Home

Catalog Content

The Rancho Santiago Community College District and Santiago Canyon College have made every reasonable effort to determine that everything stated in this catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the administration of the district for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the district and the college. The district and the college further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures.

Rancho Santiago Community College District: Santiago Canyon College

Rancho Santiago Community College District serves residents of Anaheim Hills, Orange, Santa Ana, Villa Park, and a portion of Garden Grove.

Accredited by the Western Association of Schools and Colleges

Santiago Canyon College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, (10 Commercial Boulevard, Suite 204, Novato, CA 94949, 415-506-0234), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Santiago Canyon College

8045 East Chapman Avenue

Orange, CA 92869-4512

(714) 628-4900

Orange Education Center

1465 North Batavia Street

Orange, CA 92867-3504

(714) 628-5900

Rancho Santiago Community College District Office

2323 North Broadway

Santa Ana, CA 92706-1640

(714) 480-7300

Catalog Archives

District Information

DISTRICT FACILITIES

Santiago Canyon College is situated on 82 acres at 8045 E.Chapman Avenue in Orange. It opened its first phase of classrooms in fall 1985 under the name of the Orange Campus of Rancho Santiago College. The Child Development Center opened in fall 1991 to provide childcare services. Santa Ana College is located on approximately 65 acres at 1530 W. 17th Street in Santa Ana. The college was first
opened in 1915 as an extension of Santa Ana High School and has been located at its present site, in the heart of Santa Ana, since 1947. The Orange and Centennial Education Centers each house adult continuing education programs, which provide high school diplomas, English as a Second Language, and courses that contribute to career advancement. Online education offerings also bring the classroom to you.

**DISTRICT MISSION**

The mission of the Rancho Santiago Community College District is to provide quality educational programs and services that address the needs of our diverse students and communities.

**DISTRICT OPPORTUNITY**

The Rancho Santiago Community College District provides opportunities for the pursuit of excellence through educational programs and services for local residents. The purpose of these programs and services is to enhance the quality of human life by providing public access to a college education. A significant number of classes are scheduled off-campus each semester in order to enhance accessibility to students. The map indicates the locations of the major instructional sites within the district.

Locations & Contact Information
1. RSCCD District Office
2323 N. Broadway
Santa Ana, CA

2. Santa Ana College
1530 W. 17th St.
Santa Ana, CA

3. Santiago Canyon College
8045 E. Chapman Ave.
Orange, CA

4. Orange Education Center
1465 N. Batavia St.
Orange, CA
5. OEC Provisional Education Facility
1937 W. Chapman Ave., 2nd Floor
Orange, CA

6. Centennial Education Center
2900 W. Edinger Ave.
Santa Ana, CA

7. Santa Ana College – Orange County Sheriff’s Regional Training Academy
15991 Armstrong Blvd.
Tustin, CA

8. Digital Media Center
1300 S. Bristol St.
Santa Ana, CA

9. Joint Powers Fire Training Center
18301 Gothard St.
Huntington Beach, CA

10. College and Workforce Preparation Center
1572 N. Main Street
Orange, CA

Board of Trustees
President - Claudia C Alvarez
Vice President - Phillip E Yarbrough
Clerk - Arianna P Barrios
Member - John R Hanna
Member - Zeke Hernandez
Member - Lawrence “Larry” R Labrado
Student Trustee - Mariano Cuellar
Executive Assistant to the Board of Trustees - Anita Lucarelli

RSCCD Organization

CHANCELLOR’S OFFICE
Chancellor - Marvin Martinez
Executive Assistant to the Chancellor - Debra Gerard
Chancellor’s Diversity Initiative - Narges Rabii-Rakin

BUSINESS OPERATIONS/FISCAL SERVICES
Vice-Chancellor - Iris Ingram
Assistant to the Vice-Chancellor - Kennethia Vega

**Facility Planning & District Construction & Support Services**

Assistant Vice Chancellor - Carri Matsumoto  
Director - Facility Planning - Darryl Taylor  
Supervisor - District Support Services - Alex Oviedo  
Project Managers - Alison Coburn, Joe Melendez

**Fiscal Services**

Assistant Vice Chancellor - Adam M. O'Connor  
Manager - Fiscal Services - Erika Almaraz  
Accounting Manager - Payroll - Nancy Tanner  
Manager - Internal Audit - Shelly Randolph

**Information Technologies Services**

Assistant Vice Chancellor - Yezid "Jesse" Gonzalez  
Director - Academic Support - Thurman Brown  
Director - Information Systems - Vacant  
Director - Network and Communications - Dane Clacken

**Purchasing**

Director - Linda Melendez  
Supervisor - Inventory, Delivery & Storage - Armando Toner

**Security/Safety**

Interim Chief - District Safety/Security - Michael Toledo  
Lieutenant - Santa Ana College - Vacant  
Lieutenant - Santiago Canyon College - Vacant  
Sergeant - Santa Ana College - Monte Huotari, Raymond Wert  
Sergeant - Santiago Canyon College - Francisco Prado, Mike Jensen

**HUMAN RESOURCES**

Vice-Chancellor - Cheng Yu Hou  
Assistant to the Vice-Chancellor - Elvia Garcia  
Assistant Vice Chancellor - Alistair Winter  
District Administrator - Institutional Equity, Compliance, and Title IX - Jennifer de la Rosa  
Director - Employment Services, Equity, and Diversity - Vacant  
Director - Information Systems - Vacant
Risk Management and Employee Benefits
Director, Workplace Safety & Risk Management - Don Maus

EDUCATIONAL SERVICES
Vice-Chancellor - Enrique Perez
Assistant to the Vice-Chancellor - Patricia Dueñez

Economic & Workforce Development
Assistant Vice Chancellor - Adriene “Alex” Davis
Director–LAOCRC, Los Angeles - Vacant
Director–LAOCRC, Orange County - Vacant
Executive Director–Institute for Workforce Development - Vacant

Educational Services
Assistant Vice Chancellor - Sarah Santoyo
Executive Director–Resource Development - Vacant
Executive Director–Industry Sector Engagement & Career Tech Ed - Vacant
Director–Information Communications Technology/ Digital Media Initiative - Steve Linthicum
Director, Special Programs - Esther Landin
Program Strategist - Joy Hermsen

Digital Media Center
Executive Director–Digital Media Center - Sarah Santoyo
Director–Digital Media Center - Vacant
Director–Small Business Development Center - Roger Lloyd

Child Development
Services Executive Director–Child Development Services - Janneth Linnell
Director–Child Development Services Quality Assurance - My Le Pham
Director–SAC–Child Development Center - Maria Castellon, Jerelyn Cowan
Director–SAC–Child Development Center East - Zeferina Gonzalez
Director–CEC–Child Development Center - Susan Wahl
Director–SCC–Child Development Center - Enriqueta Isais

Research & Planning Executive
Director–Research, Planning & Institutional Effectiveness - Nga Pham
Director, Center of Excellence - Jesse Crete
Public Affairs & Publications
Director–Public Affairs & Publications - Vacant
Manager–Graphic Communications - Mary Law
Manager–Publications & Electronic Media - Vacant

Calendars
[Links to external calendars]

College Credit Instructional Calendar
COLLEGE CREDIT INSTRUCTIONAL CALENDAR 2021-2022

FALL SEMESTER 2021
August 16-18 Faculty Projects
August 16-20 Professional Development Week
August 23 INSTRUCTION BEGINS
September 6 Last date to drop with enrollment fee refund and to NOT receive a “W” grade (semester-length courses)
September 6 Labor Day - Holiday
September 24 Last date to file Pass/No Pass option (semester-length courses)
October 8 Deadline to submit all Petitions to Graduate
November 11 Veteran’s Day - Holiday
November 14 Last date to drop semester-length courses with a “W” grade
November 25-27 Thanksgiving - Holiday
December 12 INSTRUCTION ENDS
December 13-January 3 Winter Break

INTERSESSION 2022
January 3 INSTRUCTION BEGINS
January 11 Last date to file Pass/No Pass
January 17 Martin Luther King, Jr. - Holiday
January 30 INSTRUCTION ENDS

SPRING SEMESTER 2022
January 31-February 2 Faculty Projects
January 31-February 2 Professional Development Week
February 7 INSTRUCTION BEGINS
February 18 Lincoln’s Birthday - Holiday
February 21 President's Day - Holiday
February 20 Last date to drop with enrollment fee refund and to NOT receive a “W” grade (semester-length courses)
March 11 Deadline to submit all Petitions to Graduate
March 11 Last date to file Pass/No Pass option (semester-length courses)
March 31 Cesar Chavez Day - Holiday
April 4-9 Spring Recess
May 8 Last date to drop semester-length courses with a "W" grade
May 30 Memorial Day - Holiday
June 2 Commencement - Santiago Canyon College
June 5 INSTRUCTION ENDS

SUMMER SESSION 2022
June 13 INSTRUCTION BEGINS
June 24 Deadline to submit all Petitions to Graduate
July 4 Independence Day - Holiday
August 7 INSTRUCTION ENDS

Continuing Education Instructional Calendar

CONTINUING EDUCATION INSTRUCTIONAL CALENDAR 2021-2022

FALL SEMESTER 2021
August 16-20 Faculty projects
August 23 INSTRUCTION BEGINS**
September 6 Labor Day - Holiday
November 11 Veterans' Day - Holiday
November 22-27 Thanksgiving recess
December 18 INSTRUCTION ENDS**
December 19-January 9 Winter Recess

SPRING SEMESTER 2022
January 7, 10, 11 Faculty projects
January 12 INSTRUCTION BEGINS**
January 17 Martin Luther King, Jr. - Holiday
February 18 Lincoln's Birthday (Observed)
February 21 President's Day - Holiday
March 31 Cesar Chavez - Holiday
April 4-April 9 Spring recess*
May 27 OEC Commencement
May 28 INSTRUCTION ENDS**
May 30 Memorial Day - Holiday

SUMMER SESSION 2022
May 31 INSTRUCTION BEGINS**

July 4 Independence Day - Holiday Observed

August 5 INSTRUCTION ENDS**

*OEC Spring recess dates may be adjusted to correspond to the unified school district instructional calendar.

**Beginning and ending dates could be adjusted

About SCC

MESSAGE FROM PRESIDENT

Welcome to the Fall 2021 semester. You have made a wise choice in selecting Santiago Canyon College (SCC) to pursue your academic and/or training goals. Whether you are working towards an associate degree, transfer to a four-year school, update your existing technical skills, earn a certificate for a new career, or earn a high school diploma or equivalency certificate, SCC has what you seek and more.

SCC is proud to provide a safe and inclusive environment that promotes respect and dignity, identifies and eliminates barriers to learning, and creates equitable outcomes for all students. By enrolling at SCC, you become part of a campus enriched by students with unique ideas, values, beliefs, experiences, and identities that strengthen our college community.

While SCC remains committed to combating the spread of COVID-19, we are also equally committed to increasing the number of in-person, on-campus classes and services. At SCC, we believe that what happens here matters and that every course, every lecture, every encounter, and every achievement will prepare you to succeed in your future endeavors.

Jose F. Vargas
Interim President

SANTIAGO CANYON COLLEGE MISSION STATEMENT

Santiago Canyon College is an innovative learning community dedicated to intellectual and personal growth. Our purpose is to foster student success and to help students achieve these core outcomes: to learn, to act, to communicate and to think critically. We are committed to maintaining standards of excellence and providing accessible, transferable, and engaging education to a diverse community.

INSTITUTIONAL STUDENT LEARNING OUTCOMES
To achieve our mission, SCC has identified Institutional Learning Outcomes with four core competencies: Learn, Communicate, Act, and Think. Students will be able to

Learn—About Self and Others, Academic and Professional Issues

- Take responsibility for one’s own learning and wellbeing.
- Learn about one’s chosen academic major, while creating connections across disciplines.
- Learn about professional conduct, including workplace and community ethics, conflict management, and teamwork.

Communicate—With Clarity and Accuracy and in Diverse Environments

- Communicate ideas in a clear and articulate manner.
- Communicate accurately to diverse audiences.
- Communicate in various formats using diverse technologies.

Act—With Awareness of Self and the Local and Global Community of Persons

- Act to maintain one’s dignity and self-respect.
- Act as a responsible community member who treats others with respect, civility, empathy, honesty, and dignity.
- Act to increase the wellbeing of the global community by maintaining cultural literacy, lifelong learning, ethical consideration of each other, and the environment we all share.

Think—Critically, Creatively, and Reflectively

- Critically analyze, evaluate, organize and use quantitative and qualitative data to solve problems and develop logical models, hypotheses and beliefs.
- Creatively use concepts to making learning relevant.
- Reflectively assess one’s values, assumptions, and attitudes.

Accreditation

Santiago Canyon College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC), which is an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

ACCJC defines accreditation as "...the process for evaluating and assuring the quality of education used by the American higher education community. It is a uniquely American quality assurance process through which institutions collectively set standards for good practice, conduct peer-based evaluations of institutions on a regular basis, confer accredited status on institutions, and make the results of accreditation review of institutions known to the public. Through accreditation, the higher education community shoulders the responsibility for monitoring the quality of the programs and services of member institutions."

Self Study Report and Visit

At its January 2006 meeting, WASC acted to synchronize the comprehensive visits of Santa Ana College and Santiago Canyon College in accordance with the Commission’s practice of scheduling simultaneous visits to colleges in multi-college districts. As a result, Santiago Canyon College completed an abbreviated Self Study Report and was visited by ACCJC representatives in the fall of 2008. Santiago Canyon College then developed a Follow-Up Report at the request of the Commission which was submitted in October 2009. At its January 6-8, 2010 meeting, ACCJC accepted the Follow-Up Report and reaffirmed Santiago Canyon College’s accreditation. A second Follow-Up Report was submitted in October 2010, and was accepted by ACCJC in January 2011.

Subsequently, Santiago Canyon College completed a Midterm Report which was submitted to the Commission in October 2011. The purpose was to assure that the recommendations made by the 2008 evaluation team had been addressed by the institution and that the college had also provided an update on the self-identified plans for improvement which were included in the institutional Self Evaluation. The attached letter from the Commission confirms that SCC sustained the changes implemented to meet the recommendations of the 2008 comprehensive evaluation team and Follow-Up Report.
Beginning in the spring of 2013, Santiago Canyon College began the development of its next self evaluation report in preparation for an accreditation team visit in October of 2014. In January of 2015, the ACCJC again reaffirmed the accreditation status of Santiago Canyon College along with its sister institution, Santa Ana College.

**Child Development Center Program Accreditation**

The SCC CDC has earned accreditation from the National Association of Young Children - the nation's leading organization of early childhood professionals. NAEYC Accreditation lets families in our community know that children in our program are getting the best care and early learning experiences.

**SCC Organization**

**PRESIDENT OFFICE**

Interim President - Jose F. Vargas

Assistant to the President - Esther Odegard

**College Advancement/Foundation**

Director - Vacant

Development Coordinator - Vacant

**ADMINISTRATIVE SERVICES**

Vice President - Arleen Satele

Manager–Facilities - Charles Wales

Supervisor–Custodial - Gabriel Dueñas

Lieutenant–Safety & Security - Vacant

**ACADEMIC AFFAIRS**

Interim Vice President - Martin Stringer

Curriculum - Anaisabelle Garcia

**Arts, Humanities & Social Sciences**

Interim Dean - Joanne Armstrong

American College English (ACE), Chair - Pam Hilburn

Anthropology, Chair - Yanina Valdos

Geography, Chair - Vanessa Engstrom

Chicano Studies, Ethnic Studies, Gender, Sexuality, and Women's Studies, Interdisciplinary Studies, and Sociology, Chair - Tiffany Gause

Communication, Chair - Tara Kubicka-Miller

Economics, Chair - Alex Taber

English, Chair - Corinna Evett

Fine Arts, Chair - Robert Miller

History, Chair - Rachel Petrocelli
Modern Languages, Chair - Charlie Malone
Performing Arts, Chair - Binh Vu
Philosophy, Chair - Marcelo Pimentel
Political Science, Chair - Nooshan Shekarabi
Psychology, Chair - Christine Umali-Kopp
Reading, Chair - Amy Freese

Business & Career Education
Dean - Elizabeth Arteaga
Associate Dean - Vacant
Business - Steven Deeley
Child Development, Chair - Regina Lamourelle
Director, Special Programs - Estela Cuellar
Apprenticeship Cosmetology - Vacant
Criminal Justice - Andrew Gonis
Gemology, Facilitator - Diana Sanders Cinamon
Public Works, Chair - Jeffry Dennis
Public Works, Facilitator - Carlos Castellanos
Public Works, Code Enforcement Facilitator - Sergio Verino
Real Estate, Chair - Alana Gates
Surveying & Mapping Sciences, Facilitator - Mark Counts
TV/Video & Communications, Facilitator - David Echols
Water Utility Science, Chair - Jeffry Dennis

Mathematics & Sciences
Interim Dean & Athletic Director - Denise Bailey
Astronomy, Chair - Morrie Barembaum
Biology, Co-Chairs - Denise Foley, Mark Smith
Chemistry, Co-Chairs - Nahla El-Said, Jeffery Wada
Earth Sciences, Chair - Angela Daneshmand
Kinesiology, Co-Chairs - Lisa Camarco, Ian Woodhead
Mathematics, Co-Chairs - Veselka Danova, Alicia Frost, Scott Sakamoto
Physics & Engineering, Co-Chairs - Craig Rutan, Cynthia Swift

Institutional Effectiveness, Library & Learning Support Services
Dean - Aaron Voelcker
Distance Education, Coordinator - Scott James
Institutional Effectiveness/Research - Haydeh Kaveh
Instructional Design Center - Silvia Lopez
Information Studies, Chair - Seth Daugherty
Library, Chair - Seth Daugherty
Online Tutoring - Amanda Carpenter

STUDENT SERVICES
Vice President - Vacant

Office of Student Equity & Success
Director - Joseph Alonzo
Scholarship Program Office - Elizabeth Bergara
Veterans Service Office - Elizabeth Bergara

Counseling & Student Support Services
Dean - Jennifer Coto
Counseling, Co-Chairs - Song Graham, Lacy Hedenberg
Education, Chair - Amy Freese
Articulation - Leonor Aguilera
Career Services - Maria Chaidez
High School & Community Outreach - Loann Tran
Assessment/AB705 - Dora Escobar
Transfer Success Center - Maria Rodriguez

Extended Opportunity Programs & Services (EOPS) /CARE & CalWORKs
Facilitator - Nena Baldizon-Rios

Student Development
Interim Associate Dean - Deisy Covarrubias
College Assistance Migrant Program (CAMP) - Miguel U. Luna
Guardian Scholars - Maria Hernandez-Figueroa
Office of Student Life & Leadership - Diana Casares
Student Support Services – TRIO - LaKynthia Perez
Upward Bound Math & Science (UBMS) - LaKynthia Perez

Enrollment and Support Services
Interim Dean - Loretta Jordan

**Admissions & Records**
Assistant Dean - Tuyen Nguyen
First Year Support Center - Alejandro Ramirez
Graduation - Tiffany Garbis
International Student Program - Jetza Torres
Student Information Support - Sergio Rodriguez

**Financial Aid**
Assistant Dean - Sheena Tran
On-Campus Job Placement - Sonya Langelier

**Disabled Students Program & Services (DSPS)**
Assistant Dean - K. Starr Avedesian
Chair - Angela Guevara

**Student Health & Wellness Services**
Nurse Coordinator - Vacant
Psychological Services - Melissa Campitelli-Smith

**CONTINUING EDUCATION**
Vice President - Jim Kennedy
Dean, Instruction & Student Services - Joseph Alonzo
Interim Dean, Instruction & Student Services - Christine Gascon
Director, Support Services - Patricia Alvano
Interim Executive Director, Adult Education - Block Grant, Eden Quimzon

**Adult Basic Education/High School Subjects**
Chair - Jolene Shields
Coordinators - Elaine Pham, Denise Salcido

**Adults with Disabilities**
Coordinator - Angela Guevara

**Career Technical Education**
Coordinator and Chair - Daniel Oase
Coordinator - Jorge Saucedo-Daniel
Community Services
Coordinator - Cristina Morones

Counseling
Chair - Rosa Salazar de la Torre

English as a Second Language/Citizenship
Coordinator and Chair - Rita Van Dyke-Kao

Inmate Education Program
Coordinator - Robert Felipe

Older Adults
Coordinator - Nancy Parent

Nondiscrimination Policy

The Rancho Santiago Community College District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities. The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics. The Chancellor shall establish administrative procedures that ensure all members of the college community can present complaints regarding alleged violations of this policy and have their complaints heard in accordance with the Title 5 and Title IX regulations and those of other agencies that administer state and federal laws regarding nondiscrimination. No District funds shall ever be used for membership, or for any participation involving financial payment or contribution on behalf of the District or any individual employed by or associated with it, to any private organization whose membership practices are discriminatory on the basis of national origin, religion, age, gender, gender identity, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or because of his or her association with a person or group with one or more of these actual or perceived characteristics. Inquiries regarding compliance and/or grievance procedures may be directed to District’s Title IX Coordinator and/or Section 504/ ADA Coordinator. RSCCD Section 504/ADA Coordinator: Tracie Green, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7489. RSCCD Title IX Coordinator: Jennifer De La Rosa, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7404. SCC Deputy Title IX Coordinator: Deisy Covarrubias, 8045 E. Chapman Avenue, Orange, Ca. 92869, 714-628-4933

POLITICA DE NO DISCRIMINACION EL DISTRITO

El Distrito está comprometido a ofrecer la igualdad en oportunidades para programas educativos, empleos, y a todo acceso a los programas institucionales y actividades. El Distrito, y cada persona que representa al Distrito, debe proveer acceso a sus servicios, clases y programas sin importar el lugar de nacimiento, religión, edad, sexo, identidad de género, expresión del género, raza o etnicidad, color, condición médica, información de genética, descendencia familiar, orientación sexual, estado civil, incapacidad física o mental, embarazo, categoría militar o de veterano, o por creer que él o ella tiene una o más de las características mencionadas, o en base a estar relacionado con una persona o grupo que se cree tenga algunas de estas características. El Canciller debe establecer procedimientos administrativos para asegurarse que todos los miembros de la comunidad del colegio puedan presentar quejas sobre supuestas violaciones a esta política y que sus quejas sean escuchadas de acuerdo a los reglamentos señalados en el Título 5 y Título IX y por
aquellos de otras agencias que administran las leyes estatales y federales sobre la no discriminación. Ningún fondo del Distrito debe ser utilizado para la membresía, o para la participación incluyendo pagos financieros o contribuciones hechas a organizaciones privadas de parte del Distrito o de cualquier individuo empleado por el Distrito o con asociación, cuyas prácticas de membresía son discriminatorias en base a lugar de nacimiento, religión, edad, sexo, identidad de género, expresión del género, raza, color, condición médica, información de genética, descendencia familiar, orientación sexual, estado civil, incapacidad física o mental, embarazo, categoría militar o de veterano, o por creer que él o ella tiene una o más de las características mencionadas, o en base a estar relacionado con una persona o grupo que se cree tenga algunas de estas características. Las consultas relacionadas con los procedimientos de cumplimiento y/o queja pueden dirigirse al Coordinador del Título IX del Distrito y/o al Coordinador de la Sección 504/ADA. RSCCD Sección 504/ADA Coordinadora: Tracie Green, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7489. RSCCD Título IX Coordinador: Jennifer De La Rosa, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7404. SCC Sub-Título IX Coordinador: Deisy Covarrubias, 8045 E. Chapman Avenue, Orange, Ca. 92869, 714-628-4933

CHÍNH SÁCH KHÔNG PHÂN BIỆT ĐỐI XỬ

A.A., Education, Coastline Community College, Fountain Valley

B.A., Child and Adolescent Development, California State University, Fullerton

M.B.A., Business Administration, Hope International University, Fullerton

Ed.D., Educational Leadership, University of Phoenix, Arizona

Arteaga, Elizabeth (2018)
Dean of Business and Career Education

B.A., Spanish, California State University, Fullerton

B.S., Business Administration, California State University, Fullerton

M.B.A., Business Administration, University of Redlands

Avedesian, K. Starr (2017)
Assistant Dean of Disabled Students Programs & Services

B.A., English, Loyola Marymount University

M.S., Counseling, California State University, Los Angeles

M.S., Education, California State University, Fullerton

Bailey, Denise (2011)
Interim Dean of Mathematics & Sciences

B.A., Chemistry, University of San Diego

Ph.D., Organic Chemistry, University of California, Irvine

Barembaum, Morrie (2000)
Professor of Astronomy

B.S., Physics, University of California, Irvine

M.S., Astronomy, San Diego State University

Batth, Navanjot (2018)
Assistant Professor of Biology

B.S. Biology, UC Riverside

M.S. Biology, CSU Los Angeles

Professor of English

B.A., English, San Diego State University

M.A., English, Chapman University M.F.A., Creative Writing, Chapman University

Breeden, Emma J. (2015)
Associate Professor of Psychology
B.A., Psychology, California State University, Long Beach
M.S.W., California State University, Long Beach

Professor of Kinesiology
B.A., Physical Education, Point Loma Nazarene University
M.S., Exercise Science, California University of Pennsylvania
Ed.D., Concentration in Sports Management and Leadership, North Central University

Campitelli-Smith, Melissa (2011)
Clinical Psychologist
B.A., California State University, Long Beach
M.A., California School of Professional Psychology, Los Angeles
Psy.D., California School of Professional Psychology, Los Angeles

Professor of Psychology
B.A., Psychology, University of California, Los Angeles
Ph.D., M.S., Psychology, Washington State University

Carpio, Brenda (2016)
Associate Professor of Political Science
B.A., Politics and Latin American Studies, Pomona College
M.A., Political Science, University of California, Irvine

Carrión, Rudy (2006)
Professor of Counseling
B.A., Political Science, University of California, Irvine
M.S., Educational Counseling, National University

Castellanos Jr., Ralph J. (2019)
Assistant Professor of Communication
A.A., Guitar Performance, Musicians Institute
A.A., Liberal Arts & Sciences: Self-development & Social Behavior, Cerritos College
B.A., Human Communication Studies, California State University, Fullerton
M.A., Human Communication Studies, California State University, Fullerton
Chaidez, Maria (2015)
Associate Professor of Counseling
A.A., Liberal Studies, Fullerton College
B.S., Human Services, California State University, Fullerton
M.S., Counseling, University of La Verne

Coto, Jennifer (2001)
Dean of Counseling
A.A. Orange Coast College
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills
Ed.D., Argosy University

Cotter, Matthew (2016)
Associate Professor of Mathematics
B.A., Applied Mathematics, California State University, Fullerton
M.A., Applied Mathematics, California State University, Fullerton

Covarrubias, Deisy D. (2008)
Interim Associate Dean, Student Development & Deputy Title IX Coordinator
B.A. Sociology and Behavioral Science, San Jose State University
M.S. Counseling, California State University, Long Beach

Crabill, Phillip (2013)
Associate Professor of Counseling
A.A., Liberal Arts, Santiago Canyon College
B.A., Psychology, California State University, Fullerton
M.S., Counseling, California State University, Fullerton
Ed.D., Counseling Psychology, Argosy University

Crammer, Cale (2016)
Associate Professor of Political Science
B.A., Political Science, California State University, San Marcos
M.A., Political Science, University of California, Riverside

Cummins, Shawn (2001)
Professor of Kinesiology
B.S., Kinesiology, California State University, Fullerton
M.Ed., Physical Education, Azusa Pacific University

Danova, Veselka (2015)
Associate Professor of Mathematics
B.S., M.S., Mathematics: Pure Option, California State Polytechnic University, Pomona

Daugherty, Seth (2016)
Associate Professor of Library & Information Studies
B.S., Instructional Design, California State University, Chico
M.L.I.S., San Jose State University
M.S., Educational and Instructional Technology, National University

DeCarbo, Michael (2000)
Professor of Communication
B.A., Speech Communication, California State University, Los Angeles.
M.A., Communication Studies, California State University, Los Angeles

Deeley, Steven (2006)
Professor of Business
B.A., Political Science, University of California, Santa Barbara
M.B.A., University of Southern California

Professor of English
B.A., Loyola Marymount University
M.A., Boston College
Ph.D., University of California, Riverside

Dennis, Jeffry P. (2018)
Assistant Professor, Water Utility Science
B.A., Chemistry, University of California, Santa Barbara
M.S., Environmental Engineering, University of Southern California

Diaz, Darlene (2007)
Professor of Mathematics
B.S., University of California, Irvine
M.S., California State University, Northridge
El-Said, Nahla (2005)
Professor of Chemistry
B.S., Pharmaceutical Science, Cairo University
M.S., Organic Chemistry, California State University, Fullerton
Ph.D., Organic Chemistry, University of California, Riverside

Engstrom, Vanessa (2015)
Associate Professor of Geography
B.S., Regional Development, University of Arizona
M.A., Geography, University of Arizona

Escobar, Dora (2015)
Associate Professor of Counseling
A.A., Liberal Arts, Orange Coast College
B.A., Business Administration, California State University, Fullerton
M.S., Counseling, California State University, Fullerton

Evett, Corinna (2005)
Professor of English
B.A., M.A., English Literature, California State University, Fullerton

Fajardo, Lourdes (2005)
Professor of Spanish
B.A., California State University, Stanislaus
M.A., California State University, Sacramento

Foley, Denise (2006)
Professor of Biology
B.S., Loyola Marymount University
Ph.D., University of California, Los Angeles

Freese, Amy (2016)
Associate Professor of Reading
A.A., Liberal Studies, Fullerton College
B.A., Communications: Television & Film, California State University, Fullerton
M.A., Education: Curriculum & Instruction: Reading, Grand Canyon University

Frias, Rudy (2002)
Professor of Counseling
A.A., Saddleback College
B.S., California State Polytechnic University, Pomona
M.A., Ed.D., Pepperdine University

Frost, Alicia (2005)
Professor of Mathematics
B.S., M.S., California State University, Long Beach

Galvan, Juana (2016)
Associate Professor of Counseling
A.A., Liberal Arts, Santa Ana College
B.S., Human Services, California State University, Fullerton
M.A., Counseling Psychology, Argosy University

Gascon, Christine (2016)
Interim Dean of Instruction & Student Services
B.A., German Literature, California State University, Fullerton
M.S., Education – TESOL, California State University, Fullerton

Gates, Alana (2019)
Assistant Professor of Real Estate
A.S., Real Estate, Irvine Valley College
B.A., Business Administration, California State University Fullerton

Gause, Tiffany (2013)
Associate Professor of Sociology
M.A., B.A., Sociology, California State University, Fullerton

Gonzalez, Sara D. (2019)
Professor of English
B.A., English Literature, California State University, San Bernardino
M.A., English Literature, California State University, Long Beach

Govea-Von Velasco, Melissa (2016)
Associate Professor of Gender, Sexuality, and Women's Studies
B.A., Sociology, Chapman University
M.A., Sociology, California State University, Fullerton
Graham, Song (2015)
Associate Professor of Counseling
B.A., Psychology, University of California, Irvine
M.S., Counseling, California State University, Long Beach

Granitto, James V. (2006)
Professor of Philosophy
B.A., Philosophy, University of California, Irvine
M.A., Philosophy, California State University, Long Beach

Guevara, Angela (2016)
Associate Professor of Adults with Disabilities
B.S., Criminal Justice Administration, University of Phoenix
M.S., Special Education – Mild to Moderate, National University

Gutierrez, Erika J. (2016)
Associate Professor of Ethnic Studies and Sociology
B.A., Ethnic Studies and Sociology, University of California, San Diego
M.A., Sociology, University of California, Riverside

Hall, Kathy (2016)
Associate Professor of English
B.A., English, Pepperdine University
M.A., Literature in English, California State University Northridge

Hauscarriague, Anne (2001)
Professor of Mathematics
B.S., Biology/Mathematics, St. Mary's College of California
M.A.T., Secondary Mathematics, Kent State University
Ph.D., Math Education, Claremont Graduate University

Hedenberg, Lacy (2015)
Associate Professor of Counseling
B.S., Human Services, California State University, Fullerton
M.S., Counseling, California State University, Fullerton

Henry, Amanda (2019)
Assistant Professor of Chemistry
B.S., Chemistry, Central Washington University
M.S., Organic Chemistry and Chemical Engineering, Western Washington University

Hernandez, Rosalba (2016)
Associate Professor of Counseling
B.A., Psychology, University of California, Irvine
M.S., Psychology, California State University, Long Beach

Ho, Nick (2019)
Assistant Professor of Counseling
B.A., Statistics, University of California, Berkeley
M.S., Educational Counseling, National University

Professor of History
B.A., University of California, Irvine
M.A., Ph.D., University of California, Riverside

James, Scott (2014)
Associate Professor/Distance Education Coordinator
A.A., Liberal Arts, Santiago Canyon College
B.S., Technical Management, Embry-Riddle Aeronautical University
M.A., Educational Technology, Pepperdine University

Jones, Vanessa (2013)
Associate Professor of Mathematics
B.S., Pure Mathematics, California State Polytechnic University, Pomona
M.S., Mathematics, California State Polytechnic University, Pomona

Johnson, Kimberly (2015)
Associate Professor of Biology
B.S., Marine Biology, California State University, Long Beach
M.S., Biology, California State University, Long Beach

Jordan, Loretta (1997)
Interim Dean of Enrollment and Support Services
B.A., History, University of California, Los Angeles
M.A., Educational Management, University of LaVerne
M.A., Clinical Psychology, Chicago School of Professional Psychology
Psy.D., Chicago School of Professional Psychology

Kramer, Jessica (2016)
Associate Professor of Mathematics
A.A., Liberal Arts, Santiago Canyon College
B.S., Biology, University of California, Irvine
M.A., Mathematics, California State University, Fullerton

Professor of English
B.A., English, University of California, Los Angeles
M.A., English, California State University, Fullerton

Kubicka-Miller, Jared (2006)
Professor of Communication
B.A., M.A., California State University, Long Beach

Professor of Communication
B.S., Northern Arizona University
M.A., California State University, Long Beach

Lamourelle, Regina (2000)
Professor of Human Development
B.A., University of California, Santa Barbara
M.S., Ed.D., Nova Southeastern University, Florida

Lennertz, William (1991)
Professor of English
B.A., California State University, Long Beach
M.F.A., George Mason University

Lui, Anson M.W. (2011)
Professor of Biology
B.S., M.S., California Polytechnic State University, San Luis Obispo
Malone, Charlie (2014)
Associate Professor of American Sign Language
B.A., Economics, California State University, Northridge
M.A., Special Education, California State University, Northridge
Professional Clear Level II Education Specialist Credential, California State University, Northridge

Martin, DeAnna (2015)
Associate Professor of Accounting
B.A., M.B.A., California State University, Long Beach
C.P.A., State of California

Martin, Linda (2015)
Associate Professor of Library & Information Studies
A.A., Cypress College
B.S., California State University, Dominguez Hills
M.L.S., University of California, Los Angeles

Martino, Danielle L. (2006)
Professor of Astronomy
B.S., California State University, Fullerton
M.S., San Diego State University

Medina, Guillermo (2019)
Assistant Professor of Kinesiology/Head Men’s Soccer Coach
B.A., Interdisciplinary Studies, National University
M.E., Cross-Cultural Teaching, National University
M.S., Physical Education, Azusa Pacific University

Mettler, Mary (2007)
Professor of Disabled Students Programs and Services
B.S., Communication Disorders, Boston University
M.S., Speech-Language Pathology, Boston University
Psy.D., M.A., Clinical Psychology, Pepperdine University

Miller, Robert (2011)
Associate Professor of Art
B.F.A., Art, Columbia College, Chicago
M.F.A., Art, California State University, Fullerton
Murphy, Ryan (2017)
Associate Professor, English
B.A., English Literature, California State University, San Bernardino
M.A., English Composition, California State University, San Bernardino
Ph.D., English Literature, Claremont Graduate University

Nguyen, Steven (2017)
Associate Professor of Chemistry
B.S., Biochemistry & Cell Biology, University of California, San Diego
M.S., Chemistry, University of California, San Diego
Ph.D., Chemistry, University of California, San Diego

Nguyen, Tuyen (2015)
Assistant Dean, Admissions/Records
A.A., Liberal Arts, Santiago Canyon College
B.A., Management, California State Polytechnic University, Pomona
M.A., Management, University of Redlands

Oase, Daniel (2016)
Associate Professor of Career Education
B.A., Psychology, University of California, Berkeley
M.B.A., University of California, Irvine

Pecenkovic, Nidzara (2015)
Associate Professor of English
M.A., English, Chapman University
M.F.A., Creative Writing, Chapman University

Petrocelli, Rachel (2016)
Associate Professor of History
B.S., French, Georgetown University
M.A., History, Stanford University
Ph.D., History, Stanford University

Pham, Elaine (2016)
Associate Professor of High School Subjects and Adult Basic Education
A.A., Mathematics, Orange Coast College
B.A., Mathematics, University of California, Santa Barbara
M.A., Social and Cultural Analysis of Education, California State University, Long Beach

Pimentel, Marcelo (2000)
Professor of Philosophy
B.A., California State University, Fullerton
M.A., University of Nevada, Reno

Quimzon, Eden (2006)
Interim Executive Director of Adult Education Block Grant
B.A., Liberal Arts, California State University, Long Beach
M.A., Reading and Literacy, Walden University

Professor of History and Political Science
B.A., California State University, Fullerton
M.A., History, California State University, Fullerton
M.A., Political Science, California State University, Long Beach
Ed.D., University of Southern California

Reed, Stephen (2007)
Professor of History
B.A., History and Spanish, University of California, Riverside
M.A., B.A., History, University of California, Riverside
M.A., History, University of Notre Dame

Roe, Maureen (2000)
Professor of English
B.A., English and Philosophy, Chapman University
M.A., English Literature, Chapman University
M.Ed., Curriculum and Instruction, American Intercontinental University

Rutan, Craig (2005)
Professor of Physics and Engineering
M.S., Physics, University of California, Irvine
M.S., B.S., Electrical Engineering, University of California, Irvine

Sakamoto, Scott (2001)
Professor of Mathematics
B.S., University of California, Santa Barbara
M.A., M.S., Ph.D., University of Arizona M.A., English, California State University, Fullerton

Salazar de la Torre, Rosa (1996)
Professor of Counseling
B.S., California State Polytechnic University, San Luis Obispo
M.A., California State University, Dominguez Hills

Salcido, Andy (1998)
Professor of Business, Computer Information Systems & Marketing
B.S., Computer Information Systems, Chapman University
M.B.A., Business Administration, Chapman University

Salcido, Denise (2016)
Associate Professor of High School Subjects and Adult Basic Education
B.A., Organizational Communication, Pepperdine University
B.A., Speech Communication, Pepperdine University
M.S., Human Resources Management, Chapman University

Sanchez, Sandra (2017)
Associate Professor, Biology
B.S., Biology, Cal State Fullerton, Fullerton
M.S., Biology, Cal State Fullerton, Fullerton

Satele, Arleen (2014)
Vice President of Administrative Services
B.A., Business Administration, California State University of San Bernardino
M.A., Public Administration, California State University of San Bernardino
Ed.D, Leadership and Change, Fielding Graduate University

Shields, Jolene (2008)
Professor of High School Subjects & Adult Basic Education
B.A., Spanish, University of California, Irvine
M.S., Educational and Instructional Technology, National University

Shekarabi, Nooshan (2005)
Professor of Political Science
B.A., M.A., Political Science, California State University, Fullerton

Shirah, Melissa (2016)
Associate Professor of Accounting
B.S., Accounting, San Diego State University,
M.S., Accounting, California State University, Fullerton
C.P.A., State of California

Siddiqui, Shereen (2016)
Associate Professor of Gender, Sexuality, and Women's Studies
B.A., Women's Studies, University of Missouri-Columbia
B.A., Sociology, University of Missouri-Columbia
M.A., Sociology, University of Missouri-St. Louis
Ph.D., Comparative Studies, Florida Atlantic University

Smith, Mark (2007)
Professor of Biology
B.A., Zoology, California State University, Stanislaus
M.A., Ecology and Evolution, California State University, Sonoma

Sproat, Barbara (2001)
Professor of Library & Information Studies
B.A., University of Minnesota, Duluth
M.L.S., University of Minnesota, Minneapolis
M.A., Children's Literature, Hollins University

Stringer, Martin (2008)
Interim Vice President of Academic Affairs
B.Ed., University of London
M.Ed., Azusa Pacific University

Swift, Cynthia J. (2006)
Professor of Physics
A.S., Physics, Cypress College
B.S., Physics, University of California, Irvine
M.S., Physics, California State University, Long Beach

Taber, Alexander G. (1999)
Professor of Economics
B.A., Economics, University of California, Santa Barbara
Ph.D., M.A., Economics, University of Chicago

Taylor, Mike (2004)
Professor of Biology
A.A., Orange Coast College
B.S., Zoology, California State University, Long Beach
M.S., Biology, California State University, Long Beach

Torneo, Nicole (2015)
Associate Professor of Chemistry
B.A., Economics, California State University, Fullerton
B.S., Chemistry, California State University, Fullerton
M.S., Chemistry, University of California, Berkeley

Tragarz, Roberta (2000)
Professor of English
B.A., English Literature, California State University, Long Beach
M.A., English Literature, University of California, Irvine

Tran, Sheena (2006)
Assistant Dean of Financial Aid, Scholarships & Veterans
B.S., Accounting & Finance, Cal State San Bernardino
M.S., Business Administration, University of Redlands
CPA, Certified Public Accountant, California Board of Accountancy

Umali Kopp, Christine E. (2007)
Professor of Psychology
B.A., University of California, Los Angeles
M.A., California School of Professional Psychology
Psy.D., Alliant International University

Valdos, Yanina (2017)
Associate Professor, Anthropology-Physical
B.A., Anthropology, concentration in Archeology, UC San Diego
M.A., Anthropology, Tulane University
Van Dyke-Kao, Rita (2019)  
Assistant Professor/Coordinator of ESL  
B.A., English, Trinity Western University  
M.A., Teaching English to Speakers of Other Languages (TESOL), Azusa Pacific University

Vargas, Jose F. (2004)  
Interim President  
A.A.S., ITT Technical Institute  
A.A., East Los Angeles College  
B.S., Business Administration, California State University, Dominguez Hills  
M.A., Education Administration, California State University, Dominguez Hills

Voelcker, Aaron (2012)  
Dean of Institutional Effectiveness, Library & Learning Support Services  
A.S., Math and Science, College of the Canyons  
B.A., Psychology, University of California, Irvine  
M.S., Administration, California State University, Bakersfield

Vu, Binh (2011)  
Associate Professor of Music  
B.A., M.M., California State University, Northridge  
D.M.A., Claremont Graduate University

Vu, Vivien (2015)  
Associate Professor of Counseling and Disabled Students Programs and Services  
B.S., Human Services, California State University, Fullerton  
M.S., California State University, Long Beach

Wada, Jeffrey (2011)  
Associate Professor of Chemistry  
B.S., M.S., University of California, Irvine

Wagner, Joyce (1999)  
Professor of Mathematics  
B.A., Mathematics, California State University, San Bernardino  
M.A., Ph.D., Mathematics, University of California, Los Angeles

Woodhead, Ian (2001)
Professor of Kinesiology

BSc (Hons), Psychology, Portsmouth Polytechnic (England)

Single Subject Teaching Credential, Mathematics, California State University, Long Beach

M.Ed., Education (Physical Education), Azusa Pacific University

Wright, K. Laney (2002)

Professor of Mathematics

B.A., Mathematics, Murray State University

M.A., Mathematics Education, California State University, Fullerton

Ph.D., Mathematics Education, Claremont Graduate University

Admissions & Registration

Santiago Canyon College

8045 East Chapman Avenue, E-101

Orange, CA 92869

(714) 628-4901

admissions@sccollege.edu

COVID-19: A Message from Admissions and Records

Admissions & Records Online Resources

Amid ongoing concern about the coronavirus (COVID-19), Admissions and Records' top priority is the health, safety, and well-being of our students and staff. We are committed to being responsive and flexible to your needs. Here are a few ways we are here to serve you during this time.

**WebAdvisor:** We strongly encourage you to access your WebAdvisor account through [www.sccollege.edu/webadvisor](http://www.sccollege.edu/webadvisor) to make changes to your class schedule, and pay for classes. It is typically easier and faster to manage your student account online.

**In-Person:** Our office is closed until further notice.

**Phone:** You may reach us at (714) 628-4901 Monday - Thursday 8:00AM - 1:00PM and 2:00PM - 4:00PM. If you would like to reach us via phone after 4:00PM, send us an email or chat request and we will call you back.

**Online Chat:** We are available to assist you via the Cranium Cafe online chat service from 4:00PM - 5:30PM Monday - Thursday and 8:00AM - 12:00PM on Fridays. Hours are subject to change.

**Email:** We can answer your questions and accept petitions or forms via email at admissions@sccollege.edu. Please make sure your email includes a brief explanation of what you need as well as your name and student ID number. Petitions and forms must be filled out completely and signed before we are able to accept and process. Petitions and forms can be found at [https://www.sccollege.edu/StudentServices/Admissions/Pages/Forms.aspx](https://www.sccollege.edu/StudentServices/Admissions/Pages/Forms.aspx)

**Transcripts:** You can order your transcripts online at [www.sccollege.edu/transcripts](http://www.sccollege.edu/transcripts).

Please accept our thanks in advance for your cooperation and understanding as we all work together during this time.

If you need to scan a document, download the free mobile app CamScanner at camscanner.com This powerful app can convert and auto-adjust any picture that you take from your phone into a PDF file.
Full-Time – Part-Time Definition

Full-time students (Fall and Spring semesters) = 12 or more units
Part-time students (Fall and Spring semesters) = Less than 12 units
Full-time students (Summer) = 6 units
Part-time students (Summer) = Less than 6 units

Admission Requirements

Who May Attend

High school graduate

OR

Person in possession of a California high school proficiency certificate or GED

OR

Person 18 years of age or older who can profit from instruction,

OR

High school student taking dual enrollment course(s).

OR

International Students with a valid Visa.

How and When To Apply

New students and students returning after an absence of two consecutive full semesters (fall, spring) must file an application for admission to the college.

File transcripts of high school(s) and colleges attended with the Admissions and Records Office if pursuing a degree at Santiago Canyon College or receiving financial assistance.

Application dates:

Fall semester: beginning April 1

Intersession: beginning November 1
Applying to the College

New or Former Students

New or former students need to apply. A new student is a student who has never attended Santiago Canyon College or Santa Ana College. A former student is a student who attended SCC or SAC, did not enroll for two consecutive full semesters, and now wishes to return. All applications are completed on the [www.sccollege.edu](http://www.sccollege.edu) website. Applications are processed within 1-3 business days. An email will be sent with a student’s WebAdvisor Login and other student information. The WebAdvisor Login and Student ID Number for former students will always remain the same. Once you have been assigned a WebAdvisor Login, you may then go online, change your password, and view your registration appointment date and time.

Continuing Students

A continuing student is a student who has not missed two consecutive full semesters. The student may check online for his/her registration date and time and may register online at that time or any time until the Friday before the term begins. Students are encouraged to meet with a counselor each semester in order to review their academic progress before completing registration.

How To Prepare for Proper Course Placement, Registration and Educational Planning (Student Equity And Achievement Program)

The Student Equity and Achievement Program (SEAP) provides students with access to core programs and services designed to help them achieve their academic and personal goals in a timely manner.

New student orientation and advisement are available to all new students. Upon completion of the orientation, students can meet with a counselor to receive assistance in developing a first-semester education plan. The plan includes mathematics, English, or American College English/English as a Second Language (ACE/ESL) course placement recommendations and courses aligned with students’ educational goals. All students must complete their Comprehensive Education Plan (semester-by-semester plan) by the third semester but no later than completing 15 degree-applicable units. A comprehensive student education plan will detail all of the coursework required to reach a desired educational goal. Students may accomplish this requirement by enrolling in a counseling course or scheduling an appointment with a counselor. A request to be exempt from completing these services is available on the Admissions & Records website. Exemption approval requires that students provide sufficient justification for their request.

Assessment/AB705

Santiago Canyon College has reformed how placement in mathematics, English, and English as a Second Language (ESL) courses is determined. Signed into law by Governor Brown on October 13, 2017, all California Community Colleges were tasked with implementing Assembly Bill 705. This bill requires that students have access to transfer-level coursework in mathematics, English, and ESL courses. Students planning to enroll in mathematics, English, and/or reading courses do not need to take a placement test. Placement into these courses is provided as follows:

Recommendation Based on High School Performance Information

Students receive course recommendations for mathematics, English, and reading based on self-reported high school non-weighted grade point average (GPA), high school coursework completion, and earned grades.

Guided Placement Course Recommendation

The Guided Placement tool is for students who do not have access to their high school transcript or did not attend high school in the United States. This placement tool provides students with the ability to reflect on mathematics, English or ESL, and reading skills.
Assessment and Course Placement for American College English/ English as a Second Language (ACE/ESL)

Students interested in enrolling in the ACE/ESL program need to complete the ACE/ESL Guided Placement for course placement recommendations. For more information visit the Assessment Services Website at sccollege.edu/testing.

Assessment for Chemistry Placement

Assessment for Chemistry placement is available for students planning to enroll in SCC’s Chemistry 200A (General Chemistry A). An assessment appointment can be made by calling 714-628-4800. For English, mathematics, and/or chemistry, some requisites are being modified for courses that need to comply with AB 705. Requisites include prerequisites, co-requisites, and recommended preparation or advisories. Please contact the Counseling Center for questions about courses with requisites that indicate an English or mathematics course as they may now include a different course from the placement profile.

Disability-Related Accommodations

Students who require disability-related accommodations must request them at least two weeks prior to taking the Chemistry 200A assessment. To arrange for accommodations for assessment, contact Disabled Students Programs and Services (DSPS) at 714-628-4860 to schedule an evaluation of needs.

AB 1805 Accessing Placement Data

Santiago Canyon College strives to provide the best possible course placement recommendations for each student. Placement Data is available on the SCC website under the “Assessment Services” page. SCC’s disclosure of these results allows prospective students and the public to view the number of students assessed and placed into transfer-level mathematics, English, and ACE/ESL courses.

Coursework from Other Colleges

Students who have attended another regionally accredited college and have completed courses that meet the prerequisite for SCC Courses can submit transcripts to clear prerequisites by one of the following methods:

- Bring transcripts to the Counseling Center (SCC, Room D-106) for verification and prerequisite clearance.
- Submit an online prerequisite clearance request form with supporting documentation at sccollege.edu/counseling and select “Course Prerequisite Clearance.”

Right to Challenge

Students who want to challenge their course placement recommendation/s need to submit a Requisite Challenge Form to the appropriate department two weeks prior to the start of the semester. Additional information about this process is available on the SCC website under “Assessment Services.”

Student Photo Identification Card

A student is eligible for a photo identification card after paying for classes. Photo I.D. is located in the Cashier’s Office in E-102. This card facilitates student use of the Library, Student Health and Wellness Services, computer laboratories, the Admissions Office, and a variety of college services.

Residency

All students are classified as either a resident of the State of California or non-resident when applying for admission. “Residents” are students who have residence in the state for more than one year before the initiation of a semester or term (EC 68017), based on the “Residency Determination Date” which is the day immediately preceding the opening of instruction (applies to U.S. citizens, permanent residents, and persons holding certain visas that allow for residency). “Non-residents” are students who have not established residence in the State of California for one year as of the residency determination date.

- Persons who are 18 years of age or older (adults) establish residency in accordance with EC 68017 above. Adult residency begins after the 18th birthday.
- Persons who are under 18 years of age (minors) establish residence in accordance with above “resident” definition and the following:
a. Married minors may establish their own residence.

b. The residence of the parent with whom an unmarried minor child maintains a place of abode is the residence of the unmarried minor child. When the minor lives with neither parent, residence is that of the parent with whom the minor last resided. The minor may establish residence when both parents are deceased and a legal guardian has not been appointed.

c. The residency of unmarried minors who have a parent living cannot be changed by their own acts, appointment of legal guardians, or relinquishment of a parent's right of control (EC 68062).

3. Exceptions apply under certain conditions to active members of the military.

4. Specific residency problems will be answered by the Admissions and Records Office.

5. Non-Citizen Students: Students with a "permanent resident" visa, refugee status, or amnesty approval may establish residency in accordance with above discussion. All visas must be examined by the college to determine residency status.

International Student Admissions

SCC is a SEVP approved institution to host international students who enter the country on F-1 student visas. Foreign students should contact the International Student Office or visit www.sccollege.edu/international for application forms and instructions. Application deadline: Fall: July 1, spring January 4, and summer May 1. A $25 application fee is required along with the application form. For more information, call (714) 628-5050.

Admission Policy of International Students on F-1 Visa Status:

The international student must submit a complete, official academic transcript of all high school and previous college work attempted. Transcripts must be officially translated into English, bear the school seal, and be signed by the registrar or another appropriate official. Applicants are considered for admission only if their course grades are above average (C+ or higher). International students must have sufficient knowledge of English to enable them to profit from instruction at the college level. Adequacy of English proficiency is determined by a satisfactory score of TOEFL iBT 61, TOEFL PBT 500+, IELTS 5.0+ or iTEP 3.5+. International students must be at least 18 years of age unless they are graduates of an accredited United States high school.

Students on the F-1 Visa must present evidence that they have financial resources to defray costs during the period of attendance at the college. The annual tuition for a student enrolled in 12 units each semester is $8,304. $325 non-resident tuition per unit + $46 enrollment fees per unit = $371 per unit for international students. The health insurance premium is $1,671 per year. For living expenses and other costs, such as books, visit the college website at www.sccollege.edu/international. All tuition, fees, and expenses are subject to change with new state legislation.

International student applicants must be in good physical health as certified by a licensed physician on the form provided by the college. Measles and poliomyelitis immunization must be completed. The physical examination by a physician must include a chest x-ray report and indicate that students have no contagious disease.

Proof of health insurance is required prior to registration. The college accepts no responsibility for medical expenses incurred by international students.

Santiago Canyon College does not provide housing for students; however, our offices offer information resources to help students find housing options. Students can participate in a homestay program arranged through private companies. SCC does not monitor or administer these programs. For housing, information visit www.sccollege.edu/international.

Fees and Expenses/ Drop for Non-Payment

Drop for Non-payment Policy: Enrollment fees must be paid in full within 3 days of registration (including weekends and holidays) or all classes may be dropped and released to other students. The day you register is counted as day.

1. All students are required to pay enrollment fees of $46 per unit within 3 days of registration.
If classes are not paid within that time, the student may be dropped from all classes and will have to re-register.

In addition to the 3-day non-payment drop policy, there is a final outstanding balance drop date. All fees must be paid in full by the Friday before the start of the term. The college reserves the right to postpone or suspend nonpayment drops. No balance will be carried over into the start of the semester. It is the student’s responsibility to drop by the refund deadline to avoid any fees for enrolled classes.

2. A health fee of $19 per semester ($16 for summer session) is charged to all students whether or not they choose to use health services. Health Fee Exemptions (Education Code 76355): (1) Any student who depends exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization, provided that the student presents documentary evidence of an affiliation with such a bona fide religious sect, denomination, or organization. (2) Any student enrolled in an approved Apprenticeship Program. A request for an exemption may be filed at the Admissions & Records Office.

3. Parking permits are $20 for students with fee waivers and $30 for all other students during the fall and spring semesters and $10 during summer session. No permit is required for intersession. Permits may be purchased online through WebAdvisor or by using the link found on the Safety & Security websites. A permit is required to park on campus at SAC and SCC. Only one permit is necessary for students who attend both colleges. Motorcycles are exempt in designated parking areas.

4. A Student Life and Leadership fee of $10 (fall and spring semesters) or $5.00 (summer session) is payable at registration for classes. The fee includes a free Photo ID for college services: (1) Library, Student and Instructional Services; and (2) $10 for college activities. Photo ID and term validation is available at Santiago Canyon College. These services and fees are optional.

5. The Santiago Canyon College Student Representation Fee of $1 is charged per semester. The $1 mandatory fee (Education Code 76060.5) is used by the Associated Student Government to represent the view of students with governmental agencies.

6. Transportation Fee: All students pay a mandatory fee each fall and spring semester. This fee provides unlimited access to all fixed route buses operated by the Orange County Transit Authority (OCTA). The fee per semester is $5.00 for full-time students (enrolled in 12 or more units) and $4.30 for part-time students (enrolled in less than 12 units). Bus access will be available seven days per week for school, work, or any other destinations. In the Partnership agreement between OCTA and RSCCD, 100% of the fee proceeds are remitted to OCTA. No dollars are kept for RSCCD usage or profit for administering this program for our students.

Non-Resident Tuition

Non-resident Tuition: $300 per unit in addition to the per enrollment fee for out-of-state residents and for students who are a citizen of a foreign country. Refer residency questions to the Admissions and Records Office.

Visa, MasterCard, Discover and American Express are accepted for all fees.

All tuition, fees, and expenses are subject to change with new state legislation.

Open Educational Resources (OER)

Open Educational Resources (OER) Open Educational Resources refer to free or low cost class materials, such as a textbook or online resource. Classes listed with an OER symbol use a free textbook unless otherwise noted in the class schedule. Classes using Lumen Learning OER will charge a materials fee for a standard textbook and online resources.

Refund of Tuition and Enrollment Fees

Students are eligible for full refunds of fees provided they have officially dropped from classes prior to the refund deadline or their classes have been cancelled by the college. There is no refund for classes added after the refund deadline date. (See current WebAdvisor schedule for refund deadline).
Refunds are based upon the date the student withdraws from the course online.

No refund will be processed until assurance has been given that any check in payment for tuition has been cleared.

Enrollment Fee refunds are granted in accordance with established provisions of the community college education code. Contact the Cashier’s Office or refer to the current class schedule for details of the refund policy and procedures.

There is no refund for variable units not completed.

**Preferred Name**

In support of Santiago Canyon College’s commitment to providing an equitable and safe environment for students whose legal name does not reflect their gender identity and/or gender expression, SCC now accepts requests from students to use a preferred first name on class rosters whenever possible.

Students who wish to designate a preferred name should fill out the Preferred Name Change Form available in the Admissions and Records Office or online. It is important to understand that Designating a preferred name for use at SCC does NOT constitute a legal name change. A student’s legal name will continue to be used on certain college documents, such as transcripts. Initially, preferred names will only be used on class rosters and waiting lists for use by instructors and departments.

Students may designate a preferred first name. Their legal last name will remain unchanged and will be included with their preferred name. Preferred names are limited to alphabetical characters, a hyphen (-) and a space. Generally, students can set a preferred name to any name, but the college reserves the right to delete a preferred name if it is used inappropriately, such as misrepresentation or fraud; such usage will also subject the student to disciplinary action in accordance with college policy.

**RSCCD Rates of Student Right-To-Know Act**

The rates below are placed here in accordance with the federally mandated Student Right-To-Know Act.

Of the degree, certificate or transfer-seeking first-time, full-time freshmen who entered RSCCD colleges in Fall 2014, the “completion rate” represents those students who earned an Associate’s Degree, Certificate of Achievement, or 60 UC/CSU transferable credits within three years.

**2014 COHORT COMPLETION RATE**

- **STATE** - 29%
- **SAC** - 23%
- **SCC** - 35%

The “transfer rate” represents non-completer students who transferred to any other two- or four-year institution within three years.

**2014 COHORT TRANSFER RATE**

- **STATE** - 10%
- **SAC** - 10%
- **SCC** - 13%
These rates do not represent the success rates of the entire student population at RSCCD colleges nor do they account for student outcomes occurring after this three-year tracking period.

In compliance with the Student Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of our college district to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2013, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a six-year period. Their completion and transfer rates are listed above. These rates do not represent the success rates of the entire student population at the College nor do they account for student outcomes occurring after this six-year tracking period.

Based upon the cohort defined above, a Completer is a student who attained a certificate or degree or became ‘transfer prepared’ during a six-year period, from Fall 2013 to Spring 2019. Students who have completed 60 transferable units with a GPA of 2.0 or better are considered ‘transfer prepared’. Students who transferred to another post-secondary institution, prior to attaining a degree, certificate, or becoming ‘transfer prepared’ during an eleven-semester period, from Spring 2014 to Spring 2019, are transfer students.

Please note, this data is accurate as of the publication date.

Registered Sex Offender Information
Current information concerning registered sex offenders can be obtained by going to: www.meganslaw.com

“Sex offenders are required to register with the police in the jurisdiction in which they reside and if attending institutions of higher learning in a different jurisdiction, they must register with local police for that area. Sex offenders who may be required to register should do so at the Orange Police Department if attending Santiago Canyon College.

Right To File a Complaint Regarding the Student Success and Support Program (SSSP)
Any student who feels that she/he has experienced discrimination in any SSSP core service (assessment, orientation, or counseling/advisement) may file a complaint with the Dean of Counseling and Student Support Services by calling (714) 628-4775.

Right To Review and Challenge Records
The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student’s education records within 30 days of the day the college receives a request for access.

Students should submit to the Assistant Dean of Admissions, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected.

2. The right to request the amendment of the student’s education records that the student believes is inaccurate.

Students may ask the college to amend a record that they believe is inaccurate. They should write the college official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate.

If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees or a member of an official committee.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the college discloses education records without consent to officials of another school in which a student seeks or intends to enroll. [NOTE: FERPA requires an institution to make a reasonable attempt to notify the student of the records request unless the institution states in its annual notification that it intends to forward records on request.]

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Santiago Canyon College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office

U.S. Department of Education

400 Maryland Avenue, SW,

Washington, DC 20202-5901

Schedule of Classes

A schedule of classes is prepared each semester and is available online. It includes general information, courses offered, hours, rooms, and instructor names.

Textbooks and Supplies

Textbooks, supplies, and athletic equipment must be purchased by the student. Special fees required for certain courses are indicated in the class schedule.

Solomon Amendment For Military Recruiters

The Solomon Amendment is a federal law that allows personally identifiable student information to be released to recruiters that would have been denied them under FERPA. This law mandates that institutions receiving federal financial aid must fulfill military recruitment requests for access to campus and lists of students. If Santiago Canyon College fails to comply with these requests from military recruiters, the college will lose federal financial aid funding.

Transcripts

Students may obtain an official transcript of records by submitting a request online or in person at the Admissions and Records Office at Santiago Canyon College. The first two counter transcripts will be issued without charge; thereafter, a $3 charge will be assessed for each additional mailed transcript. Express transcripts and all online transcripts are $8. Fed Ex Next Day Delivery* is available for an additional fee of $18 per delivery address. All official transcripts are copies of the student's permanent record in the Office of Admissions and Records at either college. Only records prepared and issued directly from that office will be considered official or certified for accuracy. Transcripts from other institutions are property of the college and will not be released.

Admissions and Records do not hold transcripts for final grades. It is the student's responsibility to verify that all grades have been posted via WebAdvisor before requesting transcripts.
International Transcripts – Evaluation Practices

Santiago Canyon College may grant credit for college coursework completed outside of the United States. Students must submit their records to a Santiago Canyon College recognized evaluating agency, in order to obtain an equivalency/evaluation report (go to www.naces.org for approved listings of evaluating agencies). Once the Admissions Office at Santiago Canyon College receives the equivalency/evaluation report, an official evaluation will be conducted to determine course applicability.

The following guidelines apply to coursework completed outside of the United States.

There is no transfer credit limit a student may be granted for coursework completed outside of the United States. However, Santiago Canyon College may only grant credit for lower-division classes.

College credit may only be granted toward Santiago Canyon College’s local associate degrees (AA or AS) and certificate programs. Credit will not be granted toward Associate Degrees for Transfer (AA-T or AS-T).

Coursework may not be used to fulfill the following General Education Requirements: English Composition, American Institutions, Reading, and Oral Communication.

Courses intended to fulfill major requirements must be submitted to the major department for approval.

Coursework may not be used to fulfill General Education Certification requirements for CSU-GE or IGETC (with the exception of Area 6 – Language Other Than English).

Santiago Canyon College may not determine course transferability to other colleges and universities.

Students who have completed coursework outside of the United States are encouraged to meet with a counselor to determine a course and program’s applicability.

Withholding of Student Records Reference(s) BP 5035:

Title 5, Section 59410 Students or former students who have been provided with written notice that they have failed to pay a proper financial obligation shall have grades, transcripts, diplomas, and registration privileges withheld. Revised: July 21, 2014 (Previously BP5555).

College Policies & Procedures

Academic and Progress Probation/Dismissal Academic Freedom Academic Honesty Academic Honors Academic Renewal Attendance & Dropping Basic Skills Career Limit Course Repeatability Credit for Prior Learning and Credit by Examination (CBE) Email Enrollment Family Education Enrollment Priority Financial Aid Free Expression Grievances Grade Appeal Grade Grievance Grades Grade Point Average GPA Independent Study Lost and Found Parking Pass/No Pass Photography Publicity Sexual Assault and Other Assaults on Campus (Title IX) Sexual Harassment Complaints (Title IX) Smoking and Tobacco Use Standards of Conduct for Computer Classrooms and Computer Labs Standards of Student Conduct Transfer Credit Unit of Credit Withdrawal From Class Withholding of Student Records

Academic Freedom

The teacher should be free to think and to express ideas, free to select and employ materials and methods of instruction, free from undue pressures of authority, and free to act within his/her professional group. Such freedom should be used judiciously and prudently to the end that it promotes the free exercise of intelligence and student learning. Academic freedom is not an absolute. It must be exercised within the law and the basic ethical responsibilities of the teaching profession. Those responsibilities include:

- An understanding of our democratic tradition and its methods.
- A concern for the welfare, growth, maturity, and development of students.
- The method of scholarship.
- Application of good taste and judgment in selecting and employing materials and methods of instruction.

(BP4201 Faculty)
Academic Honesty

Introduction

Students at Santiago Canyon College are expected to be honest and forthright in their academic endeavors. To falsify the results of one's research, to steal the words or ideas of another, or to cheat on an examination corrupts the essential process by which knowledge is advanced. Academic dishonesty is seen as an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization or uses unauthorized materials or fabricated information in any academic exercise. We, as an institution, also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, assisting other students in acts of dishonesty or coercing students into acts of dishonesty.

Procedures

In cases where a violation of academic honesty is discovered, the faculty member is encouraged to file an "Academic Honesty Incident Report" form and distribute the form as specified.

There are two categories of sanctions: Limited and College-wide. Limited sanctions include an academic action such as assigning a lower grade or a grade of "F or zero" for the test or project. College-wide sanctions include any sanction that will affect a student's standing with the college-at-large, up to and including suspension or expulsion from the college.

In matters relating to academic honesty violations, the primary responsibility for employing the Limited Sanctions rests with the instructor and the academic division where the violation allegedly occurred. The Associate Dean of Student Development will assist in all College-wide disciplinary sanctions at Santiago Canyon College.

Academic Honors

Academic Honors at Graduation

Academic honors are awarded to students who do outstanding coursework leading to graduation from Santiago Canyon College. The graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District of which 18 units or more must be letter grades of "C" or better.

Rancho Santiago Community College District coursework and all transfer work will be computed in the Honors designated GPA. Graduation honors are awarded as follows:

President's Scholar. See Honors Program and Honors Courses

With Highest Honors. The highest honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 4.0. Students with Academic Renewal Without Course Repetition are not eligible for Academic Honors With High Honors.

With High Honors. The high honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.8. Students with Academic Renewal Without Course Repetition are not eligible for Academic Honors With High Honors.

With Honors. The honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.5. Students with Academic Renewal Without Course Repetition are not eligible for Academic Honors With High Honors.
Departmental Honors. Honors are awarded to students who do outstanding work in their majors. Eligibility is determined by inclusion in the academic honors categories listed above.

Academic Renewal

Inasmuch as past performance does not always reflect accurately a student's actual ability, Santiago Canyon College has established a policy of academic renewal. Students may petition to have their academic record reviewed for academic renewal of substandard academic performance.

Academic Renewal With Course Repetition

Only units taken at Santiago Canyon College and/or Santa Ana College may be considered for Academic Renewal With Course Repetition, not units taken at any other institutions.

A student who earned a D, F, or NP grade may repeat the course once up to two times to improve the grade of the substandard work. Once a grade of D, F, or NP has been recorded, subsequent withdrawals (notations of W) will count toward the two allowable repeats. No more than two substandard grades for the same course may be alleviated and excluded from the Grade Point Average.

A student may not repeat a course to change a grade of C or better. Courses repeated under this provision will be indicated as repeated on the student's academic transcript.

Course repetition at Santiago Canyon College does not guarantee that other institutions will approve such an action. This determination will be made by the respective transfer institution.

For courses designated as non-repeatable (Title 5, §55041), only the first two substandard grades may be excluded in computing the student's grade-point average (Title 5, §55042(c)).

The petition is submitted to the Admissions and Records Office of the student's home campus (SCC or SAC). Please consult with a college counselor about any questions regarding Academic Renewal eligibility.

Rancho Santiago Community College District

ADMINISTRATIVE REGULATION

Chapter 4

Academic Affairs

AR 4240 Academic Renewal

Reference(s): Title 5 Section 55046

Academic Renewal Without Course Repetition

• To be eligible, the student must have completed at least 15 units with a 3.0 GPA or 24 units with a 2.0 GPA or higher in sessions subsequent to the substandard work being petition. All lower-division units from all colleges attended will be counted from the semester immediately following the substandard work.

• The substandard academic renewal work will not count toward graduation or certification, and the permanent academic record shall be annotated in such a manner that all work remains legible. Up to 30 units combined of below “C” work from the Colleges may be disregarded in the computation of the grade point average. The student may choose the 30 units of substandard grades to disregard.

• After an associate degree or general education certification is posted, academic renewal without course repetition is not accepted.

• Academic Renewal Without Course Repetition is solely the policy of the Rancho Santiago Community College District and may not necessarily be followed by other institutions.
• Academic Renewal Without Course Repetition may be granted multiple times by Santa Ana College and/or Santiago Canyon College but is limited to a total of 30 units.

• As a result of AB705, a student may seek grade alleviation without course repetition when the substandard work occurred in an English or Mathematics course that is part of a remedial (pre-transfer level) sequence OR in an ACE or EMLS course that is part of the sequence leading to transfer-level English (CSU GE Area A2 or IGETC GE area 1A) once the student has successfully passed the transfer-level course, regardless of the student’s overall academic record since the semester in which the “D”, “F”, or “NP” was earned.

A student seeking alleviation under this scenario will be eligible for alleviation subject to these limitations: If a student received a grade of “C” or better or “P” in a transfer-level English course (CSU GE Area A2 or IGETC GE area 1A APPROVED course), the highest grade earned shall be used when computing the student’s cumulative grade point average. Grades earned in courses in a remedial English sequence pre-requisite to a transfer-level course may only be alleviated once the student earns a satisfactory grade (‘C” or better or “P”) in the transfer-level course. Neither the student’s academic record since earning the “D”, “F”, or “NP” grade nor the time elapsed since earning the “D”, “F”, or “NP” is relevant to this scenario. The units alleviated in this scenario shall not be counted as part of the maximum 30 units of substandard work allowed under the first provision of AR 4240.

A student seeking alleviation under this scenario will be eligible for alleviation subject to these limitations: If a student received a grade of “C” or better or “P” in a transfer-level Mathematics or Quantitative Reasoning course (CSU GE Area B4 or IGETC GE 2A approved course), the highest grade earned shall be used when computing the student’s cumulative grade point average. Grades earned in courses in a remedial Math sequence pre-requisite to a transfer-level Mathematics or Quantitative Reasoning course may only be alleviated once the student earns a satisfactory grade (‘C” or better or “P”) in the transfer-level course. Neither the student’s academic record since earning the “D”, “F”, or “NP” grade nor the time elapsed since earning the “D”, “F”, or “NP” is relevant to this scenario. The units alleviated in this scenario shall not be counted as part of the maximum 30 units of substandard work allowed under the first provision of AR 4240.

A student seeking alleviation under this scenario will be eligible for alleviation subject to these limitations: If a student received a grade of “C” or better or “P” in a transfer-level English course (CSU GE Area A2 or IGETC GE area 1A APPROVED course), the highest grade earned shall be used when computing the student’s cumulative grade point average. Grades earned in the ACE or EMLS sequence pre-requisite to the transfer-level English course (CSU GE Area A2 or IGETC GE area 1A APPROVED course) may only be alleviated once the student earns a satisfactory grade (‘C” or better or “P”) in the transfer-level course. Neither the student’s academic record since earning the “D”, “F”, or “NP” grade nor the time elapsed since earning the “D”, “F”, or “NP” is relevant to this scenario. The units alleviated in this scenario shall not be counted as part of the maximum 30 units of substandard work allowed under the first provision of AR 4240.

When Academic Renewal Without Course Repetition occurs under this section, the student’s permanent academic record shall be annotated in such a manner that all work remains legible, ensuring a true and complete academic history. This petition is submitted to Admissions and Records.

RSCCD Academic Renewal Without Course Repetition is established pursuant to Title 5 section § 55046.

Academic and Progress Probation/Dismissal

A student’s academic standing and progress is calculated at the end of the fall and spring semesters (calculations are not done after the summer session or intersession), based only on the SCC/SAC units and cumulative (RSCCD Total) grade point average (GPA). Academic and Progress Probation calculations begin after a student has attempted 12 units or more at SCC/SAC. Students are placed on Academic Probation when their RSCCD Total GPA for all SCC/SAC coursework falls below 2.0. Students are placed on Progress Probation when the percentage of coursework at SCC/SAC has an entry of “W”, “I”, “NP”, and “NC” which reaches or exceeds fifty percent (50%) of the coursework attempted.
A1 - Academic Probation (First Time)
Students placed on academic probation for the first time (first semester under a RSCCD Total GPA of 2.0) are required to attend a counseling intervention workshop. An e-mail notification is sent to the student and a registration hold is placed on the student record until the completion of the workshop.

A2 - Academic Probation (Second Time)
Students who have two consecutive semesters with a RSCCD Total GPA below 2.0 will lose priority registration for the next registration opportunity. Their registration date will be after all new applicants.

AD - Academic Dismissal
Students who have three consecutive semesters with a RSCCD Total GPA of below 2.0 at the end of the spring semester are dismissed. Students who are dismissed have a hold placed on their records and an e-mail is sent notifying them of their status. Students cannot register for classes at SCC or SAC for one full semester. When students returns after “sitting out” one semester, they will return on academic probation and will continue to lose registration priority until their RSCCD Total GPA is at or above a 2.0.

Students who have three consecutive semesters with a RSCCD Total GPA of below 2.0 at the end of the spring semester are dismissed. Students who are dismissed have a hold placed on their records and an e-mail is sent notifying them of their status. Students cannot register for classes at SCC or SAC for one full semester. When students returns after “sitting out” one semester, they will return on academic probation and will continue to lose registration priority until their RSCCD Total GPA is at or above a 2.0.

Students who have three consecutive semesters with a RSCCD Total GPA of 2.0 at the end of the fall semester are “subject to dismissal” and a hold is placed on their student record. Since they have already registered for the spring semester they are given a grace period to improve their RSCCD Total GPA. If the RSCCD Total GPA remains below a 2.0 at the end of the spring semester, they will be academically dismissed and will not be able to register for classes at SCC or SAC for one full semester. When they return after “sitting out” one semester, they will return on academic probation and will continue to lose registration priority until their RSCCD Total GPA is at or above a 2.0.

Progress Probation and Dismissal

P1 - Academic Probation (First Time)
Students placed on Progress Probation for the first time (first semester where the total of W, NP, or I grades is 50% or more of all grades earned) will be notified and provided intervention services.

P2 - Academic Probation (Second Time)
Students who have two consecutive semesters of progress probation will lose priority registration for the next registration opportunity. Their registration date will be after all new applicants.

PD - Progress Dismissal
Students who have three consecutive semesters with less than 50% of their coursework earning a grade at the end of the spring semester are dismissed. Students who are dismissed have a hold placed on their records and an e-mail is sent notifying them of their status. A student cannot register for classes at SCC or SAC for one full semester. When the student returns after “sitting out” one semester, the student will return on progress probation and will continue to lose registration priority.
Students who have three consecutive semesters with less than 50% of their coursework completed with a grade at the end of the spring semester are dismissed. Students who are dismissed have a hold placed on their records and an email is sent notifying them of their status. A student cannot register for classes at SCC or SAC for one full semester. When the student returns after "sitting out" one semester, the student will return on progress probation and will continue to lose registration priority.

Students who have three consecutive semesters with less than 50% of their coursework completed with a grade at the end of the fall semester are "subject to dismissal" and a hold is placed on their student record. Since the student has already registered for the spring semester, they are given a grace period to improve their course completion rate. If the percentage of completed coursework remains below 50% at the end of the spring semester, they will be dismissed and will not be able to register for classes at SCC or SAC for one full semester. When the student returns after "sitting out" one semester, the student will return on progress probation and will continue to lose registration priority.

Important Note: Registration priority shall be lost at the first registration opportunity after a student is placed on academic or progress probation or any combination thereof for two consecutive terms.

Attendance & Drops
Drop for Non-payment Policy

Enrollment fees must be paid in full within 3 days of registration (including weekends and holidays) or all classes may be dropped and released to other students. The day you register is counted as day 1 of the 3 days.

Students are expected to attend all sessions of the classes in which they are enrolled. Students should report absences due to illness to the instructor prior to missing class.

A student may be dropped for not attending the first class meeting or for excessive absences when the total hours of absence exceed 10% of the total scheduled hours of the class.

Under extenuating circumstances, a student may be reinstated by the instructor. A student may also be dropped by the instructor when not appearing at the first class meeting.

It is the student's responsibility to withdraw officially from a course. Students are responsible for any and all charges incurred resulting from a failure to withdraw from classes within the refund period.

Post-9/11 GI Bill® and VR&E Beneficiaries (Chapter 33 and Chapter 31 beneficiaries)

The Veterans Benefits and Transition Act of 2018 (Public Law 115-407) allows students that will be utilizing Ch. 33 or Ch. 31 VA benefits to attend a course of education or training for up to 90 days from the date the beneficiary provides a certificate of eligibility (COE), or valid authorization from VOC Rehab counselor. Students must submit all required certification request forms directly to the Veterans Resource Center (VRC) for processing. Submission of forms will allow students to attend the course until the VA provides payment to the institution without penalty or requiring to borrow additional funds to cover mandatory tuition and fees due to late payments from the VA. Any student that does not have 100% entitlement for Ch. 33 VA benefits, will be responsible for any remaining balance after the VA submits payments directly to the school. For further information, please contact the VSO directly.

Online Drop Policy
Students are expected to complete regular and substantive coursework in online classes. In distance education context, coursework will be used to determine student attendance. Simply logging into an online class is not sufficient to demonstrate academic attendance by the student. Examples of coursework for online classes might include, but are not limited to, class discussions, completed assignments, completed quizzes or exams, group work, etc. Students who fail to submit substantive coursework by the due date may be dropped from the class. Completing an assignment on the first day of the class may also be required in order to avoid being dropped from the class. Please refer to the class syllabus and the class section information, found in the class schedule, for the specific attendance (regular and substantive coursework) requirements.

**Auditing**

Santiago Canyon College does not permit auditing of classes.

**Basic Skills Course Limit**

Students are limited to 30 units of basic skills coursework. Basic skills courses include non degree, basic skill classes in Mathematics, English, English as a Second Language (ESL), and Reading. Students who reach 30 units of remedial coursework are prevented from further registration. The student must complete a petition form and meet with a counselor who advises the student on a comprehensive student education plan or refers the students to continuing education.

A waiver is required beyond 30 units. Students must show a “C” or better or a 2.0 GPA in basic skills courses to qualify for a waiver. Waiver forms are available in the Admissions and Records Office and the Counseling Office.

**Dual Enrollment**

The steps listed below allow high school students to use college credit coursework to meet high school graduation requirements.

- Download at www.sccollege.edu/dualenrollment a Special Admit Form and obtain approval from your high school to enroll at Santiago Canyon College. Only approved signatures from your high school will be accepted. Signatures that do not match what Santiago Canyon College has on file will not be accepted. For a list of approved signatures from your high school, please contact the Admissions and Records Office.
- All college class prerequisites must be met.
- Math and English placement testing are not required. High school performance and/or Guided Self-Placement will be used to provide the student with course recommendations.
- Any student who is not yet 15 years of age or below 9th grade must have approval from the Santiago Canyon College Division Dean.
- Any Special Admit student below the 9th grade as well as any Special Admit student who registers as a full-time student will be charged the regular community college enrollment fees.
- Santiago Canyon College will charge enrollment fees to nonresident students who hold an F1/F2 visa. F1/F2 students are not exempted from enrollment fees.
- Special Admit students by law do not have priority registration.

**Career Technical Education (CTE) Transitions**

D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) and it provides students an opportunity to earn college credit in an identified career pathway while still in high school. CTE Transitions focuses on helping Career Technical Education students’ transition from high school to community college and on to the world of work. There is no cost to students participating in the CTE Transitions program. For more information on which courses articulate with the local Central Orange County Career Technical Education Partnership (CTEp), please contact the CTE Transitions Coordinator at (714) 628-4889, or visit www.sccollege.edu/transitions

**Classification of Students**

- **Career Advanced Placement** - one who is concurrently enrolled in high school
- **Freshman** - one who has completed 0-29 units
- **Sophomore** - one who has completed 30 or more units
- **Graduate** - one who has received an associate degree

**Course Repeatability and Repetition**

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-d32fa6eb18
State regulations (Title 5, sections 55040-55045) restrict the number of times a student may enroll in a course within a community college district. The number of times a student may enroll in a course is based on whether the course is designated "repeatable" or "non-repeatable." Any student registering to repeat a course not identified as repeatable or repeating a course more often than permitted may be dropped from the course.

Courses may be repeated only under the following circumstances:

Substandard Work for Non-Repeatable Courses

A student has up to three enrollments in the same course (SCC and SAC combined) to receive a satisfactory grade. After three enrollments, the student can no longer register for the course within this college district. After two enrollments, the student loses the ability to register for the class online. A repeat form must be completed in Admissions and reviewed by an Admissions Office administrator. The last grade earned will count in the GPA calculation. Courses repeated under the provisions of this section will be indicated as repeated on the permanent academic record of the student. A student may not repeat a course to change a grade of C or above.

Significant Lapse of Time

Students may re-enroll in a course where the student has received a satisfactory grade of “C” (or Pass) or better in their last enrollment and there has been a significant lapse of time since completion of the course. California Code of Regulations defines a "significant lapse of time" as three (3) calendar years and an institution of higher education to which the student wishes to transfer has established a recency requirement that the student cannot satisfy without repeating the course (Title 5, §55043). Students must submit a petition to the Admissions and Records office to re-enroll in the course. Grades awarded for courses repeated under this provision shall replace the original grade. Only one repetition may be used for significant lapse of time (W grade counts towards repetition).

Repeatable Courses

Repeatable Courses: As of January 2013, only three types of courses are repeatable under state regulations:

Courses for which additional enrollments are necessary to meet the major requirements of California State University or University of California for completion of a bachelor’s degree. Such courses may allow for additional enrollments to allow the student to meet the lower division component of these major requirements. The number of maximum enrollments may not exceed four and might be fewer if the transfer institution requires fewer than four enrollments or if the course is related in content to other courses offered at the college.

Intercollegiate athletics. These courses include those in which student athletes are enrolled to participate in an organized competitive sport sponsored by the district or a conditioning course which supports the organized competitive sport. Student athletes are limited to no more than 350 contact hours within a fiscal year (July 1-June 30); they are permitted a maximum of 175 hours in courses dedicated to the sport and 175 hours in courses focusing on skill development and conditioning.

Intercollegiate academic or vocational competition. Such courses must be designed specifically for students to participate in non-athletic competitive events, the competitions must be between students from different colleges, the competition must be sanctioned by a formal collegiate or industry governing body, and participation in the event must be directly related to the course content. Students enrolled in these courses are required to participate in the academic or vocational competition.

Repeatable courses are identified in the catalog’s course descriptions. A student may not re-enroll in a course to replace a grade of a course identified as repeatable in the college catalog. All grades earned within the repeatability sequence will count as completed courses regardless of grade earned.

Legally Mandated Training
Students may re-enroll in a course if the repetition is a requirement for continued paid or volunteer employment. Students must complete a petition and submit appropriate documentation to the Admissions and Records Office as evidence that a student is legally mandated to re-enroll in the course. All grades issued under this provision will count towards the students GPA.

**Significant Change in Industry or Licensure Standards**

Students may be permitted to repeat a previously completed course if there has been a significant change in industry or licensure standards since the student last took the course such that the student could not obtain or maintain his or her employment or license without retaking the course and the student is required to repeat the course for employment or licensure. Students must complete a petition and submit appropriate documentation to the Admissions and Records Office.

**Active Participatory Courses**

Active participatory courses in physical education, visual arts, or performing arts (including but not limited to Art, Dance, Kinesiology, Music, and Theatre) that are related in content to one or more other courses have additional restriction on repeatability and repetition. Courses are defined as being related in content when they have “similar primary educational activities in which skill levels or variations are separated into distinct courses with different student learning outcomes for each level or variation.” Students are limited to four semester enrollments in courses that are related in content; this limitation applies even if an active participatory course is designated as repeatable. Students may repeat active participatory courses in which a substandard grade or W was received, however all enrollments count toward the four enrollment maximum.

**Honors Courses**

A student who has completed a Santiago Canyon College Honors course and who has received a substandard grade may re-enroll in the course without the Honors notation attached to the course number. If a student participating in the Santiago Canyon College Honors program chooses to re-enroll in the non-Honors version of the course, there will be consequences relating to participation in the Honors program. Please refer to the Honors Program and Honors Courses section of the catalog.

**Computer & Network Use**

The Rancho Santiago Community College District owns and operates a variety of information resources, including hardware, software, and Internet access. These information resources are provided solely for the use of RSCCD students, faculty, and staff (and employees rather than faculty/staff?) in support of the education, research, academic development, and public service programs of RSCCD.

RSCCD information resources provide access to information content and communication worldwide. Access to, and use of, these information resources is a privilege, which is to be used responsibly. RSCCD information resources users must respect the rights of other users, respect the integrity of the information resources, and observe all relevant RSCCD Board Policies, Administrative Regulations, and federal, state, and local laws. All students, faculty, and staff are responsible for seeing that these RSCCD information resources are used in an appropriate, effective, efficient, ethical, and lawful manner, including but not limited to the illegal downloading and/or unauthorized distribution of copyrighted material, including peer-to-peer file sharing. Violations of Federal copyright laws may subject the violator to civil and criminal penalties as well as disciplinary action.

Administrative regulations establish rules and prohibitions that define acceptable use of RSCCD resources. Unacceptable use is prohibited and is grounds for loss of use of information resources, as well as discipline or legal actions as provided for under RSCCD Board Policy and federal, state, and local laws.
During the application process, students at Santiago Canyon College will provide an email account. This email address may be updated in WebAdvisor as desired by the student. The College will email students to share college information and as a means of communication regarding college business.

Credit for Prior Learning and Credit by Examination (CBE)

Eligible Courses

Arts, Humanities, and Social Sciences/Library: None
Counseling and Student Support Services: None
Mathematics and Sciences: MATH 080, 086, 140, 160, 170, 180, 219; PHYS 150AC, 150BC

Rancho Santiago Community College District
ADMINISTRATIVE REGULATION
Chapter 4
Academic Affairs
AR 4235 Credit for Prior Learning
Reference(s): Education Code Section 66025.71, 66700, 70901, Sections 70901 and 70902
Title 5 Section 55002, 55023, 55021, 55025, 55052

Students may demonstrate proficiency in a course eligible for Credit for Prior Learning and receive college credit through the approved alternative methods for awarding credit listed below:

• Achievement of a satisfactory score on an Advanced Placement (AP) examination,
• Achievement of a satisfactory score on a high-level International Baccalaureate (IB) examination,
• Achievement of a satisfactory score on the College Level Examination Program (CLEP),
• Evaluation of Joint Service Transcripts (JST),
• Achievement of an examination administered by other agencies approved by the District,
• Evaluation of industry-recognized credential documentation,
• Evaluation of student-created portfolios, and/or
• Satisfactory completion of an institutional examination, known as Credit by Examination, administered by the college in lieu of completion of an active course listed in the current college catalog.

Determination of Eligibility for Credit for Prior Learning

• The student must be in good standing in the District.
• The student must have previously earned credit or noncredit from the District or be currently registered in the District.
• Current students must have an education plan on file.
• The course is listed in either the current Santa Ana College or Santiago Canyon College Catalog.
• The student is not currently enrolled in the course to be challenged.
• Credit by Examination: The student is registered in the District and not currently enrolled in nor received credit for a more advanced course in a sequence in the same subject (may be waived by department).
Credits acquired by examination are not applicable to meeting of such unit load requirements as Selective Service deferment, Veterans, or Social Security benefits.

Credits acquired by examination shall not be counted in determining the 12 semester hours of credit in residence required for an Associate degree.

Prior Learning Assessment Grading Policy

- Grading shall be according to the regular grading system in accordance with Administrative Regulation (AR) 4230 Grading and Academic Record Symbols.
- Students shall be offered a “Pass/No Pass” option, in accordance with Administrative Regulation (AR) 4232 Pass/No Pass Grading Option if that option is ordinarily available for the course.
- Students shall be given the opportunity to accept, decline, or appeal the grade assigned by the faculty, and in cases of Credit by Examination, pursuant to AR 4230 Grading and Academic Record Symbols and AR 4231 Grade Changes.

Transcription of Credit for Prior Learning

- The student’s academic record shall be clearly annotated to reflect that credit was earned by assessment of prior learning.

Advanced Placement Credit

Students requesting Credit for Prior Learning using Advance Placement shall receive credit for completing a satisfactory score on a District approved Advanced Placement (AP) examination under the following circumstances:

- Achievement of a score of 3, 4, or 5 on an Advanced Placement Examination administered by the College Board. Advanced Placement official score reports must be on file in the Admissions and Records Office.
- The student achieved a minimum acceptable score on the AP examination as outlined by Santa Ana College or Santiago Canyon College Advanced Placement policies.

International Baccalaureate

Students requesting Credit for Prior Learning using International Baccalaureate shall receive credit for completing a satisfactory score on a District approved high-level International Baccalaureate (IB) examination under the following circumstances:

- Official IB transcripts must be on file in the Admissions and Records Office.
- The student achieved a minimum acceptable score on the IB examination as outlined by Santa Ana College or Santiago Canyon College International Baccalaureate policies.

College Level Examination Program

Students requesting Credit for Prior Learning using the College Level Examination Program shall receive credit for completing a satisfactory score on a District-approved College Level Examination Program (CLEP) under the following circumstances:

- Official CLEP transcripts must be on file in the Admissions and Records Office.
- The student achieved a minimum acceptable score on the CLEP examination as outlined by Santa Ana College or Santiago Canyon College College Level
Credit for Military Service/Training

Students interested in Credit for Prior Learning using Joint Service Transcripts shall receive credit as recommended by the American Council on Education (ACE) Directory and approved by the appropriate discipline faculty of the college under the following circumstances:

• The student shall complete the Credit for Prior Learning assessment form available in the Counseling or Admissions and Records Office.

• Official transcripts must be on file in the Admissions and Records Office. These may include Joint Services Transcript (JST), Sailor/Marine American Council on Education Registry.

Transcript (SMART), Army and American Council on Education Registry Transcript Service (AARTS), Community College of the Air Force (CCAF), Coast Guard Institute (CGI), DANTES/USAFI, Defense Language Institute Foreign Language Transcripts (DLIFLC), Defense Manpower Data Center (DMDC), DLPT Examinee Results, DA Form 330 Language Proficiency Questionnaire, or verified copies of DD214 or DD295 military records.

• Credit course equivalency shall be determined by the faculty of the appropriate discipline.

Industry Recognized Credentials

Students interested in Credit for Prior Learning using industry-recognized credential(s) shall receive credit as recommended by the appropriate department chair or faculty designee:

The student shall complete the Credit for Prior Learning assessment form available in the Counseling or Admissions and Records Office.

Enrollment services shall grant credit for industry-recognized credential(s) that have already been evaluated and approved by the appropriate department chair or faculty designee.

If an industry-recognized credential(s) has not yet been evaluated and approved by the appropriate faculty:

The student meets with the department chair or faculty designee to receive further instructions for industry-recognized credential(s) assessment.

The student submits all industry-recognized credential documents to the department chair or faculty designee for assessment of prior learning.

If the department chair or faculty designee determines the industry certification adequately measures mastery of parts or all of the course content as set forth in the Course Outline of Record, the appropriate faculty may recommend additional aforementioned alternative assessment methods or sign the form with the recorded grade, attach the industry-recognized credential(s), and forward appropriate forms and documentation to the Admissions and Records Office to be kept on file and recorded on the student transcript.

Student-Created Portfolio Assessment

Students interested in Credit for Prior Learning using a student-created portfolio shall receive credit as recommended by the appropriate department chair or faculty designee under the following circumstances:

• A department-approved portfolio assessment rubric for the course is on file.

• The student shall complete the Credit for Prior Learning assessment form available in the Counseling or Admissions and Records Office.

• The student meets with the department chair or faculty designee to receive further instructions for student-created portfolio assessment.

• The student submits all portfolio documents to the department chair or faculty designee for assessment of prior learning.
• If the department chair or faculty designee determines the student-created portfolio adequately measures mastery of parts or all of the course content as set forth in the Course Outline of Record, the appropriate faculty may recommend additional aforementioned alternative assessment methods or sign the form with the appropriate grade and forward appropriate forms and documentation to the Admissions and Records Office to be kept on file and recorded on the student transcript.

Credit by Examination (CBE) from Within the District

The District will award college course credit for successful completion of a District examination administered by the appropriate departmental faculty under the following circumstances:

Achievement of a grade that qualifies for CBE through completion of articulated high school or adult education courses. Students who wish to earn course credit through CBE through using completion of articulated high school or adult education courses must complete the required petition at either Santa Ana College or Santiago Canyon College (High School/ROP Completion of Articulation Course/Career Transitions Articulated Pathways) and be currently enrolled in at least one credit class at the time of petition.

Credit by satisfactory completion of an examination administered by the department involved in lieu of completion of a course listed in the Santa Ana College or Santiago Canyon College Catalog.

The Department Chair or faculty designee shall determine whether or not a student requesting CBE is sufficiently well prepared to warrant being given this opportunity. This determination is based upon a review of previous coursework and/or experience. Students wishing to earn course credit through CBE are encouraged to informally discuss the matter with the department chair or faculty designee and instructor prior to initiating the formal process. All steps must be completed in the order listed or the form for Credit by Examination shall not be processed. The form for CBE must be completed prior to the end of the current semester or session.

The District Credit by Examination (CBE) Process:

In order to permit students to demonstrate that they have met the objectives of a course through experience in the workplace, foreign language proficiency, or some other process outside the conventional academic setting, students may earn credit by receiving a passing grade on an examination administered by the appropriate instructional department/program. The completion of CBE may require the demonstration of other skills or the completion of assignments in addition to an examination.

Students interested in Credit for Prior Learning using CBE shall receive credit as recommended by the appropriate department chair or faculty designee under the following circumstances:

The Credit by Examination (CBE) Procedures

Student shall complete the Credit for Prior Learning assessment form along with any documentation of prior learning. The required form shall be available in the Counseling or Admissions and Records Office.

Student meets with the department chair or faculty designee for further instructions for CBE. The dean and department chair or faculty designee will determine whether a departmental or a standardized examination is to be administered and when and where it shall be.

If the department chair or faculty designee determine the CBE assessment measures mastery of all of the course content as set forth in the Course Outline of Record (COR), the appropriate faculty member shall sign the form with the recorded grade and forward appropriate forms and documentation to the Admissions and Records Office to be kept on file and recorded on the student transcript. If a faculty member determines that the assessment measures mastery of only parts of the COR, the faculty member may recommend additional aforementioned alternative assessment methods. Completed exam materials must remain on file with the department/program for three years.

High School or Adult Education to College Articulation - Credit by Examination (CBE) Procedures

Students shall complete the appropriate petition at Santa Ana College or Santiago Canyon College (High School/ROP Completion of Articulation Course/Career Transitions Articulated Pathways). The petition shall be forwarded to the appropriate Division/Department for approval.
In order for a student to receive CBE, the student must apply online to one of the colleges in RSCCD and register in at least one college credit class at the time of the petition. Timeline for credit to be claimed by the student is based on the existence of a signed articulation agreement for the year the student took the course. A recency requirement may be applicable based on industry standards. A letter grade will be assigned, and the course will be identified as CBE on the transcript in accordance with the official final grade received for the full term of the course being petitioned for college credit. Once assigned, a grade is not reversible. The letter grade will be posted on the transcript in the semester the petition was approved. Students who are unsuccessful in obtaining a grade of B or better for the full term of the course will not be allowed to petition for credit and no record of the attempt for CBE will appear on a student's transcript. The enrollment fee for CBE will not be charged for credit awarded under this provision.

Responsible Manager: Office of Academic Affairs

Adopted: September 17, 2018
Revised: December 7, 2020

Drug Free Environment and Drug Prevention Program

The district shall be free from all drugs and from the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees. The unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in all facilities under the control and use of the district. Any student or employee who violates this policy will be subject to disciplinary action, which may include referral to an appropriate rehabilitation program, the Employee Assistance Program, suspension, demotion, expulsion or dismissal.

The RSCCD Chancellor shall assure that the district distributes information annually to students and employees as required by the Drug-Free Schools and Communities Act Amendments of 1989 and in compliance with other requirements of the Act. Please refer to Board Policy (BP 3550) for specific information or contact the Student Health and Wellness Services at (714) 628-4773.

Email

During the application process, students at Santiago Canyon College will provide an email account. This email address may be updated in WebAdvisor as desired by the student. The College will email students to share college information and as a means of communication regarding college business.

Enrollment Priority

The state of California has adopted a law under Title 5 Regulation 5B108, establishing enrollment priorities for students attending California Community Colleges. Districts shall provide highest and equal priority to students eligible for registration priority who are:

A member of the armed forces or a veteran pursuant to Education Code section 66025.8,
A foster youth or former foster youth pursuant to Education Code section 66025.9,
Determined to be eligible for Disabled Student Program and Services as set forth in Education Code section 66025.91,
Receiving services through the Extended Opportunity Programs and Services as set forth in Education Code section 66025.91, or
Receiving aid from the California Work Opportunity and Responsibility to Kids Program as set forth in Education Code section 66025.92

Registration times will be assigned each term to students in the following order:
Title 5 mandated groups (see above)
Continuing students by units completed at R.S.C.C.D.
New/returning students
Loss of Priority students and those who have completed 100 or more degree applicable units at R.S.C.C.D.
Career Advance Placement (CAP) Program Check the current class schedule for enrollment priority dates and times.
Loss of Enrollment Priority

Continuing students at Santiago Canyon College will lose their enrollment priority for the following reasons:

- The student has attempted 12 units and their RSCCD cumulative GPA has fallen below 2.0 for two consecutive semesters and is on academic probation
- The student has attempted 12 units and the percentage of all coursework at SCC/SAC has an entry of “W”, “I”, “NP”, and “NC” which reaches or exceeds fifty percent (50%). § 55031
- The student has earned 100 or more degree-applicable units from Santiago Canyon and Santa Ana Colleges

Students who have SCC as their home campus can submit a petition for appeal to the Admissions Office at SCC. Students who are not in good academic standing can appeal for one of the following reasons:

- there were extenuating circumstances (verified cases of accident, illness) and can provide documentation;
- the student can demonstrate SIGNIFICANT academic improvement in a subsequent term.

Students who have earned 100 or more degree-applicable units can appeal if they have declared a high unit major and are currently working toward a degree. Forms for these appeals can be obtained in Admissions and Records or downloaded from the college website.

Experimental Courses

The college may offer Experimental courses, N98 (non-degree applicable), 098 (non-transfer), or 198 (transfer) under any discipline listed in the announcement of courses. Experimental courses are specialized courses on topics related to the immediate and changing needs of students. A student who received a satisfactory grade in an Experimental course may not re-enroll in a course with the same discipline name and number, even though the topics may be different.

Family Education Rights and Privacy Act (FERPA)

As required under the provisions of the Family Education Rights and Privacy Act of 1974, Santiago Canyon College will make public without student consent only certain directory information. This consists of the following: a student’s name; city of residence; major field; participation in officially recognized activities and sports; weight, height and age if a member of an athletic team; dates of attendance; degree and awards received; and the most recent previous educational institution or agency attended by the student.

A student initially agrees or denies a FERPA release at the point of application. However, a student may come to Admissions at any time to opt out of the FERPA disclosure or agree to the release of directory information. Admissions Forms: “FERPA Consent to Release” or “FERPA Consent NOT to Release” directory information.

All student expulsions will be noted on the official college transcript.

The Family Education Rights and Privacy Act of 1974 provides colleges the right to consent to disclose personally identifiable information contained in the student’s education records to third party vendors who are identified as School Officials and who have legitimate educational interests. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his/her professional responsibility.

A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including district safety personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees or a member of an official college committee.
Santiago Canyon College contracts with the following School Officials:

- Auditors (Vicenti-Lloyd-Stutzman)
- Barbering/Cosmetology
- Unilateral Training Committee
- California/Nevada Training Trust
- CCCApply (Unicom)
- Credentials (Online transcript request)
- Ellucian Colleague
- ECS Imaging (optical imaging)
- Electrical Training Trust
- Image Now (optical imaging)
- Medpro and Quest (Health Center)
- Metropolitan Water District of Southern California
- National Student Clearinghouse
- Operating Engineers Training Trust SARS (Counseling center)
- Santa Ana Beauty Academy
- Southern California Surveyors
- Southwest Carpenters Training Fund
- Xerox

**Free Expression**

Santiago Canyon College supports liberal policies regarding free speech for individual students, college staff, nonofficial college groups, and visiting speakers. Please refer to Board Policy (BP 3900) for specific information.

**Grades & GPA**

Grades are based upon the quality of work completed, that is, upon actual accomplishment in courses offered for credit. Credit by examination, Class In Progress (CIP), Incomplete (I), Pass/No Pass (P or NP), Reports Delayed (RD), and Withdrawals (W, EW, or MW) are not figured into Grade Point Averages (GPA). The grade point average is computed by dividing all other units attempted into all grade points received. The meaning of each Grade and its value in Grade Points is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent 4 per unit earned</td>
</tr>
<tr>
<td>B</td>
<td>Good 3 per unit earned</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory 2 per unit earned</td>
</tr>
<tr>
<td>*D</td>
<td>Passing, Less than satisfactory 1 per unit earned</td>
</tr>
<tr>
<td>*F</td>
<td>Failing 0 per unit attempted</td>
</tr>
<tr>
<td>P</td>
<td>Pass 0 per unit earned</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass 0 per unit attempted</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal 0 (no units earned)</td>
</tr>
<tr>
<td>EW</td>
<td>Excused Withdrawal 0 (no units earned)</td>
</tr>
<tr>
<td>MW</td>
<td>Military Withdrawal 0 (no units earned)</td>
</tr>
<tr>
<td>UF</td>
<td>Unauthorized Withdrawal 0 (no units earned)</td>
</tr>
<tr>
<td>WF</td>
<td>Withdrawal, Failing 0 (no units earned)</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete 0 (no units earned)</td>
</tr>
<tr>
<td>CIP</td>
<td>Class In progress 0 (no units earned)</td>
</tr>
<tr>
<td>RD</td>
<td>Report delayed 0 (no units earned)</td>
</tr>
</tbody>
</table>
Incomplete Work

When a student has attended regularly but because of illness or other unavoidable circumstances is unable to complete coursework or take the final examination, a grade of “I” may be assigned. If an “I” is issued, the instructor completes the Incomplete Grade Form which includes the condition(s) for removal of the “I”, and the grade to be assigned if the condition(s) are not completed. A student may not re-register in the same class if an Incomplete grade is pending. The work thus missed must be made

up no later than one year following the end of the term in which it was assigned. A student may petition the instructor for a time extension due to unusual circumstances. It is the student’s responsibility to contact the instructor in such cases.

A final grade will be assigned when the work stipulated has been completed and evaluated according to the conditions set forth by the instructor or when the time limit for completing the work has passed. If condition(s) are not met after one year, the incomplete grade will be changed to an “F” grade or the grade specified by the instructor on the Incomplete Grade Form.

Pass/No Pass

Pass/No Pass encourages students to explore academic areas outside a major field.

Courses in the student’s major field may not be taken under the Pass/No Pass policy except for major courses for an Associate Degrees for Transfer (ADT), courses for which Pass/No Pass is the only grading option, and units earned through Credit by Examination (CBE) or assessment.

Every university has a limitation on the number of courses/units that can be taken for Pass/No Pass and applied to graduation and may require General Education taken Pass/No Pass to be retaken for a letter grade. Universities sometimes prefer that students have letter grades in English, mathematics, speech, and critical thinking courses. Courses that meet major requirements must be taken for a letter grade. Also, Pass/No Pass grades could have a negative effect on scholarships and international students. In addition, students who plan to pursue graduate or professional studies later are advised to be selective in opting for courses on a Pass/No Pass basis.

Except as in item number one above, a maximum of 6 Pass/No Pass units may be carried during any one semester.

A maximum of 14 Pass/No Pass units is allowed for any degree program. This does not include units taken under credit by examination or assessment, or units earned in courses for which Pass/No Pass is the only grading option.

Pass/No Pass petitions are available at the Admissions and Records Offices. The Pass/No Pass petition must be signed by a counselor and be submitted between the first and fifth week of the fall and spring terms (for full semester classes) or thirty percent (30%) of the class meeting dates (for short term classes), whichever is less.

Pass/No Pass status cannot be changed back to a letter grade after the deadline has passed.

Rancho Santiago Community College District

ADMINISTRATIVE REGULATION

Chapter 4

Academic Affairs

AR 4232 Pass/No Pass

Reference(s): Title 5 Section 55022

Courses may be offered in either or both of the following categories:

Courses in which all students are evaluated on a “pass-no pass” basis.
Courses in which each student may elect on registration, or within the first 30% of the class's scheduled duration, to take the course on a "pass-no pass" basis.

A student electing to be evaluated on the "pass-no pass" basis will receive both course credit and unit credit upon satisfactory completion of the course. In computing a student's grade-point average, grades of "pass-no pass" are omitted.

A pass grade is granted for performance that is equivalent to the letter grade of "C" or better. A student who fails to perform satisfactorily will be assigned a "no pass" grade.

The student is held responsible for all assignments and examinations required in the course.

The standards of evaluation are identical for all students in the course.

The following guidelines apply to courses taken for pass-no pass as designated by each College Catalog:

Courses in the student's major field may not be taken under the Pass/No Pass policy except as designated.
Honors courses cannot be taken for Pass/No Pass.
Courses that meet major requirements must be taken for a letter grade. Also, Pass/No Pass grades could have a negative effect on scholarships and international students. In addition, students who plan to pursue graduate or professional studies later are advised to be selective in opting for courses on a Pass/No Pass basis.
A maximum of 6 Pass/No Pass units may be carried during any one semester.
A maximum of 12 Pass/No Pass units is allowed for any degree program. This does not include units taken under credit by examination or assessment.
Pass/No Pass petitions are available at the Admissions and Records Offices. The Pass/No Pass petition must be signed by a counselor and be submitted between the first and fifth week of the fall and spring terms (for full semester classes) or by the first thirty percent (30%) of the class meeting dates (for short term classes), whichever is less.
Pass/No Pass status cannot be changed back to a letter grade after the deadline has passed.
Pass indicates a "C" or better.
Pass/No Pass grades are accepted for certification in all areas. However, letter grades may be recommended or required for specific courses in a given major. Each CSU campus may also limit the total number of units graded Pass.
For a certificate, a Pass/No Pass course is acceptable if it is required for the certificate and (a) offered on a Pass/No Pass basis only or (b) if the Pass/No Pass is earned on the basis of credit by examination.
For Associate Degrees, units earned at a regionally accredited college or university on a Pass/No Pass basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
Every university has a limitation on the number of courses/units that can be taken for Pass/No Pass and applied to graduation and may require General Education taken Pass/No Pass to be retaken for a letter grade.

Adopted: September 17, 2018

Grade Grievances

Procedures for Student Grievances Regarding Grades

Education Code 76224 states:

(a) When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final.

Procedure
Students may request a grade change no later than one year following the awarding of the original grade. Student shall meet with the instructor to discuss the grade. If the issue is not resolved and the student believes that the grade is based on mistake, fraud, bad faith, or incompetency (EC 76224), he/she may appeal in writing to the Division Dean. Forms for the written appeal may be found in Division offices or by searching the Santiago Canyon College website. The student may be requested to set up an appointment with the Division Dean to discuss the written grievance. The Division Dean will review the allegations and consult with the instructor. The Division Dean will review the issue and will notify the student and instructor in writing of his/her decision. The decision of the Division Dean is final.

Grade Notification

Grades are available on WebAdvisor upon grade submission by the instructor. Log into WebAdvisor and select grades under Academic Profile.

Discrimination Complaints

Rancho Santiago Community College District does not discriminate on the basis of national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

Students may file a discrimination complaint when they believe they have been deprived of a right granted to students by the Board of Trustees in any of the policies or regulations of the Rancho Santiago Community College District. The purpose of these complaint procedures is to resolve differences as fairly and expeditiously as possible while preserving the right of students and staff members. Students should contact the Vice Chancellor, Human Resources if they want to file a discrimination complaint or discuss their concerns of alleged discrimination. The procedures for filing and investigation of a discrimination complaint can be found at: rsccd.edu/Trustees/Pages/policies-and-regulations.aspx#chapter1

Students can either file a discrimination complaint with the Vice Chancellor, Human Resources who can be contacted at

2323 N Broadway, Suite 407-2
Santa Ana, CA 92706
Telephone Number (714) 480-7489

Alternatively, the student can file a formal complaint with the State Chancellor’s Office Web site at extranet.cccco.edu/Divisions/Legal/Discrimination

General Grievances

Most complaint or grievance matters should be resolved at the department/division dean level. If a complaint does not fall into one of the previously mentioned, please see the dean that supervises the department.

Procedure

1. Students shall first confer with the person who took the action or made the ruling to which they object no later than ten (10) days following the event which prompted the grievance.
   a. The Associate Dean of Student Development will assist the student in arranging an appointment between the student and staff member.

If the difference is not satisfactorily resolved, the student shall confer with the person's supervisor.
a. The Associate Dean of Student Development will assist the student in arranging an appointment between the student and the staff member’s supervisor.

If the grievance is still unresolved, the student may file a written statement setting forth the nature of the grievance on the prescribed form with the Vice President of Student Services, no later than ten (10) days after conferring with the person’s supervisor.

The grievance form shall be completed in full and shall include a full description of the grievance, times, dates and pertinent facts and the remedy sought by the student.

a. A Student Grievance Staff Response form will be sent to both the staff member and a supervisor for completion.

The Vice President of Student Services shall select a Student Grievance Panel. The administrator involved then shall forward the completed forms to the panel chair for review and recommendation. The panel shall have the power to make an appropriate investigation of the grievance and shall state the findings and make a recommendation.

If the grievance is sustained by the panel, it will recommend appropriate action for relief of the grievance and communicate this in writing to the person(s) to whom the grievance was directed. If the findings of the panel do not sustain the grievance, the panel shall communicate this finding in writing to the student who filed the grievance. The ruling of the Student Grievance Panel is final.

**Student Grievance Panel Structure**

- one non-voting chair (except in situations of a tie vote)
- one student representative
- one classified representative
- one faculty representative
- one administrative representative

**Other Possibilities for Complaints/Grievances**

Information on student grievance procedures is available at Santiago Canyon College. Grievances should be filed with the Associate Dean of Student Development, in room A-201. Complaint and/or grievance issues that are not resolved at the campus level may be presented to the agencies provided below.

If your complaint is associated with the institution’s compliance with academic program quality and accrediting standards, contact the [Accrediting Commission for Community and Junior Colleges (ACCJC)](https://www.accjc.org/).

If your complaint does not concern California Community College’s (CCC) compliance with academic program quality and accrediting standards, complete the [CCC Chancellor’s Office Web form](https://www.sccnet.edu/ccc-oia/).

If your complaint involves unlawful discrimination, contact the [Chancellor’s Office Web site](https://www.sccnet.edu/).

**Independent Study**

Independent study allows students to pursue projects under faculty advisement and supervision. The projects may be directed field experience, research, or development of skills and competencies. Transfer credit is indicated as Independent Study 199.

Independent study projects are normally for one unit of credit and require a minimum of 48 hours of directed work per unit of credit. Within the 48-hour minimum the instructor meets with each student on a weekly basis for at least one hour or a minimum of 16 hours for each one-unit project. The proposed project must be approved by the supervising instructor and the dean, with notification to the Vice President of Academic Affairs. Independent study is offered on a Pass/No Pass basis.

Independent study projects are normally undertaken in the department or division of the student’s academic major. Exceptions to this rule must be approved by both the division dean of the student’s academic major and the division dean to whom the student is applying for an exception.

To be eligible for independent study, a student must be concurrently enrolled in at least one other class at either Santiago Canyon College or Santa Ana College and must show evidence of competence in the academic major and in the area of proposed independent study.
Lost and Found

In the event of losing an item on campus, please contact Safety and Security either in person in U-88 or by telephone at (714) 628-4730. An officer will review the lost and found register to see if your item has been found. If so, you may claim your item with approved identification. In the event the item has not been found, the officer will record a description of the item and your contact information in order to contact you if the item is found. All lost items will be stored until the fourth week of the following semester. Any unclaimed items will be donated to a local thrift store.

Parking

Campus Parking Information

RSCCD requires parking permits for student and staff lots at Santiago Canyon College during the fall and spring semesters and summer session. Parking permits are not required during intersession. Parking permits must be displayed on the first day of the semester/session. There is no grace period. Students are strongly encouraged to purchase their parking permits via the online WebAdvisor system when they register for classes. Parking permits may also be purchased using the link on the Safety & Security website. Day permits may be purchased through dispensers located in parking lots 1, 2, 3, 4, 5, 6 and 7. The purchase of your permit helps fund parking services and vehicle security when parked on campus.

Disabled Student Parking

Several areas on campus are designated for disabled student parking. Vehicles in these areas are NOT required to display a current SCC parking permit, or daily permit, but must display one of the following: District-issued disabled permit, State placard, or special State license plate. District permits are available in the Disabled Students Programs and Services, E-105.

Citation Information

Vehicles that do not display either a current parking permit or a daily parking permit will be issued a citation. Other citations will be issued if students park their vehicles in reserved parking. Disabled parking spaces are strictly enforced with citations of $350 being issued to vehicles that violate the regulations. More information on parking citations and enforcement can be found on the SCC website at www.sccollege.edu/parking. A listing of all campus parking and traffic regulations can be found at www.sccollege.edu/Departments/Security/Pages/parking-regulations.aspx

Refund of Parking Fee

Students who withdraw from full-semester classes through the first two weeks of instruction may request a refund of their parking permit.

Students must return the parking permit in its original condition to receive a refund. No refund will be allowed after the second week of instruction. No refund will be allowed if the parking permit is lost or stolen. Receipts must be presented.

Students who lose or have their parking permit stolen must purchase a new permit at full price.

Parking Lot Disclaimer

Rancho Santiago Community College District is not responsible for damages to, loss of, or thefts from vehicles parked on campus, except as defined under the applicable Government Codes of California, including [810-966.6].
Photography
Santiago Canyon College, a non-profit California Community College, reserves the right to use photography and video images of students and visitors, age 18 and older, taken on our property and at college-sponsored events for marketing and promotional purposes. Objection to the use of an individual’s photography may be made in writing to

Public Affairs and Publications
RSCCD District Office
2323 N. Broadway, Suite 408
Santa Ana, CA 92706

Prerequisites, Corequisites, and Advisory
Santiago Canyon College has adopted a policy on course prerequisites, corequisites, and advisories in order to provide for the establishing, reviewing, and challenging of prerequisites, corequisites, advisory, and certain limitations on enrollment in a manner consistent with law and good practice. The policy, which is specified for implementation as an administrative regulation, is established pursuant to regulations contained in section 55003 of Chapter 6 of Title 5 of California Code of Regulations. The RSCCD Board of Trustees recognizes that if these prerequisites, corequisites and limitations are established unnecessarily or inappropriately they constitute unjustifiable obstacles to student access and success and, therefore, the board adopts this policy which calls for caution and careful scrutiny in establishing them. Nonetheless, the board also recognizes that it is as important to have prerequisites in place where they are a vital factor in maintaining academic standards and in assuring the health and safety of students as it is to avoid establishing prerequisites where they are not needed. For these reasons, the board has sought to establish a policy that fosters the appropriate balance between these two concerns.

Important Definitions
It is very important to understand the definitions of the terms Prerequisites, Corequisites, and Advisory. Note that prerequisites and corequisites may be challenged. See Prerequisite Challenge Policy, for more information.

Prerequisite indicates a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. A prerequisite represents a set of skills or a body of knowledge that a student must possess prior to enrollment and without which the student is highly unlikely to succeed in the course or program. Students will not be permitted to enroll in such courses and programs without the appropriate prerequisite. All prerequisite courses must be completed with a letter grade of “C” or better.

Corequisite indicates a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. A corequisite represents a set of skills or a body of knowledge that a student must acquire through concurrent enrollment in another course and without which the student is highly unlikely to succeed. Students must concurrently enroll in the corequisite course.

Advisory indicates that while a course is not required prior to enrollment, it is highly advised in order to strengthen the likelihood of success in subsequent courses.

Prerequisite Policy
Prerequisite means the preparation or previous course work considered necessary for success in the course. The College requires students to complete prerequisites as pre-enrollment preparation. Prerequisites which are listed in the College Catalog include:

- Courses for which specific prerequisites have been established,
- Sequential course work in a degree- applicable program, and
- Courses in which an equivalent prerequisite exists at a four-year transfer college or university.
Questions about prerequisites are best resolved with a counselor or instructor prior to the first day of class.

**Prerequisite Challenge Process**

A prerequisite challenge requires written documentation, explanation of alternative course work, and/or background or abilities which adequately prepare the student for the course. A Prerequisite Challenge Form can be obtained from the appropriate instructional office. Prerequisites may be challenged for one or more of the following reasons:

- The college has not developed the prerequisite according to its established procedures or has not developed the prerequisite in accord with existing statutes.
- The prerequisite is discriminatory or is being applied in a discriminatory fashion.
- The college has not made the prerequisite course reasonably available.
- The student has documented knowledge and abilities equivalent to those specified in the prerequisite course.

The challenge will be reviewed by a committee consisting of the dean, or designee, department chair, or designee, and one department or division representative or designee.

If space is available in a course when a student files a challenge to the prerequisite or corequisite, the district shall reserve a seat for the student and resolve the challenge in a timely manner. If no space is available in the course when a challenge is filed, the challenge shall be resolved prior to the beginning of registration for the next term and, if the challenge is upheld, the student shall be permitted to enroll if space is available when the student registers for that subsequent term.

**NOTE:** Students who are challenging a course which is a requirement for a degree or certificate may wish to use the Credit by Examination process to receive credit for the challenged course.

*Specific regulations and procedures relating to course prerequisites, corequisites, and advisories are on file in the office of the Vice President of Academic Affairs at Santiago Canyon College.*

**Student Right to Appeal**

A student has the right to appeal an exception to a current Santiago Canyon College academic policy, including academic probation and progress probation, to be made on their behalf. The student must complete and submit a petition. Petitions are obtained and submitted to the Admissions Office. Students must provide valid justification and documentation to support their request. The Exceptions to Academic Regulations Committee will review and make decisions on all requests. Students will be informed of the outcome in a timely manner. Petitions are obtained and submitted to the Admissions Office.

**Publicity**

All announcements, publicity and advertisements posted on college facilities must be approved by the Administrative Services Office in A-204.

**Sequential Courses**

Courses arranged in order of a sequence (i.e. beginning, intermediate and advanced) must be taken chronologically. Students may not enroll in a lower level course after passing a higher level version of the same course. (e.g. enrolling in Basic Aerobics after passing Intermediate Aerobics).

**Sexual Assault and Other Assaults on Campus (Title IX)**

**Sexual Misconduct, Intimate Partner Violence, and Stalking**
Any sexual misconduct or physical abuse, including, but not limited to, rape, as defined by California law, whether committed by an employee, student, or member of the public, that occurs on or off district property, is a violation of district policies and procedures and is subject to all applicable punishment, including criminal procedures, civil litigation, and employee or student discipline procedures. Students, faculty, and staff who report sexual misconduct, dating or domestic violence (intimate partner violence), and stalking shall be treated with dignity and provided comprehensive assistance.

The District has established administrative procedures that ensure that students, faculty, and staff who are victims of sexual and other forms of misconduct receive appropriate information and treatment and that educational information about preventing sexual violence is provided and publicized as required by law (please see Administrative Regulation 3540 for complete procedures). The use of alcohol or drugs never makes the Complainant at fault for reports of misconduct, intimate partner violence, or stalking; therefore, Complainants should not be deterred from reporting incidents out of a concern that they might be disciplined for related violations of drug or alcohol policies. Except in extreme circumstances, Complainants shall not be subject to discipline for related violations of the Standards of Student Conduct.

Santiago Canyon College has the resources to assist and refer students who experienced sexual misconduct, dating or domestic violence, and stalking. Immediate care and confidential counseling can be provided by the Student Health and Wellness Services, in Building T-102 or call (714) 432-6858. When the Student Health and Wellness Services is closed, contact Campus Safety and Security (not a confidential resource) directly in U-90 or call (714) 628-4730. If you have questions regarding an allegation, specific behavior, or if you would like to discuss a concern with an administrator, please contact the Title IX Coordinator at (714) 480-7404. Additional off-campus resources can be found below.

Waymakers: 949-831-9110  
https://waymakersoc.org/

Human Options: 1-877-854-3594  
https://humanoptions.org/

Supporting Survivors: 714-517-6100  
http://www.ochealthinfo.com/bhs/services/support/ss

Laura’s House: 866-498-1511  
https://www.laurashouse.org/

National Suicide Prevention Lifeline: 1-800-273-8255  
https://suicidepreventionlifeline.org/

Rape, Abuse & Incest National Network: 1-800-656-HOPE  
https://hotline.rainn.org/>

Harassment and Discrimination

Board Policy 3430 (BP 3430) prohibits all forms of harassment that are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as this policy, and will not be tolerated. Administrative Regulation 3435 details the procedures for the resolution of such complaints (https://www.rsccd.edu/Trustees/Pages/policies-and-regulations.aspx). This policy is widely published and publicized to all employees and students, including incoming employees and students. The District is committed
to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation, including acts of sexual misconduct, dating or domestic violence, and stalking. The District shall also be free of other unlawful harassment or discrimination, including that which is based on any of the following statuses: race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, or sexual orientation of any person, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics. The Title IX Coordinator is responsible for resolving reports of sexual misconduct, sex or gender-based discrimination or harassment, dating or domestic violence, and stalking. To report an incident or file a complaint, please contact the following individuals:

Jennifer de la Rosa
Title IX Coordinator
Rancho Santiago Community College District
2323 N. Broadway, Santa Ana, California 92706
Email: De_La_Rosa_Jennifer@sccollege.edu
Phone: 714-480-7404
Web: www.rsccd.edu/titleix

Deisy Covarrubias Deputy
Title IX Coordinator
Santiago Canyon College
8045 E. Chapman Ave., Orange, CA 92869
Email: covarrubias_deisy@sccollege.edu
Phone: 714-628-4933

Any individual can submit a report by using the following link: www.rsccd.edu/incidentreportingform
Applicable regulations, resources, and additional information can be found at www.rsccd.edu/titleix or www.rsccd.edu/civilrights

The District seeks to foster an environment in which all employees and students feel free to report incidents of harassment without fear of retaliation or reprisal. Retaliation for exercising one’s right of protection from discrimination and/or harassment or for participating in the investigation of a complaint is prohibited by law and this policy, and will not be tolerated. All allegations of retaliation will be swiftly and thoroughly investigated. If the District determines that discrimination, harassment, or retaliation has occurred, it will take all reasonable steps within its power to stop such conduct. Students or employees who engage in discrimination, harassment, or retaliation are subject to disciplinary action, up to and including termination or expulsion.

Duty to Report

Except for psychologists in the College’s Student Health Center, any District employee who knows of or has reason to know of sexual misconduct, dating or domestic violence, and stalking shall promptly inform the Title IX Coordinator. These employees are considered responsible employees under Title IX and are required to disclose all information, including the names of the parties, even where the person has requested that their name remain confidential. Supervisors are mandated to report all incidents of harassment and retaliation that come to their attention.

The Title IX Coordinator will determine whether confidentiality is appropriate given the circumstances of each such incident as the District must then take appropriate steps to eliminate any gender discrimination/ harassment/misconduct, prevent its recurrence, and remedy its effects. The District is required by the federal Clery Act to report certain types of crimes (including certain sex offenses) in
statistical reports. However, while the District will report the type of incident in the annual crime statistics report known as the Annual Security Report, victim names/identities will not be revealed.

BP 3430 applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities, and compensation.

**Supportive Measures**

The District will offer and implement appropriate and reasonable supportive measures to the Parties upon notice of alleged sexual harassment and/or retaliation. Supportive measures are non-disciplinary, non-punitive individualized services, offered as appropriate, as reasonably available, and without fee or charge to the Parties, which are intended to restore or preserve equal access to the District's education program or activity, to protect the safety of all Parties or the District's educational environment, and/or deter sexual harassment and/or retaliation.

The Title IX Coordinator will promptly make supportive measures available to the Parties upon receiving notice or a complaint and will coordinate the effective implementation of such measures. At the time that supportive measures are offered, the District will inform the Complainant, in writing, that they may file a formal complaint with the District either at that time or in the future if they have not done so already.

The District will maintain the privacy of the supportive measures, provided that privacy does not impair the District's ability to provide the supportive measures. The District will act to ensure as minimal an academic/occupational impact on the Parties as possible. The District will implement measures in a way that does not unreasonably burden the other party. Supportive measures may include but are not limited to:

- Counseling and referral to medical and/ or other healthcare services
- Referral to the Employee Assistance Program
- Referral to community-based service providers
- Student financial aid counseling
- Altered work arrangements for employees or student-employees
- Safety planning
- Campus safety escorts
- Implementing mutual contact limitations (no contact orders) between the Parties
- Academic support, extensions of deadlines, or other course or program-related adjustments
- Trespass orders
- Class or work schedule modifications, withdrawals, or leaves of absence
- Increased security and monitoring of certain areas of the campus
- Any other actions deemed appropriate by the Title IX Coordinator

Violations of no contact orders will be referred to the appropriate student or employee conduct processes for enforcement.

**Definitions**

The District has adopted the following definitions so as to address the unique environment of an academic community.
**Affirmative Consent** means an affirmative, conscious, and voluntary agreement to engage in sexual activity. It is the responsibility of each person involved in sexual activity to ensure that they have the affirmative consent of the other or others to engage in the sexual activity. Lack of protest or resistance does not mean consent, nor does silence mean consent. Affirmative consent must be ongoing throughout a sexual activity and can be revoked at any time. The existence of a dating relationship between the persons involved, or the fact of past sexual relations between them, should never by itself be assumed to be an indicator of consent. In California, a minor (meaning a person under the age of 18) cannot consent to sexual activity. It shall not be a valid response to alleged lack of affirmative consent that the Respondent believed that the Complainant consented to the sexual activity under either of the following circumstances: The Respondent's belief in affirmative consent arose from the intoxication or recklessness of the Complainant. Any allegation that alcohol or other drugs were involved in an incident will be reviewed. The Respondent did not take reasonable steps, in the circumstances known to the Respondent at the time, to ascertain whether the complainant affirmatively consented. It shall not be a valid response that the Respondent believed that the Complainant affirmatively consented to the sexual activity if the Respondent knew or reasonably should have known that the Complainant was unable to consent to the sexual activity under any of the following circumstances: The Complainant was asleep or unconscious. The Complainant was incapacitated due to the influence of drugs, alcohol, or medication so that the Complainant could not understand the fact, nature, or extent of the sexual activity. The Complainant was unable to communicate due to a mental or physical condition.

**Complainant** means an individual who is alleged to be the victim of conduct that could constitute Sexual Harassment, as defined herein, whether the notice/complaint is presented by the individual or someone on the individual’s behalf, such as a report by one who learned of the conduct in his or her official capacity as a faculty member or administrator.

**District** means the Rancho Santiago Community College District, including the colleges it operates, Santa Ana College and Santiago Canyon College, and centers.

**Education program or activity** means locations, events, or circumstances where the District exercises substantial control over both the Respondent and the context in which the Prohibited Conduct occurs and also includes any building owned or controlled by a student organization that is officially recognized by the District.

**Formal Complaint** means a document submitted or signed by a Complainant or signed by the Title IX Coordinator alleging Prohibited Conduct against a Respondent and requesting that the District investigate the allegation.

**Formal Grievance Process** means the process for adjudicating Formal Complaints of Prohibited Conduct through investigation, live hearing, determination of responsibility, and appeals.

**Hearing Decision-maker** refers to those who have decision-making and sanctioning authority within the District's Formal Grievance process.

**Investigator** means the person tasked by the District with investigating a Complaint. All Investigators shall receive annual training regarding such issues as the laws governing Title IX and VAWA/Campus Save Act; as well as other related state and federal laws prohibiting discrimination, harassment, and retaliation based on gender or sex, including sex discrimination, sexual harassment, sexual misconduct, dating, and domestic violence, and stalking; complainant, respondent, employee, and witness privacy rights; and the Family Educational Rights and Privacy Act of 1974 (FERPA).

**Notice** means that an employee, student, or third-party informs the Title IX Coordinator or other Official with Authority of the alleged occurrence of harassing, discriminatory, and/or retaliatory conduct.

**Official with Authority (OWA)** means an employee of the District explicitly vested with the responsibility to implement corrective measures for sexual harassment and/or retaliation on behalf of the District.
Parties include the Complainant(s) and Respondent(s), collectively.

Prohibited Conduct means any sexual misconduct, gender or sex-based discrimination or harassment, dating violence, domestic violence, stalking, and retaliation.

Remedies are actions taken to address safety, prevent recurrence of Prohibited Conduct, and restore equal access to the District’s educational program.

Resolution Process refers broadly to the process for addressing Formal Complaints either by informal resolution or through a Formal Grievance Process that includes investigation, live hearing, and appeal. Respondent means an individual who has been reported to be the perpetrator of Prohibited Conduct, as defined herein.

Sanction means a consequence imposed by the District on a Respondent who is found to have engaged in Prohibited Conduct under this interim administrative regulation.

Sexual Harassment means conduct on the basis of sex that satisfies one or more of the following

A. Quid Pro Quo Sexual Harassment: When an employee of the District conditions (implicitly or explicitly) the provision of aid, benefit, or service of the District on an individual’s participation in unwelcome sexual conduct; or

B. Hostile Environment Sexual Harassment: Unwelcome conduct determined by a reasonable person standing in the shoes of the Complainant to be so severe, pervasive, and objectively offensive that it effectively denies a person equal access to the District’s education program or activity; or

C. Sexual assault, dating violence, domestic violence, or stalking, as defined herein.

1. Sexual assault means any sexual act (forcible or non-forcible), directed against another person, without the consent of the victim, including instances where the victim if incapable of giving consent. Sexual acts include the following:

(a) Rape, which is defined as the penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the Complainant.

(b) Sodomy, which is defined as oral or anal sexual intercourse with another person, forcibly committed and/or against that person’s will (non-consensually), or not forcibly or against the person’s will in instances in which the Complainant is incapable of giving consent because of age or because of temporary or permanent mental or physical incapacity.

(c) Sexual Assault with an Object, which is defined as the use of an object or instrument to penetrate, however slightly, the genital or anal opening of the body of another person, forcibly and/or against that person’s will (non-consensually), or not forcibly or against the person’s will in instances in which the Complainant is incapable of giving consent because of age or because of temporary or permanent mental or physical incapacity.

(d) Fondling, which is defined as the touching of the private parts of another person for the purposes of sexual gratification, without the consent of the victim, including instances where the victim is incapable of giving consent because of age or because of temporary or permanent mental or physical incapacity.

(e) Incest, which is defined as sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law.

(f) Statutory Rape, which is defined as sexual intercourse with a person who is under the statutory age of consent.

2. Dating violence means violence committed, on the basis of sex, by a person who is or has been in a social relationship of a romantic or intimate nature with the Complainant. The existence of such a relationship shall be determined based on a consideration of the following factors: the length of the relationship, the type of relationship and the frequency of interaction between the persons involved in the relationship. For the purposes of this definition, dating violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse. Dating violence does not include acts covered under the definition of domestic violence.
3. **Domestic violence** means conduct, on the basis of sex, that includes the requisite components of a felony or misdemeanor crimes of violence committed by (a) a current or former spouse or intimate partner of the victim; (b) a person with whom the victim shares a child in common; (c) a person who is cohabitating with or has cohabitated with the victim as a spouse; (d) a person similarly situated to a spouse of the victim under California law; or (e) any other person against an adult or youth victim who is protected from that person's acts under California law.

4. **Stalking** means a course of conduct directed at a specific person on the basis of sex that would cause a reasonable person to fear for the person's safety or the safety of others, or to suffer substantial emotional distress. For the purposes of this definition: (a) A course of conduct is two or more acts, including, but not limited to, acts in which the Respondent directly, indirectly, or through third parties, by any action, method, device, or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person, or interferes with a person's property; (b) Reasonable person means a reasonable person under similar circumstances and with similar identities to the Complainant, and (c) Substantial emotional distress means significant mental suffering or anguish that may but does not necessarily require medical or other professional treatment or counseling.

Student/Students means as any individual who has accepted an offer of admission, or who is registered or enrolled for credit or noncredit-bearing coursework, and who maintains an ongoing relationship with the District.

Third-Party means a person other than the Complainant and the Respondent.

Any individual can submit a report by using the following link:

[www.rsccd.edu/report](http://www.rsccd.edu/report)

Applicable regulations, resources, and additional information can be found at [www.rsccd.edu/titleix](http://www.rsccd.edu/titleix) or [www.rsccd.edu/civilrights](http://www.rsccd.edu/civilrights)

Student/Students means any individual who has accepted an offer of admission, or who is registered or enrolled for credit or noncredit-bearing coursework, and who maintains an ongoing relationship with the District.

Third-Party means a person other than the Complainant and the Respondent.

**Hearing** The District will designate a single Decisionmaker (hearing officer) or a three-member Decision-maker panel, at the discretion of the Title IX Coordinator. With a panel, one of the three members will be appointed as Chair by the Title IX Coordinator. For purposes of this regulation, the term Hearing Chair is used to refer to the single Decision-maker or the Chair of the three-person Decision-maker panel. The Decision-maker(s) must not have had any previous involvement in the matter, and therefore, cannot be the Title IX Coordinator or investigator(s) in the case.

**Roles and Responsibilities** The Title IX Coordinator or designee shall be responsible for managing the hearing process and the necessary logistics (scheduling, notifying witnesses, providing the Parties and Decision-maker(s) with appropriate documentation and evidence, coordinating the location of the hearing, and any other support that is necessary for the hearing to run smoothly), provided their previous role(s) in the matter do not create a conflict of interest. Otherwise, a designee may fulfill this role.

The Decision-maker(s) is responsible for conducting an impartial live hearing and issuing a written determination regarding the responsibility to the Parties without bias or conflict of interest. The Parties' Advisor of choice may be but is not required to be, an attorney. The Parties' Advisors may be present for meetings and proceedings throughout the grievance process, subject to equal restrictions on Advisors' participation, in the District's discretion. If the party does not have an Advisor at the hearing, the District must provide an Advisor of the District's choice, without fee or charge, solely for the purpose of conducting cross-examination.
Location Live hearings may be conducted with all Parties physically present in the same geographic location or, at the District’s discretion, any or all parties, witnesses, and other participants may appear at the live hearing virtually. The District must create an audio or audiovisual recording, or transcript, of any live hearing. At the request of either party, the District must also provide for the entire live hearing (including cross-examination) to occur with the Parties located in separate rooms with technology enabling the Parties to see and hear each other.

Notice of Hearing The Title IX Coordinator will send notice of the hearing to the Parties no less than ten (10) business days prior to the hearing unless the Parties agree to an expedited schedule. Once mailed, emailed, and/or received in-person, notice will be presumptively delivered. The notice will contain:

• A description of the alleged violation(s), a list of all policies allegedly violated, a description of the applicable procedures, and a statement of the potential sanctions/ responsive actions that could result.

• The time, date, and location of the hearing and a reminder that attendance is mandatory, superseding all other campus activities.

• Any technology that will be used to facilitate the hearing.

• Information about the option for the live hearing to occur with the Parties located in separate rooms using technology that enables the Decision-maker(s) and Parties to see and hear a party or witness answering questions. Such a request must be raised with the Title IX Coordinator at least five (5) business days prior to the hearing.

• A list of all those who will attend the hearing, along with an invitation to object to any Decision-maker on the basis of demonstrated bias. This must be raised with the Title IX Coordinator at least two (2) business days prior to the hearing.

• Information on how the hearing will be recorded and on access to the recording for the Parties after the hearing.

• A statement that if any party or witness does not appear at the scheduled hearing, the hearing may be held in their absence, and the party’s or witness’s testimony and any statements given prior to the hearing will not be considered by the Decisionmaker(s). For compelling reasons, the Hearing Chair may reschedule the hearing.

• Notification that the Parties may have the assistance of an Advisor of their choosing at the hearing and will be required to have one present for any questions they may desire to ask. The party must notify the Title IX Coordinator if they do not have an Advisor, and the District will appoint one. Each party must have an Advisor present. There are no exceptions.

• A copy of all the materials provided to the Decision-maker(s) about the matter, unless they have been provided already.

• An invitation to contact the Title IX Coordinator to arrange any disability accommodations, language assistance, and/or interpretation services that may be needed at the hearing, at least seven (7) business days prior to the hearing.

• A statement that Parties cannot bring mobile phones/devices into the hearing.

Hearings for possible violations that occur near or after the end of an academic term (assuming the Respondent is still subject to this Policy) and are unable to be resolved prior to the end of term will typically be held immediately after the end of the term or during the summer, as needed, to meet the resolution timeline followed by the District and remain within the 60-90 business day goal for resolution. In these cases, if the Respondent is a graduating student, a hold may be placed on graduation and/or official transcripts until the matter is fully resolved (including any appeal). A student facing charges under this Policy is not in good standing to graduate. If a party or Parties prefer not to attend or cannot attend the hearing in person, the party should request alternative arrangements from the Title IX Coordinator at least five (5) business days prior to the hearing. Similarly, any witness who cannot attend in person should let the Title IX Coordinator or the Chair know at least five (5) business days prior to the hearing so that appropriate arrangements can be made.

Remedies and Sanctions Should a violation of the interim administrative regulation be substantiated, the District will effectively implement remedies for the Complainant, designed to restore or preserve the Complainant’s equal educational access, such as long-term supportive measures, and may impose disciplinary sanctions on the Respondent in conformity with all relevant statutes, regulations, and District personnel policies and regulations, including the provisions of any applicable collective bargaining agreement. Factors considered when determining a sanction/ recommendation may include, but are not limited to: • The nature, severity of, and circumstances surrounding the violation(s)

• The Respondent’s disciplinary history

• Previous allegations or allegations involving similar conduct

• The need for sanctions/responsive actions to bring an end to the Prohibited Conduct
• The need for sanctions/responsive actions to prevent the future recurrence of the Prohibited Conduct
• The need to remedy the effects of the Prohibited Conduct on the Complainant and the community
• The impact on the Parties
• Any other information deemed relevant by the Decision-maker(s)

Student Sanctions  In cases involving Respondents who are students, the hearing process detailed herein shall serve as the due process hearing outlined in Section IV of Board Policy 5500. The following are the usual sanctions that may be imposed upon students or organizations singly or in combination:

• Warning: A verbal statement that the conduct was unacceptable and that further violation of any District policy, procedure, or directive will result in more severe sanctions/responsive actions.

• Reprimand: A written statement, included in the student’s disciplinary file that the conduct was unacceptable and that further misconduct will result in more severe sanctions /responsive actions.

• Required Counseling: A mandate to meet with and engage in either District-sponsored or external counseling to better comprehend the misconduct and its effects.

• Probation: Authorization for the Respondent to return to classes, but with an understanding of expected appropriate future behavior and terms that may include denial of specified social privileges, exclusion from co-curricular activities, exclusion from designated areas of campus, no-contact orders, and/or other measures deemed appropriate. Any violations of the Standards of Student Conduct during this probationary period will result in further, more serious disciplinary action against the Respondent.

• Suspension: Termination of student status for a definite period of time not to exceed two academic years.

• Expulsion: Permanent termination of student status and revocation of rights to be on campus for any reason or to attend District-sponsored events.

• Withholding Diploma: The District may withhold a student’s diploma for a specified period of time and/or deny a student participation in commencement activities if the student has an allegation pending or as a sanction if the student is found responsible for an alleged violation.

• Revocation of Degree: The District reserves the right to revoke a degree previously awarded from the District for serious violations committed by a student prior to graduation.

• Student Organizational Sanctions: Deactivation, loss of recognition, loss of some or all privileges for a specified period of time.

• Other Actions: In addition to or in place of the above sanctions, the District may assign any other sanctions as deemed appropriate.

Employee Sanctions

Responsive actions for an employee who is found to have engaged in Prohibited Conduct, as defined herein include:

• Warning – Verbal or Written
• Performance Improvement Plan
• Enhanced supervision, observation, or review
• Required Counseling
• Required Training or Education
• Demotion
• Transfer
• Reassignment
• Assignment to a new supervisor
• Restriction of stipends, research, and/or professional development resources
• Suspension with pay
• Suspension without pay

• Termination

• Other Actions: In addition to or in place of the above sanctions/responsive actions, the District may assign any other responsive actions as deemed appropriate.

Additional information and resources can be found at:

https://www.rsccd.edu/Departments/TitleIX/Pages/default.aspx

Sexual Harassment Complaints (Title IX)

Board Policy 3430 (BP3430) Prohibition of Harassment prohibits all forms of harassment are contrary to basic standards of conduct between individuals and are prohibited by state and federal law, as well as this policy, and will not be tolerated. The District is committed to providing an academic and work environment that respects the dignity of individuals and groups. The District shall be free of sexual harassment and all forms of sexual intimidation and exploitation including acts of sexual violence. Sexual violence includes dating violence, domestic violence and stalking. The District shall also be free of other unlawful harassment, including that which is based on any of the following statuses: race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, or sexual orientation of any person, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics.

The District seeks to foster an environment in which all employees and students feel free to report incidents of harassment without fear of retaliation or reprisal. Students can file a Title IX complaints, which includes harassment or sexual violence with the Vice Chancellor, Human Resources who can be contacted at

2323 N Broadway, Suite 407-2, Santa Ana, CA 92706
Telephone Number 714-480-7489

The procedures for filing and investigation of a discrimination complaint can be found at: www.rsccd.edu/Trustees/Pages/AR-3435.aspx

The District also strictly prohibits retaliation against any individual for filing a complaint of harassment or sexual violence or for participating in such an investigation. Such conduct is illegal and constitutes a violation of this policy. All allegations of retaliation will be swiftly and thoroughly investigated. If the District determines that retaliation has occurred, it will take all reasonable steps within its power to stop such conduct. Individuals who engage in retaliatory conduct are subject to disciplinary action, up to and including termination or expulsion.

Any student or employee who believes that he or she has been harassed or retaliated against in violation of this policy should immediately report such incidents by following the procedures described in AP 3435. Supervisors are mandated to report all incidents of harassment and retaliation that come to their attention.

This policy applies to all aspects of the academic environment, including but not limited to classroom conditions, grades, academic standing, employment opportunities, scholarships, recommendations, disciplinary actions, and participation in any community college activity. In addition, this policy applies to all terms and conditions of employment, including but not limited to hiring, placement, promotion, disciplinary action, layoff, recall, transfer, leave of absence, training opportunities and compensation.
To this end the Chancellor shall ensure that the institution undertakes education and training activities to counter discrimination and to prevent, minimize and/or eliminate any hostile environment that impairs access to equal education opportunity or impacts the terms and conditions of employment.

The Chancellor shall establish procedures that define harassment on campus. The Chancellor shall further establish procedures for employees, students, and other members of the campus community that provide for the investigation and resolution of complaints regarding harassment and discrimination, and procedures for students to resolve complaints of harassment and discrimination. All participants are protected from retaliatory acts by the District, its employees, students, and agents.

This policy and related written procedures (including the procedure for making complaints) shall be widely published and publicized to administrators, faculty, staff, and students, particularly when they are new to the institution. They shall be available for students and employees in all administrative offices.

Employees who violate the policy and procedures may be subject to disciplinary action up to and including termination. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion.

**Smoking and Tobacco Use**

Smoking is prohibited in all campus areas including all District owned, rented, or leased properties and vehicles, except in designated parking lot areas and within 20 feet of entrances, exits, and operable windows.

Smoking is defined as the use of products containing tobacco and/or nicotine, including but not limited to smokeless tobacco, clove cigarettes, or any other smoking products, and any and all electronic or “e-cigarettes”, which are unapproved nicotine delivery devices, unregulated by the FDA.

Public performances in which smoking is an integral and necessary part of the production are excluded from these regulations.

These regulations apply to employees, students, visitors, and all other persons who use District-owned or rented/leased facilities and vehicles. Failure to comply with these regulations may result in disciplinary action.

It is the responsibility of every District employee to comply with these regulations and report violations to District Safety.

These regulations do not supersede more restrictive policies which may be in force under State and Federal regulations.

**(AR-3570)**

**Standards of Student Conduct**

Guidelines for Student Conduct are set forth in the California Education Code, California Administrative Code, Title V, policies of the Board of Trustees, and all civil and criminal codes. Students enrolling in district educational programs assume an obligation to obey state law and district rules and regulations governing the conduct of students.

Students who enroll in those instructional programs in which the college has affiliations with various outside associations must comply with the college’s policies and procedures and also with the outside associations’ policies and procedures. This includes but is not limited to students enrolled in the programs of Cosmetology, Fire Academies, Criminal Justice Academies and Nursing.

**Guidelines for Student Conduct**
The following represent violations for disciplinary action, up to but not limited to expulsion, that may be taken:

A. Dishonesty, cheating, plagiarism, lying, or knowingly furnishing false information to the district or college officials performing their duties.

B. Forgery, alteration, or misuse of district documents, records, or identification.

C. Willful misconduct that results in damage to any real or personal property owned by the district or district employees (damage includes, but not limited to vandalism, such as cutting, defacing, breaking, etc.).

D. Obstruction or disruption of pedestrian or vehicular traffic or of teaching, research, administration, or of other district activities on or off District premises. This includes obstruction or disruption of administration, disciplinary procedures or authorized college activities.

E. Assault, battery, or any threat of force or violence upon a student, college personnel, or campus visitor; willful misconduct which results in injury or death to a student, college personnel, or campus visitor. This includes fighting on district property or at a district sponsored event, on or off district premises.

F. Detention of any person on district-owned or controlled property or at district-sponsored or supervised functions or other conduct which threatens or endangers the health or safety of another.

G. Theft of any property of the district which includes property of a member of the district community or a campus visitor.

H. Unauthorized entry into or unauthorized use of district property, supplies, equipment, and/or facilities.

I. Misrepresentation of oneself or of an organization to be an agent of the district.

J. Sexual assault or physical abuse, including rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, or threat or assault, or any conduct that threatens the health and safety of the alleged victim, which includes students, college personnel, or campus visitors.

K. Use, possession, distribution, or being under the influence of alcoholic beverage on district property or at any district sponsored event.

L. Use, possession, distribution, or being under the influence of narcotics, other hallucinogenic drugs or substances, or any poison classified as such by Schedule “D” in Section 4160 of the Business and Professions Code on District property or at any District-sponsored event except as expressly permitted by law.

M. Expression which is libelous, slanderous, obscene or which incites students so as to create a clear and present danger of commission of unlawful acts on district premises, or violation of district regulations, or the substantial disruption of the orderly operation of the college.

N. Engaging in lewd, indecent, or obscene behavior on district property or at any district-sponsored function.
O. Possession or use while on the district premises, or a district-sponsored function, of any firearm, knife, explosive, or other dangerous object, including but not limited to any facsimile firearm, knife or explosive. Exceptions include those participating in a criminal justice educational program who are authorized such possession or those who are enrolled in a course which authorizes such possession.

P. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any district policy or administrative regulation.

Q. Engaging in harassing or discriminatory behavior based on race, sex (i.e., gender), religion, age, national origin, disability, sexual orientation or any other status protected by law.

R. Continuous disruptive behavior or willful disobedience, habitual profanity or vulgarity, open and persistent abuse of college personnel, or open and persistent defiance of the authority of college personnel, which includes physical as well as verbal abuse, including the use of racial epithets and hate speech.

S. Disruptive written or verbal communication, vulgarity, open and persistent abuse of other students which include verbal abuse, racial epithets and hate speech. Engaging in intimidating conduct or bullying against another student through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyberbullying.

T. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the Board of Trustees;

U. Violation of the Computer Usage Policy is applicable to students using computer classrooms, computer labs, the wireless network or other locations on and off district property. A violation is considered any of the following:

(a) Accessing with or without permission or causing to be accessed without authorization, altering, damaging, deleting, hacking, destroying, or otherwise using any data, computer, computer system, computer software and programs, or computer network belonging to or used by the college or any member of the District.

(b) Accessing with or without permission, taking, copying, or making use of any data from a computer, computer system, or computer network, or taking or copying any supporting documentation, whether existing or residing internal or external to a computer, computer system, or computer network belonging to or used by the college or District.

(c) Using or causing to be used, computer services without permission

(d) Disrupting or causing the disruption of computer services or denying or causing the denial of computer services to an authorized user of a computer, computer system, or computer network belonging to or used by the college or District.

(e) Introducing any computer contaminant or virus into any computer, computer system, or computer network belonging to the college or District.

(f) Sending any message using any computer system or network without authorization or sending any message in the name of another person or entity.

(g) Using any account or password without authorization.
(h) Allowing or causing an account number or password to be used by any other person without authorization.

(i) Accessing or causing to be accessed, downloading or causing to be downloaded, pornographic or obscene materials except when accessing such material which is part of the instructional process or assignment for a class in which the student is currently enrolled.

(j) Use of systems or networks for personal commercial purposes.

(k) "Cyberstalking", which is to be understood as any use of the college or district computer system, computer network, or computer programs to stalk another person via excessive messages or inquiries, inappropriate or threatening messages, racially motivated communications, photos or other means of communication.

V. Any act constituting good cause for suspension or expulsion, or violation of district policies or campus regulations.

Disciplinary Action

Violations to any tenets within the standards of student conduct are subject to the following disciplinary actions: warning, reprimand, probation, restitution, removal, suspension or expulsion. Disciplinary actions may be imposed singly or in combination.

Standards of Conduct for Computer Classrooms and Computer Labs

In accordance with Board Policy (BP 3720) and Administrative Regulation (AR 3720) and to extend the life of hardware, comply with copyright laws, and adhere to appropriate computer network conduct and usage, the following standards of conduct are required of all students using computer classrooms, computer labs, and the wireless network.

Failure to comply with the following standards can result in the suspension of a student’s privileges and possibly other sanctions such as removal from class, suspension, expulsion or other disciplinary actions.

The primary use of computer systems/resources is for academic/educational purposes. The following are NOT allowed:

- Using the Internet to access sexually explicit and/or pornography websites.
- Sending and receiving any messages that are threatening, racist or inflammatory, abusive towards a specific gender or culture, obscene, or use inappropriate language.
- Using the network for personal or commercial advertising or political activity.
- Using computers or the wireless network to play individual games, multiple-user games, or gambling.
- Using the computers for illegal purposes.

The SCC Library, computer labs, computer classrooms, and science labs may have additional restrictions to those listed above. It is the student's responsibility to be aware of these additional guidelines.

Study Load

In order to meet the graduation requirements in four semesters, students should carry an average of 15 units each semester. Students will ordinarily not be allowed to register for more than 18 units.
When individual circumstances may require additional unit demand, an overload program in excess of 18 units may be approved for students who have maintained a 3.0 GPA. Approval for such overloads may be secured from the counseling department.

A summer session load should not exceed the equivalent of one unit per week or approximately nine units for an 8-week session. If over 9 units for summer or over 6 units for intersession, an overload petition must be approved using the same criteria as above.

### Transfer Credit

Santiago Canyon College grants credit for coursework completed at regionally accredited institutions of higher education. Official transcripts are required and must be submitted to the Admissions and Records Office. Official transcripts submitted for evaluation must be printed/dated within the last 6 months. Any coursework marked as “in-progress” will need to have additional transcripts submitted once grades have been posted.

Transfer coursework may be used to meet a major requirement by approval. To seek approval, a Petition to Substitute a Major Requirement must be submitted along with supporting documentation. Petition can be obtained in the Admissions and Records Office or online.

Transfer coursework may also be used to meet CSU or IGETC Certification. If coursework was completed at an institution outside of the California Community College system, it must be approved through the Course Pass Along process.

Transfer coursework may also be used to meet SCC General Education. Course must be listed in the college catalog, in the same academic year for which the course was taken, at the transfer institution. Upper-division courses may be used so long as it meets the lower-division requirements; however, a student is strongly encouraged to meet with a SCC counselor to discuss unintended consequences.

### Unit of Credit

Santiago Canyon College is on a semester system and awards college credit in semester units.

One unit of credit (or credit hour) of college credit represents 54 hours of student time in lecture, study, or laboratory work. For a 16 week semester, this is generally three hours of work per week per unit. For example, semester-long lecture classes are generally one-hour per week in class and two-hours per week outside preparation. Semester-long laboratory classes are generally three hours per week in the laboratory with minimal outside preparation.

When converting units from quarter to semester, the ratio is one quarter unit equals two thirds of a semester unit.

### Withdrawal From Class

Students who cannot continue in a course have an obligation to withdraw officially. Students are encouraged to consult with instructors concerning class withdrawals.

Students may officially withdraw on the web through the last day of the 12th week of instruction (or 75 percent of the class meetings, whichever is less and receive a transcript symbol of “W”. All instructor-initiated “EA’s” (excessive absence drops) through the 12th week or 75 percent of class meetings, whichever is less, will be assigned a “W”.
The academic record of a student who remains in a class beyond the time allowed by district policy must reflect a symbol other than a “W”, except under extenuating circumstances.

A student who has a withdrawal (grade of “W”) in the same course two or more times loses the privilege of online registration for that course and must receive the approval of the Associate Dean of Admissions or the Registrar to enroll in the same course.

(See also Course Repeatability and Repetition.)

**Extenuating Circumstances**

**Excused Withdrawal (EW)**

A student may petition for an Excused Withdrawal due to extenuating circumstances (reasons beyond the student’s control). Extenuating circumstances are approved based upon verifiable documentation supporting the request. If approved, the petitioned classes will be designated with an “EW” (Excused Withdrawal) on the transcript. An “EW” will not be counted in progress probation or dismissal calculations nor will it be counted towards the permitted number of withdrawals or counted as an enrollment attempt.

**Military Withdrawal (MW)**

A student who is a member of an active or reserve U.S. military service and has received orders compelling a withdrawal from courses may request a military withdrawal. If approved an “MW” will appear on the transcript for each course. “MW” shall not be counted in the permitted number of withdrawals nor shall it be counted in progress and dismissal calculations.

Students should file the petitions as soon as possible. The petition must be filed no later than one year following the awarding of the original grade.

**Withholding of Student Records**

Students, or former students, who have failed to pay a proper financial obligation shall have grades, transcripts, diplomas and registration privileges withheld.

**Student and Academic Support Services and Opportunities**

- Associate Degrees, Associate Degrees for Transfer and Certificates
- Bookstore
- CalWORKs Career Services
- Child Development Center
- College Assistance Migrant Program (CAMP)
- Community Services
- Continuing Education Program
- Cooperative Work Experience
- Education Counseling Services
- Disabled Students Programs and Services (DSPS)
- Distance Education
- Extended Opportunity Programs (EOP)
- Financial Aid Services
- First Year Support Center
- Guardian Scholars
- Hawk’s Nest Food Pantry
- High School and Community Outreach Honors Program
- Honors Courses
- Language Lab
- Library
- Math Success Center
- Online Student Services
- Pathways to Teaching Program
- Public Affairs
- Scheduling Options and Definitions
- Science Teaching and Resource Center
- Student Health and Wellness Services
- Student Support Services – TRIO
- Supplemental Instruction
- Transfer Success Center
- Transportation Tutoring Services
- Upward Bound Math and Science
- Veterans Resource Center
- Writing Center

**Associate Degrees, Associate Degrees for Transfer and Certificates**

Santiago Canyon College offers more than 170 majors or areas of emphasis leading to an associate degree or an associate degree for transfer. Additionally, the college offers more than 225 programs leading to a certificate of achievement, certificate of proficiency, certificate of competency, or certificate of completion.

**Bookstore**
The official Santiago Canyon College Hawk Campus Store offers a comprehensive selection of new, used, digital and rental textbooks, along with course materials, supplies and specialty items. For more information, visit the Hawk Campus Store in A-101, call (714) 628-4736 or visit www.sccollege.edu/bookstore.

**CalWORKs**

The CalWORKs program at Santiago Canyon College provides assistance to students who are receiving cash aid. CalWORKs students are provided specialized counseling and support services to help ensure their achievement of educational goals and career readiness. Services include counseling/case management, vocational training, job services, workshops, and student support services. For more information, call (714) 628-4915.

**Career Services**

Career Services assists currently enrolled students with career decision-making and employment preparation. Services include career and employment preparation workshops, guest lecturers from industry, on-campus job fairs, and numerous career and job search resources. Enrolled students and alumni have access to Santiago Canyon College's Online Job Board College Central Network at www.collegecentral.com/sccollege. For more information, visit Career Services in D-106 or call (714) 628-4805.

**College Assistance Migrant Program (CAMP)**

The College Assistance Migrant Program (CAMP) is a federally funded program that provides tailored programs and services to students from migrant and farm working backgrounds. The purpose of CAMP is to support students in making the best of their academic, career and educational goals.

After meeting eligibility requirements, CAMP students receive the following programs and services: academic and career counseling, study skills workshops, book vouchers, bus passes, internships, financial aid application support, laptop borrowing privileges, tutoring, peer mentoring, seminars and workshops for CAMP parents and families, family cultural activities and participation in the CAMP Planning Summer Bridge Program.

To learn more about CAMP contact us at (714) 628-5034, come by our office in A-212 or visit our website at www.sccollege.edu/camp.

**Child Development Center**

Santiago Canyon College operates the Child Development Center, which functions as the lab school for the Child Development and Education Department. The lab school provides practicum experience and hands-on learning to students seeking a career in early care and education of young children or a related field. Additionally, the Child Development Center provides comprehensive quality services to meet students' childcare needs. Services are available for children that are between two and five years of age. Fees are based on the California Department of Education, Early Education and Support Division's sliding fee scale, which are based on family income. Students eligible for the CalWORKs program may also be eligible to receive free childcare services. Limited full cost childcare spaces are also available for college faculty, staff, and community members that do not meet the sliding fee scale income criteria. For more information and hours of operation phone (714) 628-4890.

**Community Services**

Community Services is a fee-based program that provides classes to the general public for educational, cultural, social and recreational purposes. Classes are not for credit, usually shorter in duration than credit classes, and do not require lengthy preparation or rigorous testing. Participants can choose from a variety of classes that include Creative Arts, Business and Careers, Computer Training, Dance, Health and Fitness, Language, Financial Management, Music, Real Estate, Special Interest and Travel Tours. In addition, academic and recreational College for Kids classes are offered each semester.

For more information call the Community Service office at (714) 628-4960.

**Continuing Education Program**

Santiago Canyon College Continuing Education Division provides noncredit courses and programs. Beyond providing the means for an adult to take classes for a high school diploma, Continuing Education delivers pre-collegiate education in the areas of basic academic skills and English as a Second Language, citizenship, and short-term career technical programs. It also serves the needs of the disabled and adults with special needs, health and safety and older adults. A full range of personal, career and academic counseling services is available to students enrolled in continuing education classes. Classes are located at a number of educational centers throughout the
Cooperative Work Experience Education
The Cooperative Work Experience Education program represents a joint educational venture between the student, the employer, and the college. The purpose of these courses is to provide eligible students with supervised on-the-job training as an integral part of the total college education program. This is accomplished through new learning experiences in an occupational setting. Students may earn up to four units per semester and a maximum total of 16 units in Cooperative Work Experience courses. Students must petition each time they wish to re-enroll. Further information will be found in the academic program of the catalog.

Counseling Services
Counseling services, (714) 628-4800, are provided by counseling faculty to assist students with successful completion of academic, career, and personal goals. Counseling services are organized under these major areas:

Academic Counseling
Counselors can help students select a program of study in relation to their educational objective to include associate degree, university transfer, and/or certificates, offer assistance in exploring life goals, and assist students with the development of a comprehensive student education plan. A comprehensive student education plan is a road map to help you reach your educational goal. The customized plan will list the required courses that you will need and helps plan out when to take the courses. Your education plan is designed and tailored to your specific needs, interests and goals.

Career Planning
Counselors can assist students in the development of their career goals and provide information that will indicate the best preparation for reaching these goals. Students are encouraged to enroll in CNSL 116, a three-unit CSU/UC transferable Career/Life Planning & Personal Exploration course for optimal exposure to the world of work and career opportunities.

Assessment, Orientation, Advisement, and Follow-Up
The Seymour-Campbell Student Success Act of 2012 requires new students to participate in assessment, orientation, and advisement as part of the Student Success and Support Program (SSSP). Through orientation and advisement, counseling faculty assist students with understanding placement test (assessment) results in math, reading and English or American College English, and how these courses fit into the development of their education plan. Counselors also provide academic and progress-probation intervention workshops for students not meeting required academic standards.

Personal Counseling
Counselors are available to students who need assistance with problems which may be affecting their academic progress. The emphasis is on short-term counseling focused around problem areas or concerns. When appropriate, students may be referred to other campus services for additional assistance.

Disabled Students Programs and Services (DSPS)
DSPS provides instructional support services and academic accommodations to students with verifiable disabilities attending SCC. Program services are designed to ensure that students have an equal opportunity to participate in, and benefit from, all college programs, services, and activities. Students are responsible for requesting DSPS accommodations as early in the semester as possible or at least two weeks before they are needed. To have accommodations authorized, students must provide DSPS with disability verification and meet with a DSPS certificated professional for an evaluation of needs. The academic accommodations authorized for students are
determined individually based on identified disability-related educational needs. Assessment for Learning Disabilities (LD) eligibility is available at no cost to students experiencing academic difficulties that interfere with their educational progress. Students can schedule an appointment by coming to the DSPS Office in E-105, by phoning (714) 628-4860 or by emailing DSPS@sccollege.edu.

Distance Education

Distance Education courses are formal credit courses that use one or more technologies to deliver instruction to students who are separated from the instructor. Online courses are 100% online and hybrid courses have regularly scheduled on campus class meetings. All Distance Education courses at Santiago Canyon College ensure that there is regular and effective contact from the instructor to the student, from the student to the instructor, and from student to student. A variety of technologies and media are used for communication, assignments, and assessments. At a minimum, Distance Education students must have regular access to a computer with high speed internet access, word processing and presentation software, multimedia software (such as QuickTime or Windows Media Player), and any software or hardware listed in the course requirements in the class description.

Please check our Distance Education department website, at www.sccollege.edu/DistanceLearning, for resources and to check to ensure that Distance Education courses are right for you.

Extended Opportunity Programs and Services (EOPS)

Extended Opportunity Program and Services (EOPS) is a state-funded program that provides specialized assistance to students who need additional support due to financial and educational challenges. EOPS provides comprehensive academic, career, and personal counseling. Additional services include summer success program, book services, priority registration, university transfer assistance, financial aid application assistance, and additional resources as needed.

EOPS also offers CARE (Cooperative Agencies Resources for Education) to EOPS single parents receiving cash aid with children under the age of fourteen. CARE services are in addition to EOPS and may include additional book services, transportation assistance, and group support activities.

For more information regarding eligibility call (714) 628-4915

Financial Aid Services

Financial aid is available to qualified students to help meet the cost of tuition, books, supplies, and other educational materials. Students may also be eligible to have their enrollment fee waived. Financial aid staff are available to answer questions and help students through the financial aid process. You may contact us in-person in room E-104 or by phone (714) 628-4876 for more information. General information such as answers to frequently asked questions and hours of operation can be accessed online.

First Year Support Center

The First Year Support Center (FYSC) is dedicated to supporting new and continuing students in their academic and social transition at Santiago Canyon College. The center strives to provide college skill sets and awareness of campus resources, and to be able to integrate students into the college campus and community. Students will be provided with the following types of assistance: applying to the college, registration of classes, filling out financial aid documentation, student portal assistance, student success workshops, Dreamer resources, etc. For more information, visit the FYSC in E-307 or call (714) 628-5085.

Guardian Scholars

The SCC Guardian Scholars Program serves ambitious, college bound students who are current and former foster youth pursing a path within higher education. SCC Guardian Scholars' mission is to support the well-being and empowerment of students on their educational journeys to earning a Career Technical Certificate, Associate's Degree, and/or transfer to a university. We strive to provide a support system and network that is vitally needed for foster youth to ensure a positive college life, both inside and outside of the classroom.

Upon meeting eligibility requirements, Guardian Scholars receive the following support services: Priority registration, one-on-one academic advising, new-student orientation, financial aid, assistance finding on-campus jobs, bus passes, school supplies, textbook assistance, special activities, luncheons, mentoring, friendship and support.

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4c6c-bbb7-bd321baa6eb18

82/2244
To learn more about Guardian Scholars, contact us at (714) 628-4709, come by our office in A-206, or visit our website at Guardian Scholars.

**Hawk's Nest Food Pantry**

The Hawk's Nest Food Pantry supports all credit and noncredit SCC students' academic potential, creativity, as well as their personal and professional growth by providing free and nutritious food for students and their families. Students are welcome to shop for free. The food pantry provides non-perishables and perishables, such as fresh produce. To find out when the food pantry is open, please visit: www.sccollege/foodpantry

Requirements to use the food pantry:

- Have a student ID number
- If possible, please bring a re-usable bag

**High School and Community Outreach**

The High School and Community Outreach Department provides detailed information regarding academic programs and student services that are offered at Santiago Canyon College to the local community. The Outreach Department services include: onsite placement testing, weekly high school visits, priority registration through the Early Welcome program, on-campus academic planning/registration sessions, and general oversight of the Summer Advantage program for graduating seniors from local high schools for each fall semester. For more information, call (714) 628-4808 or visit www.sccollege.edu/outreach.

**Honors Program and Honors Courses**

The SCC Honors Program is dedicated to providing an enriched learning environment for high academic achievers so that they may fulfill themselves personally and acquire the skills and knowledge necessary to succeed at the Associate degree or Baccalaureate degree level. The Honors Program encourages critical thinking, sound decision-making, cultural awareness, and effective communication skills through instructional modes that foster independence and responsibility.

Requirements to enroll in an Honors class

Regularly admitted students who meet the course prerequisites may take an Honors class. Enrollment in an Honors class does not require membership in the Honors Program. Students must be free of active disciplinary action reports.

First-time freshmen need to bring a high school transcript to the Counseling Department to receive a signed prerequisite clearance form prior to enrolling in an Honors class. Students who completed college work while in high school need to use the college GPA and units. Continuing College students need a minimum 3.0 cumulative GPA from all institutions attended. Transfer students will need college transcripts from all previous institutions as well as a signed prerequisite clearance form.

Career Advanced Placement (CAP) students must have a minimum 3.0 GPA in any college coursework and have a minimum 3.0 GPA in high school.

Requirements to join the Honors Program

Submit an Honors Program application and requested documentation to Admissions and Records during the fall or spring semester. Students must be free of active disciplinary action reports.

Applications are not accepted from students who are not currently enrolled. Application, procedures, and deadlines are available on the Honors Program website: www.sccollege.edu/honors.

Freshmen:
First-time freshmen who graduated from high school with a minimum 3.0 GPA may join the program during their first semester at SCC. High School Proficiency cannot be used. Official high school transcripts are required.

Qualification for English 101 as indicated by the SCC English placement test or a score of 3 or higher on the AP English test.

May not be involved in or found at fault in any disciplinary action as outlined in the SCC catalog.

Meet with Honors Program Counselor once per semester for Comprehensive Educational Plan prior to Pre-Selection of Honors courses.

**Continuing College students:**

Students need a cumulative 3.0 GPA or higher in 6 or more units from all colleges attended.

Qualification for ENGL 101 as indicated by the SCC English placement test or a score of 3 or higher on the AP English test.

Have no grade lower than a “C” in any college-level Honors class.

Meet with Honors Program Counselor once per semester for Comprehensive Educational Plan prior to Pre-Selection of Honors courses.

May not be involved in or found at fault in any disciplinary action as outlined in the SCC catalog.

Career Advanced Placement (CAP) students: Current high school CAP students are not eligible to join the Honors Program. GPA in college units completed while in high school could affect future ability to enroll in honors classes and the Honors Program.

**Requirements to continue in the Honors Program**

Maintain a cumulative 3.0 GPA or higher.

Earn grades of "C" or above in all Honors classes.

Earn grades of "C" or above in all college-level classes while in the program.

Meet with Honors Program Counselor once per semester for Comprehensive Educational Plan prior to Pre-Selection of Honors courses.

Complete English 101 during the first year in the Honors Program unless ENGL 101 has already been satisfied. (ENGL 101H is recommended)

Remain free of any disciplinary action as outlined in the SCC catalog.

Requirements to complete the Honors Program

Submit the Honors Program Completion Petition to Admissions and Records (E-100). The petition and deadlines are available on the Honors Program website: www.sccollege.edu/honors.

Maintain a cumulative 3.0 GPA in all college units, including remedial and honors coursework.

Complete Honors Program unit and residency requirements:

Complete a minimum of 30 college units at Santiago Canyon College

Complete a minimum of 15 honors units with a minimum of 1 course from each category listed below within the Rancho Santiago Community College District.

12 of the 15 units must be completed at Santiago Canyon College. 3 units may be completed at Santa Ana College

12 of the 15 units must be completed after acceptance to the program

A single course may not meet more than one Honors Educational Category. In addition to the Honors Educational Category requirements (1-3), additional Honors units will be needed to fulfill the 15 unit requirement.
Honors Educational Category 1: English, Communication, Arts and Humanities

Honors Educational Category 2: Mathematics, Physical and Biological Sciences

Honors Educational Category 3: Social and Behavioral Sciences

See Honors Program website or Honors Program Counselor for course offerings.

Earn grades of "C" or above in all college units, including remedial and honors coursework, while in the program. Honors courses must be taken for letter grade (P/NP grades are excluded).

Disqualification from the Honors Program

Students with a cumulative GPA below a 3.0 or who receive a "D" or "F" in an Honors class will be disqualified from the program.

Students whose cumulative GPA falls below 3.0 anytime during their enrollment at SCC, or who receive a "D" or "F" in an Honors class will be disqualified from the Honors Program for the duration of their enrollment at SCC. Students may appeal disqualification from the Honors Program to the Honors Program Committee. Contact the Honors Program Counselor.

Students who earn a "D" or "F" in an Honors class may repeat the non-Honors version, but they will not be allowed to complete the Honors program.

President's Scholar

The President's Scholar designation is placed on the transcript and diploma of the graduate who has achieved a cumulative grade point average of 3.5 and completed the Honors Program. All letter grades must be "C" or better. Students with Academic Renewal Without Course Repetition are not eligible for President's Scholar. Students may not receive the President's Scholar designation if an associate degree from Santiago Canyon College has already been granted. Students participating in graduation ceremonies will be presented with a medallion.

Completion of the Honors Program

The designation Honors Program Completion is placed on the transcript of students who complete all Honors Program requirements. It is also placed on the diploma of students who earn an associate degree.

Language Lab

Santiago Canyon College offers a state of the art language lab for students enrolled in Spanish, Italian, French and American Sign Language courses. Our main objective in the Language Lab is to provide students with a variety of Directed Learning Activities to supplement and complement classroom instruction and enhance their language learning experience. In addition, we provide a comfortable learning environment where students are able to access other resources such as interactive computer programs, audio, and video materials carefully arranged and selected for students' specific level to assist them in the development of their listening, speaking, reading and writing proficiency skills.

Library
The Santiago Canyon College Library collection contains over 50,000 books in print format and over 15,000 electronic books as well as DVDs and music CDs. Full-text journal, magazine, and newspaper articles are available through online databases. Remote access to most library resources is available through the Library website.

In addition, the Santiago Canyon College Library offers student computer work stations, laptop computers, a wireless network, group study rooms and an instruction lab. There are black/white and color copiers and printers, scanners, and a Self-Check-Out Center.

The Student Innovation Zone (SIZ) provides students with the opportunity to be creative in their academic work with PC, Apple computers and multimedia editing software.

Research assistance is available in-person and online.

The Library can be reached at (714) 628-5001 or online at www.sccollege.edu/library.

Math Success Center
The Math Study Hall (a.k.a. MaSH), located in U-80, is a service offered by SCC that provides students a chance to supplement learning done in the classroom. Math faculty, Instructional Assistants and tutors are on duty to assist students with questions or concerns from their math class. Additionally, computers are available for students to access mathematical software or do work for an online math class. For further information including services or hours of operation, please visit www.sccollege.edu/Departments/Mathematics

Online Student Services
The SCC Student Services website, www.sccollege.edu/StudentServices, is designed to inform and assist students with counseling information, sample placement tests, and eAdvising. Students can also request transcripts, apply for financial aid, find scholarships, pay fees, purchase a parking pass, download forms for most programs and services, view transfer workshops and presentations, research careers and find jobs and internships.

Pathways to Teaching Program
The Pathways to Teaching Program is designed to encourage and support students to pursue an education leading to the teaching profession. Services include academic counseling and transfer assistance, specialized workshops and events, appointments with university representatives, teacher preparation resource information, internships, volunteer opportunities and the SCC TEACH! student organization. For more information about the Pathways to Teaching Program, drop by on the Third floor of E building or call (714) 628-4928.

Public Affairs
Information and publicity regarding college programs and activities is disseminated to the news media and the community through the Rancho Santiago Community College District Public Affairs office.

Science Teaching and Resource Center
The Science Teaching and Resource Center (STAR Center) is designed to help students in all science classes (Astronomy, Biology, Chemistry, Geology and Physics) to succeed. The curriculum for the center includes: Question and Answer sessions, Directed Learning Activities (DLA) and Student-led study groups. All services provided through the STAR Center are geared towards engaging science students and enhancing their success.

Scheduling Options and Definitions
Santiago Canyon College schedules two 16-week semesters (fall and spring) with a summer session, and may offer a spring intersession schedule. Courses may be offered through different modalities such as traditional face-to-face or online. For more information about online learning or classes, see Distance Education page 26.

Term = a period of a time within an academic year when courses are scheduled (fall, spring, summer, spring intersession)
Semester = 16 weeks, scheduled every fall and spring

Summer Session = typically offered within a 4, 6 or 8 week period, can be scheduled after spring but before fall

Spring Intersession = typically offered in 4 weeks, can be scheduled after fall but before spring

In an effort to work with student schedules, Santiago Canyon College offers a variety of scheduling options during the fall and spring semesters:

Short Term = less than 16 weeks, can be 8 weeks, 10 weeks or 12 weeks

Early Start / Late Start = 8 weeks, spans either the first 8-weeks or second 8-weeks

Weekend = offered Fridays, Saturdays, and/ or Sunday

Student Health and Wellness Services
Currently enrolled credit students who have paid their health fees are eligible for Student Health and Wellness Services (SHWS). Walk-in health services are routinely provided by registered nurses. Services of physicians and psychologists are available by appointment only. All services are provided without charge, except nominal fees for medications, laboratory tests and some medical procedures when supplies are used.

Emphasis is on health maintenance and wellness promotion. On-site health services include the diagnosis and treatment of acute short-term illnesses, pregnancy testing and Family PACT services, which include FREE hormone based contraception, emergency contraception, cervical cancer screening, STI testing, and condoms. In addition, SHWS offers first aid care, short-term mental health counseling, health maintenance and wellness promotion literature, as well as blood pressure screening, cholesterol monitoring, tobacco cessation counseling, tuberculin skin testing, community referrals, emergency care and accident insurance coverage for course-related injuries. Refer to the class schedule for Student Health and Wellness Service hours, or call (714) 628-4773.

Student Support Services – TRIO
Student Support Services – TRIO (SSS-TRIO) is a federally funded program that supports underserved first generation, low-income, neurodiverse students who test into developmental Math & English achieve their educational goals. The purpose of SSS-TRIO is to provide support and resources to enable students to overcome challenges and make use of their inherent talents and abilities to succeed in college and in life.

SSS-TRIO provides personalized academic and personal growth coaching, one-on-one tutoring, holistic counseling, book loan services, calculator & laptop loan services, priority registration, Summer Bridge, placement test preparation, student success workshops, campus referral services, supplies, and additional resources for students.

To learn more about SSS-TRIO, please contact us at (714) 628-5033, visit us at A-104, or go to our website.

Supplemental Instruction
Supplemental Instruction (SI) is an academic support program that targets historically difficult courses. SI offers regularly scheduled, out-of-class review sessions to all students enrolled in a targeted math or science course. SI study sessions are informal seminars in which students work practice problems, review notes, discuss readings, develop organizational tools, and prepare for examinations. Students learn how to integrate course content with reasoning and study skills. Students attend SI sessions on a voluntary basis and no effort is
made to segregate students based upon academic ability. Since SI is introduced on the first day of classes and is open to all students in the class, SI is not viewed as remedial. To learn more about the SI program, and to see a list of courses offering SI, visit our website at www.sccollege.edu/SI.

Transfer Success Center
The Transfer Success Center provides resources and services to assist students in researching, planning, and completing their transfer to a four-year college or university. The Transfer Success Center coordinates various events throughout the year, including tours of universities, university representative advising appointments, transfer fairs, and a variety of workshops to help students with each step in the transfer process. In addition, the Transfer Success Center provides many useful resources such as; assistance with applications, personal statement assistance, updates via social media and e-mail, computers for use in research and completing applications, a comprehensive website, and expert advice from trained specialists and counselors. For more information, stop by D-104-N, call (714) 628-4865, visit www.sccollege.edu/transfer, and follow us @SCCTransfer on Facebook, Twitter, and Instagram.

Transportation
Some classes may be conducted off campus. Unless students are specifically advised otherwise, students are responsible for arranging for their own transportation to and from the class site. Although the district may assist in coordinating the transportation and/or recommending travel times, routes or caravanning, be advised that the district assumes no liability or responsibility for the transportation, and any person driving a personal vehicle is NOT an agent of the district.

Tutoring Services
Tutorial services designed to maximize student learning potential are offered in person and online. Walk-in, individual, and small group tutoring in multiple subject areas is available for SCC students in the First Year Support Center, room E-303, and in the TRiO Instructional Support Center, room B-210. For online tutoring, visit www.sccollege.edu/StudentServices/TutorCenter

Upward Bound Math and Science
The Upward Bound Math and Science (UBMS) program aims to strengthen the math and science skills of participating high school students. UBMS’ purpose is to help students recognize and develop their potential to excel in math and science, encourage them to pursue postsecondary degrees in math and science, and ultimately careers in the math and science profession. Santiago Canyon College’s UBMS program serves students enrolled at El Modena High School and Orange High School. For more information, please contact us at (714) 628-5012, visit us at A-206, or go to our website at:

www.sccollege.edu/Departments/upwardboundms

Veterans Resource Center
Students interested in seeking Veterans Service Office (VSO) at Santiago Canyon College (SCC) should go to the Veterans Resource Center (VRC) in room A-210.

Veterans Services assists qualified veterans with support services such as, access to VA Educational Benefits, priority registration, educational counseling, and psychological services. The VSO also provides support to the success of students with disabilities by providing resources and information that promote access, equal opportunity and empowerment. A knowledgeable office staff specializing in veterans’ affairs is prepared to assist students at SCC at (714) 628-4793. Rancho Santiago Community College District is approved by the California Bureau for Private Postsecondary training of veterans and eligible persons. Educational opportunities are available for college credit which include associate degrees, transfer degree programs, and certificates.

Eligibility

Veterans who qualify to receive benefits under the Montgomery Bill-Active Duty (Ch. 30), Montgomery Bill-Selected Active Reserve (Ch. 1606), and eligible persons under the Survivors and Dependents Educational Assistance Program (Ch. 35) are encouraged to take advantage of their educational entitlement.
Veterans with a minimum of 90 days aggregate active service on or after 9/10/01 may be eligible for the post 9/11 GI Bill® (Ch. 33). This program includes basic housing allowance (BAH), book stipend, and tuition/fees.

Veterans with a service-connected disability may be eligible for vocational rehabilitation (Ch. 31) benefits. This program provides eligible veterans with a monthly allowance as well as payment for tuition, most fees, and necessary books and supplies. For further information, applicants should seek further information regarding eligibility from the VA Regional Office, Los Angeles, 1-800-827-1000 or 1-888-442-4551 or by contacting the local Orange County Veterans Service Office, Santa Ana, (714) 480-6555.

**Applying for Benefits**

Each veteran and eligible person who are seeking to apply for VA benefits, must apply for these benefits by visiting the Veterans Benefits Administration website at: www.benefits.va.gov. In addition, any person who wishes to attend a college in the Rancho Santiago Community College District must follow the admissions procedures. See index for details on enrollment. A copy of discharge paper-DD214 is required of all new veterans and a copy of DD2384 of new Chapter 1606/1607 reservists who are using their educational benefits for the first time.

**Post-911 GI Bill® and VR&E Beneficiaries (Chapter 33 and Chapter 31 beneficiaries)**

The Veterans Benefits and Transition Act of 2018 (Public Law 115-407) allows students that will be utilizing Ch. 33 or Ch. 31 VA benefits to attend a course of education or training for up to 90 days from the date the beneficiary provides a certificate of eligibility (COE) or valid authorization from VOC Rehab counselor. The school will not prevent enrollment, assess a late penalty fee, require students to secure alternative or additional funding or deny access to any resources available to other students who have satisfied their tuition and fee bills to the institution. Students must submit all required certification request forms directly to the Veterans Resource Center (VRC) for processing, including any additional information needed to properly certify the enrollment as described in the school's institutional policies. Submission of forms will allow students to attend the course until the VA provides payment to the institution without penalty or requiring to borrow additional funds to cover mandatory tuition and fees due to late payments from the VA. Any student that does not have 100% entitlement for Ch. 33 VA benefits, will be responsible for any remaining balance after the VA submits payments directly to the school. For further information, please contact the VRC directly.

**Transcripts and Program Approval**

VA regulations stipulate that prior credit must be evaluated. With this in mind, the VSO requests that all official transcripts be on file with the Admissions Office by the end of the first term of attendance. This will avoid any delays in payments and/or overpayments if applicable.

Students utilizing VA Educational Benefits at SCC must select a major and each course approved prior to registering for each term. The VA requires that the VSO monitor progress towards a specific degree plan; therefore for VA certification purposes, students must enroll in courses that are part of their current educational plan specifically required for that major.

College counselors are available to provide comprehensive counseling services for day and evening students; call (71) 628-4800 to schedule an appointment with Santiago Canyon College Counseling Department. If you have attended previous school(s), official transcripts must be on file before a college program can be evaluated thoroughly by the counselors.

**Military Credit**

SCC will only evaluate credit from regionally accredited institutions. Three units for health education and one unit for kinesiology may be granted on the basis of military service. When a veteran petitions for graduation and needs these units for graduation purposes, Veterans should seek confirmation directly with the Graduation Office.
General Information

The VA will pay education benefits for eligible veterans and dependents of veterans. The payment will depend on a number of factors including but not limited to: benefit type, benefit eligibility percent, number of active certified units, training type, etc. See the VSO for more information.

Veterans and their eligible dependents or spouses must maintain good academic standings and progress with the college as outlined in the school catalog (see Academic and Progress Probation/Dismissal). Students who fail to make academic progress will be placed on Academic Probation and/or Course Completion Probation accordingly. Students who are on probation for two consecutive terms after failing to demonstrate academic progress may lose priority registration and CCPG eligibility. Students who are on Academic and/or Progress Dismissal from the college cannot be certified for VA Educational Benefits. For further detailed information, please see the College Policies and Procedures section.

Writing Center

The primary purpose of the Santiago Canyon College Writing Center is to make our students better writers by helping them develop their skills, their confidence, and their voice. Students enrolled in our foundational/basic skills courses, English N60 and 061, visit the center once a week to practice and fortify the concepts they are learning in the classroom. Professors and Writing Center faculty work closely to coordinate their efforts and provide students with extended support for success. Students taking composition and literature may use the Writing Center’s resources by enrolling in a 0.2 unit Writing Center course, English N91, which allows them to work with English faculty to improve their essays and strengthen their research skills. Finally, the Writing Center serves all disciplines by inviting students who are writing essays for classes such as philosophy, psychology, history, and child development to enroll in an Extended Strategies course, ENGL N92, for assistance from English professors. In addition to these services, the Writing Center hosts a series of 45-minute campus workshops each semester to help students brush up on their punctuation, grammar, and research techniques as well as strengthen their ability to approach reading assignments in content-area courses.

The SCC Writing Center is a beautiful, spacious student facility located on the second floor of the Humanities Building. It is made up of two large classrooms/work areas, two break-out/ conference rooms, and a comfortable lobby. In addition to several round tables, the center contains 56 student computers and 2 printers. For more information, visit:

http://www.sccollege.edu/Departments/EnglishDepartment/Pages/writingCenter.aspx.

Staffed by English faculty, the Writing Center provides free, walk-in services for students seeking help with a variety of writing assignments, including essays for any class, college application personal statements, resume construction and development, and research strategies and documentation. The Writing Center also offers weekly workshops to review tricky grammar and punctuation rules as well as reading comprehension techniques for approaching difficult academic texts. Located in H-240, the center is typically open Monday-Thursday, 7:00 AM-6:00 PM. For more information, call (714) 628-4701.

Student Life

Alumni Network Associated Student Government (ASG) Cafeteria/Student Lounge Forensics Intercollegiate Athletics Model United Nations SCC Athletic Achievements Student Clubs and Organizations Student Life and Leadership

Student Activities

Alumni Network Associated Student Government (ASG) Cafeteria/Student Lounge Student Clubs and Organizations Student Life and Leadership

Alumni Network

A robust alumni network is a vital link to SCC's past and an important factor in building the reputation and financial health of the college. The network is also a resource for SCC alumni seeking to build their professional networks, becoming involved on campus, or just having fun and reconnecting with fellow Hawks.

The SCC Alumni Network was founded to promote and facilitate a lifelong relationship between SCC and its former students and to encourage ongoing support for the college. Alumni are former students who have graduated, transferred or received a degree or certificate. Students who have completed significant coursework at SCC may also be considered alumni.
The list of benefits of being an SCC alumnus continues to grow. For more information, email alumni@sccollege.edu.

**Associated Student Government (ASG)**

The Associated Student Government was established to provide students with government and leadership experience. Opportunities are available to become involved in campus and statewide committees and councils as student representatives. In ASG, students learn firsthand about group dynamics and decision making, program planning, and running effective meetings. Additionally, there are many student clubs and organizations to join. For more information please visit www.sccollege.edu or call (714) 628-4913.

**Student Clubs and Organizations**

The Inter-Club Council (ICC) represents all active student clubs and organizations on campus to promote leadership development, networking, communication skills and campus life. For a list of current student clubs and organizations, please visit studentlife. To form a new student club, please call (714) 628-4917.

**Student Life and Leadership**

The office of Student Life and Leadership promotes and supports students' co-curricular interests and provides excellent opportunities through the Student Leadership Institute (SU), the Associated Student Government (ASG), Inter-Club Council and student organizations. The office also provides a variety of services to students, faculty, and staff through assistance with student-focused event planning. For more Information, please call (714) 628-4912 or visit A-206.

**Cafeteria/Student Lounge**

The T-Buildings house the Associated Student Government room, Student Lounge, food services at the Hungry Hawk Cafe, and the Student Health and Wellness Services. To reserve rooms for use, call the Santiago Canyon College facilities office at (714) 628-4719.

**Academic Competitions**

Forensics, Intercollegiate Athletics, Model United Nations, SCC Athletic Achievements

**Forensics**

Forensics is more commonly known as competitive speech and debate. The SCC Forensics team was one of the first signature programs to be offered when the college was first accredited. Members of the team travel to local tournaments on select weekends and perform persuasive speeches, debates, impromptus, poetry, drama, and many more. This co-curricular activity provides students with an excellent opportunity to stand out on transfer and job applications. Forensics teaches skills that are useful in any industry, but are particularly well-suited for students that are seeking careers in broadcasting, law, politics, and public relations. The team is open to all students, and students with no prior experience compete against other beginners at their first tournaments. For more information, contact Jared Kubica-Miller at miller_jared@sccollege.edu

**Model United Nations**

The award winning Santiago Canyon College Model United Nations (MUN) Team offers students the opportunity to simulate the policies and processes of the United Nations and its various agencies, including non-governmental and inter-governmental organizations. Students participating in MUN enroll in Political Science 150 or 250 where they prepare for individual and team MUN events. Through these classes, students learn about the role of the United Nations in world politics by conducting research, writing resolutions, and developing skills in diplomacy, public speaking, bargaining and negotiations. Students participating in MUN are required to attend intercollegiate United Nations conferences and competitions. For more information, contact Professor Rabii-Rakin at (714) 628-4940.

**Intercollegiate Athletics**

Santiago Canyon College, home of the Hawks, is proud of its athletic teams and their rich athletic history. The college has fielded teams since 1999 and now offers competitive opportunities for student athletes in seven sports: men's and women's cross country, men's and women's soccer, softball, and men's and women's volleyball.
The Hawks compete in the highly competitive Orange Empire Conference (OEC) under the auspices of the California Community College Athletics Association. SCC’s outstanding coaching and teaching staff, combined with an excellent system of academic assistance, has helped eligible students transfer to four-year colleges and universities.

2012 saw the opening of the new athletics and aquatics complex at Santiago Canyon College. The facility includes a fully equipped fitness center, strength lab, aerobics studio, men’s and women’s locker rooms, athletic training facilities, three indoor courts, a swimming pool and administrative offices.

All prospective student-athletes with questions about eligibility should contact the Director of Athletics at (714) 628-4816.

**SCC Athletic Achievements**

**Cross-Country**
- Top-10 National Rank (Team): 2003 Men’s Cross Country (#8)
- Top-10 State Rank (Team): 2003 Men’s Cross Country (#3)

**Men’s Basketball**
- Southern California Regional Finalist 2018

**Men’s Golf**
- State Finals Team 2014, 2011 (4th)
- Men’s Individual State Golf Champion - Connor Covington 2010
- Orange Empire Conference Champions 2006

**Women’s Golf**
- Orange Empire Conference Champions 2009, 2007

**Women’s Soccer**
- National Champions 2009

**Women’s Softball**
- State Champions 2016
- State Finalists 2014
- Orange Empire Conference Champions 2014

**Track and Field**
- Top-10 State Rank (Team)
- 2007 Women’s Track & Field (#9)
- National Community College Record
Financial Aid

Financial Aid is intended to help students who might not otherwise be able to attend college. Although the primary responsibility for meeting college costs rests with the student and his or her family, it is recognized that many families have limited resources and are unable to meet the cost of a college education. Federal and state financial aid programs have been established to provide assistance to students with documented financial need.

The application process for financial aid begins with the completion of the Free Application for Federal Student Aid (FAFSA) which is available in October for the following academic year. In order to qualify for financial aid a student must be enrolled in an eligible program of study leading to completion of an AA/AS degree, transfer requirements, or a certificate program; maintain satisfactory academic progress; for most programs, have demonstrated financial need; be a U.S. citizen or eligible non-citizen; certify compliance with selective service registration requirements; not be in default on any student loan, or owe a refund on any grant made under any Title IV program; have a social security number; and have a high school diploma, or GED. Effective July 1, 2012, we are no longer offering the Ability to Benefit test. Students without a High School diploma or GED who passed the Ability to Benefit test or completed 6 college credits towards a degree or a certificate prior to July 1, 2012 are still eligible to continue receiving aid in future years.

For additional information and a Free Application for Federal Student Aid (FAFSA), stop by the Financial Aid Office, located in room E-104, or call (714) 628-4876. You may also apply online at www.FAFSA.ed.gov.

Withdrawals and Repayment of Financial Aid Funds

Federal aid recipients who withdraw or are dropped from all classes by the instructors are subject to regulations regarding the Return of Title IV funds. Students who withdraw or are dropped from all classes prior to completing more than 60% of the enrollment period are subject to these rules. Based on the date of the complete withdrawal or drop, the Financial Aid Office will determine the amount, if any, of “unearned” federal financial aid received by the student.

If the student received more financial aid than the amount earned, the student will be billed for the overpayment. Financial aid recipients are advised to

- avoid total withdrawal from all classes,
- successfully complete at least 6 units during the semester,
- if completely withdrawn, repay any “unearned” financial aid as soon as possible.

Failure to do any of the above may result in the loss of financial aid eligibility.

Financial Aid Programs

Federal PELL Grant

This grant is a federally funded program designed to be the foundation of financial aid for undergraduates who demonstrate need. The amount of the PELL Grant is based on the cost of attendance, minus the expected calculated family contribution and the student’s enrollment status at the time of payment. Award amounts vary according to eligibility and enrollment. Please check with the Financial Aid Office or visit the website for the maximum and minimum PELL award amounts. PELL Grants are limited to 12 full-time equivalent semesters.

FSEOG and FWS Programs
These programs below have limited funds and are generally awarded only to those eligible students who meet the Priority Deadline and to those students with the least amount of estimated family contribution (EFC).

**Federal Supplemental Educational Opportunity Grant (FSEOG)**

This federally funded grant is available to undergraduate students who demonstrate exceptional financial need. The awarding of FSEOG funds must be given to maximum PELL Grant recipients.

**Federal Work-Study (FWS)**

This federally funded program provides employment opportunities to students with financial need. Students awarded FWS receive an allocation of funds earned through part-time jobs on and off campus. FWS provides an excellent learning process through on-the-job training.

**William D. Ford Federal Direct Loan Programs**

**Subsidized Direct Loan**

The federal government pays the interest on this need-based student loan. No payments are required while the student remains actively enrolled in at least six units and at the end of enrollment. The maximum annual loan amounts are $3,500 for freshmen and $4,500 for sophomores.

**Unsubsidized Direct Loan**

There is no income criteria on this non-need based federal student loan for students who are enrolled in at least six units. Interest begins accruing immediately. Interest payments may be made or payments can be deferred. Maximum annual loan amounts are $3,500 for freshmen and $4,500 for sophomores.

**Additional Unsubsidized Direct Loan**

This additional $6,000 loan is available to independent students: $2,000 is available to dependent students who meet the qualification requirements and have room in their cost of attendance.

**Parent Loans for Undergraduate Students (PLUS)**

This loan is for parents who borrow on behalf of dependent students. The parents’ credit will be checked by the Department of Education. Repayment of principal and interest begins immediately. The amount borrowed cannot exceed the cost of attendance, minus any other financial aid and resources received by the student.

**Chafee Grant**
This grant program is available to former foster youth. Awards are $5,000 per year. Apply using the FAFSA and the separate Chafee Grant Application.

California State Programs

California College Promise Grant (CCPG)

A State program for California residents to waive the enrollment fees at community colleges. There are several ways to qualify for a CCPG: The student demonstrates financial need according to federal methodology based on completion of the Free Application for Federal Student Aid (FAFSA);

OR

The student or the student's family is receiving CalWORKs, formerly TANF/AFDC, or Supplemental Security Income (SSI), or General Assistance/General Relief, or the student is a disabled veteran or a dependent of a deceased or disabled veteran as certified by the California Department of Veterans Affairs, or the student is a recipient or the child of a recipient of the Congressional Medal of Honor, or the student is a dependent of a victim of the 9/11/01 terrorist attack, or the student is a dependent of deceased law enforcement/fire suppression personnel killed in the line of duty.

OR

The student meets specific income criteria based on family size as set by the State of California.

Dream Act/AB 540 Eligibility

Several types of state and institutional aid are available to AB 540 students as a result of the California Dream Act such as CCPG Fee Waiver or Cal Grant. Please go to www.sccollege.edu and read more about it under financial aid.

Cal Grants

Cal Grant Programs are available to California Residents who qualify. United States citizens, permanent residents or eligible non-citizens may apply for Cal Grants via the Federal Application for Student Aid (FAFSA). AB 540 students may apply via the California Dream Act Application. The deadline to apply is March 2nd each year for all California College Students (maximum opportunity). If you miss the March 2nd deadline AND you plan to attend a community college in the fall, you have until September 2nd (limited number of grants available). Be aware there is also a GPA requirement. The college electronically transmits GPA verifications for certain students. For detailed information go to www.csac.ca.gov

Cal Grant A
Cal Grant A assists low and middle income students with tuition costs at four-year institutions. Eligibility is based on academic achievement and financial need.

If you qualify for a Cal Grant A and plan to attend a public community college, the Student Aid Commission will put the student’s tuition/fee award on reserve for 2 years until the student transfers to a four-year college, provided that the student continues to qualify financially by demonstrating financial aid need.

**Cal Grant B**

Cal Grant B provides assistance in meeting living expenses (i.e. books and supplies, housing costs and transportation). The maximum award is $1,672. Eligibility is based on demonstration of substantial financial need and enrollment status. Cal Grant B also funds tuition costs for sophomores at the same rate as Cal Grant A. Students must be actively enrolled in 6 units.

**Cal Grant C**

Cal Grant C assists vocational students with tuition and training costs in a program of at least 4 months long. Awards range up to $1,094 for related training costs such as special clothing, tools, equipment, and books and supplies. The Cal Grant C program is for non-transfer majors.

**Full Time Student Success Grant (FTSSG)**

The Full Time Student Success Grant (FTSSG) is a new need based grant that is paid in conjunction with any full time Cal B disbursement up to $500 per semester. This grant is only for community colleges and is not transferable.

**Bureau of Indian Affairs Grant (BIA)**

The Bureau of Indian Affairs provides grants to assist eligible American Indian students in meeting educational costs. To be eligible, the applicant must be at least one-fourth American Indian, Eskimo, or Aleut heritage, as certified by a Tribal Agency served by the Bureau of Indian Affairs; be enrolled as a full-time student (12 or more units), and be eligible for financial aid at Santiago Canyon College.

**Scholarship Program Office**

Many community benefactors, including SCC Foundation, SCC faculty and staff, and outside organizations, establish scholarships at Santiago Canyon College to recognize academic achievement and offer needed financial support.

Eligibility varies according to the individual scholarship. There are scholarships available to students taking classes at Santiago Canyon College, those transferring to four-year colleges, and those entering college for the first time upon graduation from high school.

Listings and requirements for the various SCC student scholarships are provided online each spring. A comprehensive online application is available for students to review.

Applications must be submitted for screening in March, and student recipients will be recognized at a ceremony in May.
For information regarding scholarships that are available for high school seniors, contact the Scholarship Office or the High School and Community Outreach Office.

For applications or more information, please contact the Scholarship Office at 714-628-4793, visit the Scholarship Office located in room A-210 or online

**Honors and Awards**

Phi Theta Kappa. Phi Theta Kappa is an international honors society that recognizes academic excellence and achievement of students enrolled in two-year colleges. The society offers a myriad of opportunities for scholarship, intellectual enrichment, personal development and academic recognition.

The Beta Eta Rho Chapter of Phi Theta Kappa was organized at Santiago Canyon College in 1998.

Membership in Phi Theta Kappa is extended each semester by the local chapter to students who have completed a minimum of 12 degree units with a minimum of grade point average of 3.0. Members receive special recognition when they graduate.

Psi Beta. Psi Beta is the national honor society in psychology for community and junior colleges. The mission of Psi Beta is professional development of psychology students through promotion and recognition of excellence in scholarship, leadership, research, and community service.

Membership in Psi Beta is extended each semester by the local chapter to students who have completed one psychology course and 12 semester hours of total college credit and have an overall GPA of 3.25 with at least a “B” average in psychology courses.

Members receive special recognition upon graduation.

Sigma Chi Eta. The purposes of Sigma Chi Eta are (a) to recognize, foster, and reward outstanding scholastic achievement in communication studies; (b) to stimulate interest in the field of communication; (c) to provide an opportunity to discuss and exchange ideas in the field of communication; (d) to establish and maintain closer relationships and mutual understanding between speech communication studies faculty and students;

(e) to explore options for community college students who will transfer to a four-year college or university or enter the world of work. The Omicron Chapter at SCC was founded in 2004. Students who qualify may apply for membership by contacting the advisor, Dr. Melinda Womack. In order to become a member of a Sigma Chi Eta chapter, the student must:

- have completed at least 12 semester hours
- have completed at least three communication courses or 9 semester hours (or at least 12 quarter credit hours) of communication study;
- have a cumulative GPA of at least 3.0;
- have a communication studies GPA of at least 3.25;
- be in good standing at the college;
- display commitment to the field of communication.

**Foundation**

The Santiago Canyon College Foundation is a 501(c)(3) non-profit organization dedicated exclusively to helping Santiago Canyon College gain the financial resources it needs to ensure that every qualified student, regardless of economic background, has access to an affordable yet high-quality college education. The SCC Foundation raises money for academic
scholarships and provides supplemental dollars for student support programs such as the Hawks Nest Food Pantry and Veterans Resource Center (VRC). To enhance the quality of our students’ overall experience at SCC, the Foundation also supports enrichment programs such as Forensic Debate Team and campus events, including the annual Performing Arts Showcase.

There is no better value in higher education than community college - nor a more cost-effective way to make sure that every person in our community has a viable path to becoming or remaining a productive citizen.

Your donation to the foundation - in any amount - makes a real difference in the lives of our students. To find out more, please e-mail foundation@sccollege.edu or call (714) 628-4790.

**On-Campus Job Placement Office**

The On-Campus Job Placement Office operates under the umbrella of the Student Support Services, aiding students in advancing their leadership skills by placing them in on-campus student work programs. Student employment can assist with education cost and also develop desirable work attitudes and habits while working in a professional environment. Upon determining eligibility, students are matched with departments based on their educational goals. This work experience is intended to compliment the educational process and to enhance future employment.

For more information, call the On-Campus Job Placement Office at (714) 628-4867 or visit us in E-104 or go online at www.sccollege.edu/jobplacement

**Student Consumer Information—Right-To-Know Disclosure Information**

Federal regulations require all campuses to provide specified information to prospective and current students, staff and the general public. Listed below are those items that must be available for review per federal regulation.

The federal Higher Education Act, the federal Equity in Athletics Disclosure Act (EADA), and regulatory guidance provided in the Code of Federal Regulations (CFR) require direct individual notices of prescribed information to certain target audiences including prospective students; currently enrolled students; current employees; parents, coaches and counselors of prospective student athletes; and the general public. Disclosures are to include crime/security statistics, student completion/graduation rates, FERPA privacy/security rights, financial aid program information, and gender-specific information on athletic participation and financial support.

Please go to www.sccollege.edu and click on ‘About SCC’ to review all the current Student Consumer Information including Gainful Employment disclosures.

**Educational Options**

**Associate Degrees**

The Associate Degree is a certification of the student’s satisfactory completion of a program of study with a specific major or area of specialization. The Associate Degree is normally completed in two years, compared with the Baccalaureate Degree, which is normally completed in four years. Associate Degrees are commonly conferred by community colleges and are referenced as “local degrees”. They are usually of two types, the Associate of Arts and the Associate of Science. The distinction between the Associate of Arts and the Associate of Science degrees lies in the majors. If the major is in the fields of engineering, physical or biology science, or occupational curricula, the degree conferred is usually the Associate of Science. Otherwise, the Associate of Arts degree is conferred.

Ordinarily, Associate Degrees have one of two major purposes. Either the program of study prepares the individual for transfer to a four-year college or university or the program of study is intended to prepare the student for immediate employment.
Associate Degrees for Transfer

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," an established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable course work with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Certificate of Achievement Programs

A Certificate of Achievement (18 or more units or state approved under 18 units) is a verification of achievement in a particular academic or occupational area, and it will be included on the official transcript. Certificate of Achievement programs normally include only those courses which have a direct bearing upon specialized occupational competency since the certificate has the sole objective of immediate employment in a specialized area. For this reason there is no general education requirement in a certificate program. To qualify for a certificate of Achievement, a candidate must meet the following requirements:

Courses: Courses are designated for the specific certificate.
Grades: At least a C grade in each course required for the certificate, unless otherwise specified. Credit by Examination may also be used to gain credit for required courses.
Pass/No Pass: A Pass/No Pass course is acceptable toward the certificate if it is required for the certificate and (a) offered on a Pass/No Pass basis only or (b) if the Pass/No Pass is earned on the basis of credit by examination.
Residency: Twelve units completed at Santiago Canyon College. (Six of the twelve units required for the certificate must be earned at Santiago Canyon College.)
Petition: A petition for Certificate of Achievement must be filed by the student by deadline (see Instructional Calendar) with the Admissions and Records Office at Santiago Canyon College.

Certificate of Proficiency Programs

A Certificate of Proficiency is under 18 units and/or is not a State-approved program. This type of certificate is verification of completion in a particular subject matter. A Certificate of Proficiency will NOT be included on the official or unofficial transcript. Certificate programs include only those courses which focus on vocational skills. The sole objective is employment in a specialized area and for this reason there are no general education requirements for a Certificate of Proficiency.

Santiago Canyon College Certificate of Proficiency programs are described in the catalog section on SCC Academic Programs. To qualify for a Certificate of Proficiency, a candidate must meet the following requirements:

Courses: Courses are designated for the specific certificate.
Grades: At least a C grade in each course required for the certificate, unless otherwise specified. Credit by Examination may also be used to gain credit for required courses.
Pass/No Pass: A Pass/No Pass course is acceptable toward the certificate if it is required for the certificate and (a) offered on a Pass/No Pass basis only or (b) if the Pass/No Pass is earned on the basis of credit by examination.
Residency: At least 20% of the total units required for the certificate must be earned at Santiago Canyon College.
Petition: A petition for Certificate of Proficiency must be filed by the student by deadline (see Instructional Calendar) with the Admissions and Records Office at Santiago Canyon College.
Multiple Associate Degrees and Certificates

A student may earn multiple Associate Degrees and Certificates from Santiago Canyon College.

For additional degrees and certificates, any course used to meet the prescribed graduation requirements may count toward more than one degree and certificate.
Courses used to meet the proficiency requirements and general education requirements for the first degree may be used to fulfill these requirements for additional degrees,
Courses used for one major may be used to meet requirements for additional majors.
If a break in enrollment occurs, a student must comply with the proficiency, general education, and major requirements in effect at the time the student resumes attendance or those in effect in subsequent years of the student’s enrollment.
Each additional degree and Certificate of Achievement will be posted to the student's academic record and the student will receive diplomas for each degree and Certificate of Achievement earned.

Educational Plans

Plan A - Santiago Canyon College General Education Requirements
Plan B - CSU General Education Breadth Requirements (CSU GE) Plan
Plan C - Intersegmental General Education Transfer Curriculum (IGETC)

Plan A - Santiago Canyon College General Education Requirements

General Education requirements at Santiago Canyon College reflect the conviction that those who receive degrees must possess in common certain basic principles, concepts, and methodologies, both unique to and shared by various disciplines. General Education prepares the college student to comprehend and contribute to the modern world, to understand our regional, national, and international cultural diversity as well as our shared cultural heritage, to reinforce an awareness of self as well as others, and to instill an ongoing intellectual curiosity and commitment to learning.

The subject matter of General Education courses is designed to be general, broad, and introductory rather than specialized, narrow, or advanced. General Education courses form a pattern of learning experiences designed to provide educational opportunities that lead to the following outcomes for students:

Learn: About Self and Others, Academic and Professional Issues

Take responsibility for one’s own learning and wellbeing.
Learn about one’s chosen academic major, while creating connections across disciplines.
Learn about professional conduct, including workplace and community ethics, conflict management, and teamwork.

Communicate: With Clarity and Accuracy and in Diverse Environments

Communicate ideas in a clear and articulate manner.
Communicate accurately to diverse audiences.
Communicate in various formats using diverse technologies.

Act: With Awareness of Self and the Local and Global Community of Persons

Act to maintain one’s dignity and self-respect.
Act as a responsible community member who treats others with respect, civility, empathy, honesty, and dignity.
Act to increase the wellbeing of the global community by maintaining cultural literacy, lifelong learning, ethical consideration of each other, and the environment we all share.

Think: Critically, Creatively, and Reflectively

Critically analyze, evaluate, organize and use quantitative and qualitative data to solve problems and develop logical models, hypotheses and beliefs.
Creatively use concepts to making learning relevant.
Reflectively assess one's values, assumptions, and attitudes.

*Courses may be listed in more than one area, but will not be certified in more than one area.*

### A. Natural Sciences (3 units are required)

Courses in the natural sciences examine the physical universe, its life forms, and its natural phenomena. They assist in developing an appreciation and understanding of the scientific method and encourage an understanding of the relationships between science and other human activities. This category includes introductory or integrative courses in astronomy, biology, chemistry, earth sciences, general physical science, geology, physics, physical geography, physical anthropology, and other disciplines.

- **Anthropology 101, 101L**
- **Astronomy 100L, 102, 103, 112**
- **Biology 109/109H, 109L/109HL, 115, 139, 149, 190, 190L, 211, 229, 239, 259**
- **Chemistry 100, 200A, 200AH**
- **Earth Sciences 100, 100L, 111, 120, 121, 130, 160, 200**
- **Geography 101/101H, 101L, 130, 130H**
- **Physical Science 100**
- **Physics 100, 150A, 250A**
- **Psychology 200**
- **Water Utility Science 107**

### B. Social and Behavioral Sciences (6 units are required)

Courses in the social and behavioral sciences focus on people as members of society. They assist in developing an awareness of the methods of inquiry used by the social and behavioral sciences. Critical thinking is stimulated about the ways people act and have acted in response to their societies, and appreciation is developed of how societies and social groups operate. This category includes introductory or integrative survey courses in cultural anthropology, economics, history, political science, psychology, sociology, cultural geography, and related disciplines.

Select one course from B1. American Institutions and one course from B2. Social Science Elective.

#### B1 American Institutions

- **History 118, 120/120H, 121/121H, 122, 126**
- **Political Science 101*/101H**

#### B2 Social Science Elective

- **Anthropology 100*/100H**
- **Child Development 107*, 110**
- **Criminal Justice 101**
- **Economics 101, 102**
- **Education 101**
Geography 100*/100H*, 102*/102H*
History 101/101H, 102/102H, 126*, 240
Political Science 101*/101H*, 110, 230
Psychology 100/100H, 160*, 190
Sociology 100/100H, 120, 150, 220*

C. Humanities (3 units are required)

Courses in humanities study the cultural activities and artistic expressions of human beings. They assist in developing an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation, and in developing aesthetic understanding and an ability to make value judgments. This category includes introductory or integrative courses in the arts, foreign languages, literature, philosophy, and religion.

Arts and Humanities:

Anthropology 104
Art 100/100H, 101/101H, 102/102H, 110
Cinema Studies 103, 104, 105, 107, 108
Dance 100
History 132*, 142*
Music 101/101H, 102, 104
Philosophy 106/106H, 102, 108
Theatre Arts 100

Foreign Language:

American Sign Language 110, 111, 116, 210
Chinese 101, 102
French 101, 102, 194, 201, 202
Italian 101, 102, 194, 195, 201, 202

Literature:


D. Cultural Breadth (3 units are required)

Courses meeting the cultural breadth requirement represent both global and national perspectives and recognize the value of systemic historical and cross-cultural examinations of race, ethnicity, gender, and global issues.

Courses meeting this requirement can be identified in two areas.

D1. Ethnic Studies/Gender, Sexuality, and Women’s Studies
Courses meeting the Ethnic Studies/Women’s studies requirement focus on the cultural perspectives of the African American, the Asian American, the Chicano/Latino, and the Native American and women in the United States. They assist students to deal constructively with issues of difficult differences and to develop respect for and become aware of the views, interactions, and contributions of these ethnic groups and women to U.S. society and culture. This category is interdisciplinary and includes introductory courses that incorporate the voices of these historically excluded groups.

Ethnic Studies 101, 110, 120, 130, 140
Gender, Sexuality, and Women’s Studies 101, 102

D2. International Perspective.

Courses in International Perspective include an emphasis on global perspectives in a cultural context. All courses need to address not just specific aspects of culture but also a component addressing the basic concepts of culture including how culture influences the environment, behavior, structure, and function of society. These courses also include a multi-country perspective.

American Sign Language 116
Anthropology 100*/100H*, 104
Child Development 221
Communication 120/120H, 225/225H
English 246, 271*, 272*, 278
Geography 100*/100H*, 102*/102H*
History 124, 127, 132*, 142*, 152, 162
Kinesiology 109, 110
Music 102, 103
Philosophy 112
Psychology 170, 180
Sociology 286

E. Language and Rationality (6 units are required)

Courses in language and rationality develop the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation of communication in whatever symbol system the student uses.

Select one course from E1. English Composition (with a grade of “C” or better) and one course from E2. Communication and Analytical Thinking (includes mathematics, logic, statistics, computer languages and programming, and related disciplines.)

E1 English Composition

English 100, 101/101H with a grade of “C” or better.

E2 Communication/Analytical Thinking

Communication 101, 110*, 111**
Computer Science 100, 105, 129, 154
English 102**/102H**, 103**/103H**

Philosophy 110**, 111**

Reading 102**, 150**, 151**

Sociology 125**/125H**

**Meets a required Proficiency

F. Lifelong Understanding and Self-Development (3 units are required)

The courses in this category are designed to equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities. In a social context, students will benefit from a study about themselves and how they function at different stages of life. Instruction is intended to include consideration of such matters as human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying. Physical activity courses could be included, provided that they include some components of the above-listed topics.

Select one course from SECTION F1 and one course from SECTION F2.

No more than one unit may be counted from F2.

**F1. Business 130**

Child Development 107

Counseling 101, 113, 116, 118

Interdisciplinary Studies 155

Kinesiology 100, 101, 102, 104, 110, 111

Information Studies 100

Nutrition & Food 115, 120

Philosophy 111

Psychology 160*, 230

Sociology 130, 220*

**F2. Kinesiology 119–283 (excluding Kinesiology 274 and 284)

G. Required Proficiencies

Courses taken to meet these proficiencies must be completed with a grade of “C” or better.

**G1. Mathematics**

1. Completion of Mathematics 080, 085, 086, or any other 3 unit mathematics course numbered above the level of 080 OR

2. Placement into Math 140, 150, 171, or 180 without a recommended support course based on Santiago Canyon College’s qualifying profile by the Math placement process.

3. Completion of Algebra II in high school with a grade of “C” or better.

**G2. Reading**
1. Completion of Reading 102, 150, or 151 with a grade of “C” or better; OR
2. Completion of English 102/102H, English 103/103H, Philosophy 110, or Philosophy 111 with a grade of “C” or better.

G3. Oral Communication

Completion of 3 units with a grade of “C” or better from one of the following: Communication 100/100H, 101, 110, 111, 134

NOTE: Schedules for proficiency examinations are announced each semester in the Schedule of Classes. Applicants must be currently enrolled or completing graduation requirements in order to take the proficiency examinations.

International coursework may not be used to fulfill the following general education requirements:

B1: American Institutions
E1: English Composition
G2: Reading Proficiency
G3: Oral Communication Proficiency

General Education Requirements

Students must complete 24 units of general education to receive an Associate of Arts degree from Santiago Canyon College. This must include a minimum of one course in General Education Areas A-F. Students completing the Liberal Arts or any other major may use a course to satisfy both a major requirement and a general education category requirement (A-F). Non-degree-applicable courses may not be used for graduation requirements.

Completion of the California State University general education requirements, CSU-GE/Plan B, or the University of California Intersegmental General Education Transfer Curriculum/Plan C will also fulfill the general education requirements for a Santiago Canyon College Associate Degree. Students may also satisfy the Plan A General Education requirements by submitting an official transcript of a Bachelor’s degree from a regionally accredited institution, or submitting transcripts that show completion of an Associate’s degree from an accredited California institution within 10 years of completing all major requirements at Santiago Canyon College.

Official transcripts from all colleges and universities attended must be submitted to SCC Admission and Records Office (E-101).

Associate Degree Requirements

Students must complete a minimum of 60 units with an overall grade point average of 2.0. At least 12 units must be earned at Santiago Canyon College and at least 6 units must be completed in courses required for the student’s designated major. Students must complete courses for the major (a minimum of 18 units) with a letter grade of “C” or better. A limit of 15 units taken on a pass/no pass basis will be applied toward the degree.

Required Proficiencies: Mathematics, Reading, Oral Communication

May be used to satisfy a General Education requirement; Must be completed with a letter grade of “C” or better.
Mathematics (graduation petition code G-1)

1. Completion of Math 080, 085, 086 or any 3-unit math course numbered above the level of 080 OR

2. Placement into Math 140, 150, 171, or 180 without a recommended support course based on Santiago Canyon College’s qualifying profile by the Math placement process OR

3. Completion of Algebra II in high school with a grade of “C” or better.

Reading: Critical Analysis (graduation petition code G-2)

1. Completion of READ 102, READ 150, or READ 151 with a grade of “C” or better; OR

2. Completion of ENGL 102/102H, ENGL 103/103H, PHIL 110, or PHIL 111 with a grade of “C” or better.

Oral Communication (graduation petition code G-3)

Completion of 3 units with a letter grade of “C” or better in one of the following: COMM 100, 100H, 101, 110, 111, or 134

Catalog Rights

Students who attend Santiago Canyon College at least one semester per year (fall, spring, summer) continuously may choose catalog rights pertaining to graduation, major, and general education requirements for the first year of attendance or any subsequent year of attendance. If there is a gap in continuous attendance, students must use the catalog requirements for the year of readmission or for a year of subsequent continuous enrollment.

Petition for Graduation

Petitions must be filed in the Office of Admission and Records at Santiago Canyon College when a student has completed 30 units one semester before the expected graduation date, or by the semester deadline listed in the class schedule or found on the Admissions page at www.sccollege.edu

What if I have a mixture of quarter and semester unit courses, how is this calculated for CSU or IGETC certification?

It will be calculated to the student’s advantage per Area, using either semester or quarter units. To convert semester units to quarter units, multiply the semester by 1.5. To convert quarter units to semester units, divide the quarter units by 1.5.

Plan B - CSU General Education Breadth Requirements (CSU GE)

General Education Breadth Requirement Courses For The California State University (CSU)

Students planning to graduate from one of the 23 campuses of the California State University must complete 48-semester units in general education breadth courses. Upon request, Santiago Canyon College will verify the completion (certify) of up to 39 units of lower-division general education requirements. Nine-semester units of general education units must be completed at the upper-division level after transfer. Students are strongly encouraged to meet with a Santiago Canyon College counselor when planning to transfer to a CSU campus.

IMPORTANT NOTE: The list of certifiable courses is subject to change year by year, but students are assured that courses taken to meet General Education-Breadth requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved beginning Fall 2021 and are valid through Summer 2022.
*Courses marked with an asterisk may be listed in more than one area but will not be certified in more than one area.

Areas B1, B2, B3: Underlined courses include a laboratory section.

(F' YR) - This identifier indicates the semester and year the course was approved in a general education area.

A. Communication in the English Language and Critical Thinking (minimum 9 units)

The 9 units selected from this area must include at least one course from A1, A2, and A3. Each course must be completed with a grade of "C" or better (C minus is not acceptable).

A1: Oral Communication

Communication 100/100H, 101, 110, 111*

A2: Written Communication

English 100, 101/101H

A3: Critical Thinking

Communication 111*

English 102*/102H*, 103/103H

Philosophy 110, 111

Reading 150, 151

B. The Physical Universe and Its Life Forms (minimum 9 units)

Complete ONE course from Area B1 and ONE course from Area B2.

One course MUST have a corresponding lab from Area B3.

Complete ONE Math course from Area B4 with a grade of "C" or better (C minus is not acceptable).

B1: Physical Sciences

Astronomy 102, 103, 112

Chemistry 100, 200A, 200AH

Earth Sciences 100, 111, 120, 121, 130, 160, 200

Geography 101/101H, 130, 130H

Physical Science 100

Physics 100, 150A, 150B, 250A, 250B, 250C

B2: Life Science

Anthropology 101

Biology 109/109H, 115, 139, 149, 190, 211, 221, 229, 231, 239, 249, 259, 290

Psychology 200
B3: Laboratory Activity

Anthropology 101L
Astronomy 100L
Biology 109L, 109HL, 115, 139, 149, 190L (F'17), 211, 212, 229, 231, 239, 259, 290
Chemistry 100, 200A, 200AH
Earth Sciences 100L, 111, 121
Geography 101L
Physical Science 100
Physics 100, 150A, 150B, 250A, 250B, 250C

B4: Mathematics/Quantitative Reasoning

Sociology 125/125H

C. Arts, Literature, Philosophy, and Foreign Language (minimum 9 units)

This area must include one course from C1, one course from C2, and a third course from either area.

C1: Arts (Art, Dance, Music, Theatre)

Art 100/100H, 101/101H, 102/102H
Cinema Studies 103, 104
Dance 100
English 233A*, 233B*
Music 101/101H, 102, 103, 104
Theatre Arts 100

C2: Humanities

American Sign Language 110, 111, 116, 210
Chinese 101, 102
English 102*/102H*, 231, 232, 233A*, 233B*, 241, 242, 243, 246, 270, 271, 272, 278*
French 101, 102, 194, 201, 202
History 101*/101H*, 102*/102H*, 132*, 152, 162
Italian 101, 102, 194, 195, 201, 202

**Both SPAN 101A and 101B must be completed to meet the C2 requirement.

NOTE: The UNITED STATES HISTORY, CONSTITUTION, AND AMERICAN IDEALS CSU graduation requirement may be met by completing
Political Science 101/101H and one U.S. History course from the following: History 118, 120/120H, 121/121H, 122, 124, 127.

*These history courses may also be used to meet 6 of the 9 units required for Area D.*

**D. Social, Political, and Economic Institutions and Behavior; Historical Background (minimum 9 units)**

**New and returning** students BEGINNING SCC Fall 2021 or later – MUST take 6-semester units from any discipline.

Students staring SCC BEFORE Fall 2021 and have maintained continuous enrollment – MUST take 9-semester units from at least 2 different disciplines.

Courses must be selected from at least 2 different disciplines.

- Anthropology 100/100H, 103, 104
- Child Development 107*, 110
- Cinema Studies 105
- Communication 120/120H, 225/225H
- Counseling 150, 152*
- Criminal Justice 101
- Economics 101, 102
- Education 101
- Ethnic Studies 101*, 110*, 120*, 130*, 140*
- Gender, Sexuality, and Women's Studies 101, 102, 103
- Geography 100/100H, 102/102H, 140
- Interdisciplinary Studies 155*
- Kinesiology 109
- Political Science 101/101H, 110, 150, 200/200H, 201, 220, 221, 222, 230
- Psychology 100/100H, 157*, 160*, 170, 180, 190*, 200, 220, 230*, 240, 250
- Sociology 100/100H, 115, 116, 120, 130*, 150, 220, 240/240H, 286

+No credit for HIST 122 if taken after HIST 120/120H or 121/121H.

**E. Lifelong Understanding and Self-Development (minimum 3 units)**

Only one unit from E2 can be used to satisfy Area E.

**E1 Lifelong Understanding**

- Child Development 107*
- Counseling 101, 113 (F’19), 116, 152*
- Interdisciplinary Studies 155*
- Kinesiology 100, 101, 102, 104, 110, 111
Nutrition and Food 115
Psychology 157*, 160*, 190*, 230*
Sociology 130*

**E2: Self-Development**
Kinesiology 119-283

**F. Ethnic Studies** (minimum 3 units)

**New and returning** students BEGINNING SCC Fall 2021 or later – MUST complete Area F.

Students starting **SCC BEFORE Fall 2021** and have maintained continuous enrollment - do not need to complete Area F. Instead, students MUST complete Area D.

Ethnic Studies 101*, 110*, 120*, 130*, 140*

**U.S. History, Constitution and American Ideals – (CSU Graduation Requirement)**

All California State Universities have a graduation requirement in U.S. History, Constitution, and American Ideals. Although this is not a transfer requirement it is recommended students take it prior to transfer to a CSU. Courses used to meet this requirement may also be used to meet 6 of the 9 units required in Area D and may be found in Areas D6 or D8 in bold.

**US-1: HISTORICAL DEVELOPMENT OF AMERICAN INSTITUTION AND IDEALS**

History 118, 120, 120H, 121, 121H, 122, 124, 127

**US-2: U.S. CONSTITUTION & GOVERNMENT**

Political Science 101, 101H

**US-3: CALIFORNIA STATE & LOCAL GOVERNMENT**

Political Science 101, 101H

**CERTIFICATION REQUIREMENTS**

No more than 30-semester units may be certified for areas B through D combined.

Pass/No Pass grades are accepted for certification in all areas. However, letter grades may be recommended or required for specific courses in a given major. Each CSU campus may also limit the total number of units graded Pass.

Grades of “C-” earned in Areas A1, A2, A3, and B4 can be used for certification. However, if the course double-counts to meet a major requirement, a “C” or better grade is recommended for certification.

A single course may not meet more than one general education requirement.

Certification of coursework from other colleges will only be granted to students who have completed a minimum of 12 units at Santiago Canyon College.

Courses taken at other California Community Colleges will be applied to the subject areas in which they were listed by the institution where the course was completed.

Courses taken at other regionally accredited institutions (which do not maintain a CSU certification list) may be approved for certification via a “Pass Along Petition” and after a review by the Santiago Canyon College Articulation Officer. Courses completed at foreign institutions are not acceptable for certification. Pass Along Petitions are available from the Santiago Canyon College Counseling Department and must be accompanied by the appropriate documentation.

Requests for certification should be made during the semester prior to the last term of attendance. Please consult the class schedule or the Admissions website at [www.sccollege.edu](http://www.sccollege.edu) or the Santiago Canyon College Counseling Department for deadline.
information.

Students following the Associate in Science Biology for Transfer (11856) only need to complete the following CSU General Education Breadth requirements:

Area A – One course from areas A1, A2, and A3.
Area B – One course from areas B1, B2, B3, and B4
Area C – One course in areas C1 and C2
Area D – Two courses from two different disciplines in area D
Area E – One course from area E

Plan C - Intersegmental General Education Transfer Curriculum (IGETC)

Completion and certification of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from Santiago Canyon College to a campus in either the CALIFORNIA STATE UNIVERSITY or the UNIVERSITY OF CALIFORNIA system without the need, after a transfer, to take additional lower-division, general education courses to satisfy campus general education requirements. Completion of IGETC does not guarantee admission to a UC campus. Students are strongly encouraged to meet with a Santiago Canyon College counselor when planning to transfer to a UC campus.

IMPORTANT NOTE: The list of certifiable courses will be subject to change year by year, but students are assured that courses taken to meet IGETC requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved beginning Fall 2021 and are valid through Summer 2022.

* Courses with an asterisk indicate that transfer credit may be limited by either UC or CSU or both. Courses with an asterisk may be counted in one area only. Please consult with a counselor for additional information.

**Courses with two asterisks indicate that an official High School transcript must be on file in the admissions office.

Areas 5A, 5B, 5C: Underlined courses have laboratory activity.

(F’ YR) - This identifier indicates the semester and year the course was approved in a general education area.

AREA 1—ENGLISH COMMUNICATION

C.S.U.: 3 courses required, one from each group.
U.C.: 2 courses required, one each from Group A and B.

Group A: English Composition

1 course required, minimum 3-semester units.

English 100, 101*/101H*

Group B: Critical Thinking/Composition

1 course required, minimum 3-semester units.
English 102*/102H*, 103*/103H*
Philosophy 110*
Reading 151

**Group C: Oral Communication - Required for CSU transfer only**

1 course required, minimum 3-semester units.

Communication 100*/100H*, 101, 110, 111

**AREA 2A—MATHEMATICAL CONCEPTS & QUANTITATIVE REASONING**

1 course required, minimum 3-semester units.


Sociology 125*/125H*

**AREA 3—ARTS & HUMANITIES**

3 courses required, minimum 9-semester units, with at least one course from Group A and one course from Group B. Select a third course from either area.

**Group A: Arts (minimum 3 units)**

Art 100*/100H*, 101*/101H*, 102*/102H*

Cinema Studies 103, 104

Dance 100

Music 101*/101H*, 102, 103, 104

Theatre Arts 100

**Group B: Humanities (minimum 3 units)**

American Sign Language 111, 116, 210

Chinese 102

English 102*/102H*, 231, 232, 233A, 233B, 241, 242, 243, 246, 270 (F'20), 271, 272, 278

French 102, 201, 202

History 101*/101H*, 102*/102H*, 132

Italian 102, 201, 202

Philosophy 106*/106H*, 108, 112, 115, 118, 120

Spanish 102, 111, 195A, 195B, 201, 202

**AREA 4—SOCIAL & BEHAVIORAL SCIENCES**

3 courses required, minimum 9 semester units from at least 2 disciplines or an interdisciplinary sequence.

Anthropology 100*/100H*, 103, 104

Child Development 107*
Cinema Studies 105
Communication 225*/225H*
Criminal Justice 101
Economics 101, 102
Education 101
Ethnic Studies 101#, 110#, 120#, 130#, 140#
Gender, Sexuality, and Women’s Studies 101*, 102, 103
Geography 100*/100H*, 102*/102H*, 140
History 101*/101H*, 102*/102H*, 118, 120*/120H*, 121*/121H*, 122*, 124, 126, 127, 133, 142, 152, 162, 240
Interdisciplinary Studies 155
Kinesiology 109
Political Science 101*/101H*, 110, 150, 200, 201, 220, 221, 230
Psychology 100*/100H*, 157*, 160, 170, 180, 190, 200, 220, 230, 240, 250
Sociology 100*/100H*, 115, 116, 120, 130, 150, 220, 240*/240H*, 286

# These courses meet the CSU Ethnic Studies graduation requirement for new and returning students BEGINNING SCC fall 2021 or later. Students starting SCC BEFORE Fall 2021 and have maintained continuous enrollment, do not need to meet the CSU Ethnic Studies graduation requirement.

AREA 5—PHYSICAL & BIOLOGICAL SCIENCES

Minimum 7–9 semester units. One Physical Science course and one Biological Science course are required. One course must include a corresponding laboratory. Lab courses are underlined.

**Group A: Physical Science (minimum 3 units)**
- Astronomy 102, 103, 112
- Chemistry 100, 200A*/200AH*, 200B
- Earth Sciences 100, 111, 120, 121, 130, 160, 200
- Geography 101*/101H*, 130*/130H*
- Physical Science 100
- Physics 100, 150A*, 150B*, 250A*, 250B*, 250C*

**Group B: Biological Science (minimum 3 units)**
- Anthropology 101
- Biology 109*/109H*, 115, 139, 149, 190, 211, 221, 229, 231, 239, 249, 259, 290
- Psychology 200

**Group C: Laboratory Activity (minimum 1 unit)**
- Anthropology 101L
- Astronomy 100L
- Biology 109L/109HL, 115, 139, 149, 190L, 211, 221, 229, 231, 239, 249, 259, 290
Chemistry 100*, 200A*/200AH*, 200B
Earth Sciences 100L, 111, 121*
Geography 101L
Physical Science 100
Physics 100, 150A*, 150B*, 250A*, 250B*, 250C*

AREA 6—LANGUAGE OTHER THAN ENGLISH (LOTE) (UC ONLY)

This proficiency may be met by one of the following methods:

Satisfactory completion of two years of high school coursework in a language other than English with grades of “C-” or better**; or completion of one of the following:

American Sign Language 110, 111, 210
Chinese 101, 102
French 101, 102, 201, 202
Italian 101, 102, 201, 202
Spanish 101*/101H*, 101B, 102, 110, 111, 201, 202;

OR

Satisfactory completion, with “C” grades or better, of two years of formal schooling at the sixth-grade level or higher in an institution where the language of instruction is not English;

OR

3 or higher on College Board Advanced Placement Examination, 5 or higher on International Baccalaureate Higher Level Examination; SAT II: Subject Tests (see a counselor for required scores); grade of A, B, or C on the “O” level exam; or score of 5, 6, or 7 on the “A” level exam;

OR

Satisfactory completion of an achievement test administered by a college in a language other than English equivalent to two years of high school language; or verification of student competency equivalent to two years of high school language.

U.S. HISTORY, CONSTITUTION, AMERICAN IDEALS – CSU GRADUATION REQUIREMENT ONLY

To meet the CSU requirement, students should take

Political Science 101*/101H* AND one of the following courses: History 118, 120*/120H*, 121*/121H*, 122*, 124, 127. These courses can be used for 6 of the 9 units required in Area 4 (Social and Behavioral Sciences).
AMERICAN INSTITUTIONS REQUIREMENT (AI)
(Not part of IGETC. May be completed prior to transfer)

CSU has an American Institutions' graduation requirement that is separate from IGETC.

UC-bound students should be aware of the UC American Institutions graduation requirement at their campus of choice, requirements vary. These courses can be used to meet 6 of the 9 units required in Area 4: Social & Behavioral Sciences.

UC requires the completion of a college course or courses with a grade of “C” or better OR a one-year course in high school in U.S. History or a half-year course in U.S. History and a half-year course in American Government with grades of “C” or better (UCLA requires grades of “B”). Requirements vary by UC campus. Check with a Santiago Canyon College counselor to determine which course(s) to take.

CERTIFICATION REQUIREMENTS

1. Complete all courses used for IGETC certification with a minimum grade of C (C minus is not acceptable). A “Pass” is acceptable providing it is equivalent to a grade of C or higher.

2. Request certification from the last California community college you attend prior to transferring to CSU or UC. Requests should be made to the Office of Admissions and Records during the semester prior to the last term of attendance. Please consult the class schedule or the Santiago Canyon College Counseling Department for deadline information.

3. Prior to requesting certification, have official transcripts on file from every high school and college you have attended.

4. Courses taken at other California community colleges will be applied to the subject areas in which they are listed by the institution where the work was completed.

5. A course taken at other regionally accredited institutions (which do not maintain an IGETC certification list) may be approved for certification via a “Pass Along Petition” and after a review by the Santiago Canyon College Articulation Officer. Pass Along Petitions are available from the Santiago Canyon College Counseling Department and must be accompanied by the appropriate documentation.

6. Courses completed at foreign institutions are not acceptable except for certification of competence in a language other than English.

7. Completing IGETC prior to transfer is strongly recommended and can be advantageous in the admissions process. Partial certification is permitted if the student has completed all but two courses on the pattern. Please see a Santiago Canyon College counselor for guidelines.

8. Students completing the Associate in Science Biology for Transfer (11856) degree must follow IGETC for STEM and only need to complete the following IGETC areas to earn the degree:

Area 1 – all courses (except 1C for UC-bound students)
Area 2 – One course
Area 3 – Two courses A
Area 4 – Two courses
Area 5 – All courses
Area 6 – one course for UC-bound students -CSU students do not need to complete this section.

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Associate Degree and Certificate Programs at Santiago Canyon College

ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS AT SANTIAGO CANYON COLLEGE (SCC)
AA = Associate of Arts Degree

AA-T = Associate of Arts for Transfer Degree

AS = Associate of Science Degree

AS-T = Associate of Science Degree for Transfer

CA = Certificate of Achievement

CP = Certificate of Proficiency

Degrees and certificates of achievement have State-approved program control numbers and appear on student transcripts.

Certificates of proficiency are not State-approved and do not appear on student transcripts

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<td>Liberal Arts</td>
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Associate Degree Requirements

Associate Degrees

To earn an associate degree, a student must fulfill the requirements listed under I, II and III below.

I. Unit and Residency Requirements

60 UNITS of degree applicable coursework are required, with at least a 2.0 grade point average. At least 12 of the units must be earned at Santiago Canyon College and at least 6 of those units must be in courses required for the major unless students are earning an Associate Degree for Transfer (ADT).

II. General Education Requirements

The general education requirements can be met through the completion of one of the following general education plans.

Plan A: Santiago Canyon College General Education Requirements

Plan B: California State University General Education Breadth

Plan C: Intersegmental General Education Transfer Curriculum (IGETC)

The general education requirements may also be satisfied by submitting an official transcript showing completion of a bachelor’s degree from a regionally accredited institution.

Alternatively, the general education requirements may be satisfied by submitting an official transcript showing completion of an associate of arts or associate of science degree from a regionally accredited California institution within a ten-year period. All major requirements must be completed at Santiago Canyon College within ten years of the semester and year the degree was conferred at the regionally accredited California institution.

For coursework completed outside the United States, see International Transcripts section.

III. Major Requirements

Each degree specifies courses required for the major (a minimum of 18 units). Students must complete these courses with a grade of C or better. For programs of study leading to an associate degree, see SCC Academic Programs.

A course may be used to satisfy a major requirement and meet a general education category requirement. Non degree applicable courses (courses numbered N01-N99) may not be used for graduation requirements.

IMPORTANT NOTE: The list of courses will be subject to change year by year, but students are assured that courses taken to meet General Education requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved per academic year beginning Fall 2018 and are valid through Summer 2019.

IV. Proficiencies

The required proficiencies listed may also be used to meet General Education Requirements in areas A-F where appropriate. Courses taken to meet proficiencies must be completed with a grade of C or better.
Petition For Graduation and Catalog Rights:

Students must submit a Petition to Graduate to earn an associate degree, certificate, CSU Certification and/or IGETC Certification. Petitions for graduation should be filed in the Admissions and Records Office at Santiago Canyon College when a student has completed at least 30 units or one semester prior to the expected semester to graduate. Students who maintain continuous enrollment have the option to meet the associate degree or certificate requirements as listed in the catalog in effect at the time of first enrollment or any subsequent year.

Continuous enrollment is defined by earning a notation on a transcript (letter grade, W, NP, P or I) for at least one course during any semester, or session, within that academic year. For the purposes of the catalog, an academic year begins with the fall semester and concludes with the summer session. So long as the student remains in attendance in any one semester (fall/spring) or session (summer/intersession) per academic year, the student has the ability to elect to meet the graduation requirements in effect at the time beginning his/her continuous enrollment or in more recent catalog years.

If a student does not earn a note on their transcript during any of the semesters, or sessions, during an academic year, then the student is no longer protected by previous associate degree and/or certificate requirements and will be held to the additional requirements. The student must then reset their catalog rights clock to use the catalog at the time of readmission or subsequent enrollment.

In the event a loss of catalog rights due to extenuating circumstances, a student wishes to waive or substitute a requirement for an associate degree and/or certificate requirements, the student could complete the appropriate form and submit to the Exceptions for Academic Regulations (EAR) Committee for final determination.

Commencement

Commencement is held once a year at the end of the spring semester for those students who have completed or petitioned for a degree during the current academic year (Fall 2016, Spring 2018, or Summer 2018). A Petition to Graduate must be submitted to the Admissions and Records Office at Santiago Canyon College to participate in commencement. Exceptions may be made to accommodate students petitioning for Fall 2018.

NOTE: Official transcripts from all colleges attended must be on file.

Associate in Arts Degrees (A.A.)

Anthropology, AA
Art, AA
Communication, AA
Economics, AA
Elementary Education, AA
English, AA
Ethnic Studies, AA
Gender, Sexuality, and Women's Studies, AA
Liberal Arts: Arts, Humanities, and Communication, AA
Liberal Arts: Mathematics and Sciences, AA
Liberal Arts: Multi-Cultural Studies, AA
Liberal Arts: Social and Behavioral Sciences, AA
Modern Languages, AA
Sociology, AA

Associate in Science Degrees (A.S.)

Accounting, AS
Apprenticeship Carpentry, Acoustical Installer, AS
Apprenticeship Carpentry, Concrete, AS
Apprenticeship Carpentry, Drywall/Lather, AS
Apprenticeship Carpentry, Drywall Finisher, AS
Apprenticeship Carpentry, Finish Carpentry, AS
Apprenticeship Carpentry, Framing, AS
Apprenticeship Carpentry, Insulator, AS
Apprenticeship Carpentry, Millwrighting, AS
Apprenticeship Carpentry, Pile Driver, AS
Apprenticeship Carpentry, Plastering, AS
Apprenticeship Carpentry, Tilt-Up, AS
Apprenticeship Electricity, Industrial, AS
Apprenticeship Electricity, Intelligent Transportation Systems Electrician, AS
Apprenticeship Electricity, Sound Installer, AS
Apprenticeship Electricity, Sound Technician, AS
Apprenticeship Operating Engineers, Construction Safety Inspector, AS
Apprenticeship Operating Engineers, Heavy Duty Repairer, AS
Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, AS
Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, AS
Apprenticeship Operating Engineers, Special Inspector, AS
Apprenticeship Power Lineman, AS
Apprenticeship Surveying, Chainman, AS
Apprenticeship Surveying, Chief of Party, AS
Astronomy, AS
Biography, AS
Biotechnology, AS
Business Administration, AS
Business Management, AS
Chemistry, AS
Code Enforcement and Compliance, AS
Computer Information Systems, AS
Computer Science, AS
Construction Inspection, AS
Construction Management, AS
Cosmetology, AS
Earth Sciences, AS
Entrepreneurship, AS
Environmental Management, AS
Gemology, AS
General Electrician, AS
General Management, AS
General Marketing, AS
Graphic Design, AS
Kinesiology - Fitness and Active Lifestyle, AS
Kinesiology - Health Promotion, AS
Kinesiology - Sport Studies, AS
Land Surveying, AS
Maintenance Electrician, AS
Maintenance Mechanic, AS
Real Estate, AS
Wastewater/Environmental Sanitation, AS
Water Distribution, AS
Water Treatment, AS

Certificates of Achievement

Accounting, CA
After School Program Assistant, CA
After School Program Associate Teacher, CA
American College English/ESL, CA
American Sign Language, CA
Apprenticeship Carpentry, Acoustical Installer, CA
Apprenticeship Carpentry, Concrete, CA
Apprenticeship Carpentry, Drywall/Lather, CA
Apprenticeship Carpentry, Drywall Finisher, CA
Apprenticeship Carpentry, Finish Carpentry, CA
Apprenticeship Carpentry, Framing, CA
Apprenticeship Carpentry, Insulator, CA
Apprenticeship Carpentry, Millwrighting, CA
Apprenticeship Carpentry, Pile Driver, CA
Apprenticeship Carpentry, Plastering, CA
Apprenticeship Carpentry, Tilt-Up, CA
Apprenticeship Cosmetology, CA
Apprenticeship Electricity, Industrial, CA
Apprenticeship Electricity, Intelligent Transportation Systems Electrician, CA
Apprenticeship Electricity, Sound Installer, CA
Apprenticeship Electricity, Sound Technician, CA
Apprenticeship Operating Engineers, Construction Safety Inspector, CA
Apprenticeship Operating Engineers, Heavy Duty Repairer, CA
Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, CA
Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, CA
Apprenticeship Operating Engineers, Special Inspector, CA
Apprenticeship Power Lineman, CA
Apprenticeship Surveying, Chairman, CA
Apprenticeship Surveying, Chief of Party, CA
Bilingual Instructional Aide: Spanish, CA
Biotechnology Biomanufacturing Technician, CA
Biotechnology Lab Assistant, CA
Biotechnology Laboratory Technician: Food Safety, CA
California State University General Education Breadth (CSU), CA
Code Enforcement and Compliance, CA
Computer Information Systems, CA
Computer Retail Sales and Support, CA
Computer Science, CA
Construction Inspection, CA
Construction Management, CA
Cosmetology, CA
Digital Media Arts: Graphic Design, CA
Digital Media Arts: Mobile Application Development and Design, CA
Entrepreneurship, CA
Esthetician, CA
Gemology, CA
General Biotechnology Technician, CA
General Electrician, CA
Global Studies, CA
Intersegmental General Education Transfer Curriculum (IGETC), CA
Kinesiology - Fitness and Active Lifestyle, CA
Kinesiology - Health Promotion, CA
Kinesiology - Sport Studies, CA
Land Surveying, CA
Maintenance Electrician, CA
Maintenance Mechanic, CA
Real Estate, CA
Special Education Paraprofessional, CA
Wastewater/Environmental Sanitation, CA
Water Distribution, CA
Water Treatment, CA

Certificates of Proficiency

Advertising, CERT
Applied Robotics and Embedded Programming, CERT
Business Information Worker, CERT
Business Management, CERT
Code Enforcement Officer, CERT
Computerized Accounting, CERT
Digital Media Production, CERT
Digital Media Studies, CERT
Early Childhood Leadership and Administration, CERT
General Accounting, CERT
General Marketing, CERT
Human Resource Management, CERT
Infant/Toddler, CERT
Level I - Early Childhood Exceptional Needs, CERT
Level II - Early Childhood Exceptional Needs, CERT
Preschool, CERT
Public Administration and Policy, CERT
Real Estate Appraisal, CERT
Real Estate Salesperson, CERT
Supervision, CERT
The School-Age Child, CERT
Wastewater Treatment, CERT
Water Conservation, CERT
Water Distribution, CERT
Water Equipment Operation and Maintenance, CERT
Water Treatment, CERT
Water Utility Management, CERT
Web Marketing, CERT

Associate Degrees for Transfer

California Community Colleges are now offering associate degrees for transfer to the CSU. These may include Associate in Arts (AA-T) or Associate in Science (AS-T) degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirements for the 120-unit baccalaureate degree within 60-semester units or 90 quarter units.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs.

To earn an associate degree for transfer, a student must fulfill the requirements listed under I, II and III below.

I. Unit and Residency Requirements 60 UNITS of CSU-transferable semester units are required, with at least a 2.0-grade point average. While a minimum of 2.0 is required for admission to the CSU, some majors may require a higher GPA. Please consult with a counselor for more information. At least 12 of the units must be degree applicable and earned at Santiago Canyon College.

II. General Education Requirements The general education requirements can be met through the completion of one of the following general education plans.

Plan B: California State University General Education Breadth
Plan C: Intersegmental General Education Transfer Curriculum (IGETC)

NOTE: Students who are following Plan C: IGETC and are planning to transfer to a CSU must complete Area 1C: Oral Communication CSU admissions requirement with a grade of “C” or better. Completion of Area 1C is not necessarily a graduation requirement for Santiago Canyon College. Please consult a college counselor to ensure all graduation requirements are being met.

III. Major Requirements Each degree specifies courses required for the major (a minimum of 18 units). Students must complete an “AA-T” or “AS-T” major as detailed in the program section of the catalog. Completion of these courses must be done with a grade of C or better or a “P” if the course is taken on a “Pass/No Pass” basis. (Title 5 § 55063). Courses in the student’s major field may not be taken under the Pass/No Pass policy except for (a) major courses for an Associate Degrees for Transfer (ADT), (b) courses for which Pass/No Pass is the only grading option, and (c) units earned through Credit by Examination (CBE) or assessment. All completed coursework must come from a regionally accredited institution, meaning that an institution must be accredited by one of the six U.S. regional accrediting associations. International coursework does not apply unless the school is regionally accredited.

Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) Reciprocity, Course Substitution, External Exams, and Credit by Exam Policy and Procedures
Students who have taken courses from a California Community College, a regionally accredited institution, completed an external exam such as AP, CLEP (may be used on CSU GE-Plan B only), or IB or Credit by Exam may be granted credit towards an AA-T/AS-T general education and/or major requirement. Courses will be reviewed by one of the following methods:

**General Education Courses**

- General education courses taken at other California Community Colleges are granted course-to-course reciprocity providing the course in question appears on the CSU-Plan B or IGETC-Plan C at the time the student completed the course.
- Non-California Community College general education courses are reviewed by the Articulation Officer via the pass-along process in accordance with the CSU-Plan B or IGETC-Plan C standards.
- Students who completed an external examination such as AP, CLEP or IB are granted credit towards general education consistent with CSU GE and IGETC policies.
- Santiago Canyon College Credit by Exam may be granted for general education only if a course is eligible and listed in the Credit by Exam section of the SCC Catalog.

**Major Requirement Courses**

- A major requirement with a C-ID number taken at another California Community College (CCC) is granted course-to-course reciprocity and meets the same designated C-ID major requirement found in the SCC’s AA-T/AS-T.
- A major requirement completed at another California Community College that is approved as part of its AA-T or AS-T, will be applied to the corresponding Santiago Canyon College AA-T/AS-T area. Courses completed at other CCCs must be part of their AA-T/AS-T at the time the student completed the course, if a course is not part of the AA-T/AS-T then the course must be reviewed by the SCC discipline faculty in accordance with the C-ID descriptor. Courses completed at other CCCs prior to the AA-T/AS-T approval, will be “grandfathered”.
- A major requirement without a C-ID number taken at another California Community College, where an AA-T/AS-T does not exist, is reviewed by the SCC discipline faculty in accordance with the C-ID descriptor.
- A non-California Community College major requirement taken at a regionally accredited institution is reviewed by the SCC discipline faculty in accordance with the C-ID descriptor and if comparable, course-to-course substitution is granted.
- Students who completed an external examination such as AP, CLEP or IB are granted credit towards major requirements where exam-to-course comparability exists; if exam-to-course comparability does not exist, the discipline faculty reviews the external exam and determines course comparability if a course is offered (Students should be aware that external exam credit may be awarded/counted differently by the transfer institution).
- Santiago Canyon College Credit by Exam may be granted for major requirements only if a course is eligible and listed in the Credit by Exam section of the SCC Catalog.

*It is strongly recommended students make an appointment with a Santiago Canyon College counselor to discuss appropriate credit placement.*

**Associate in Arts for Transfer Degrees (A.A.-T)**

- Anthropology, AA-T
- Child and Adolescent Development, AA-T
- Communication Studies, AA-T
- Economics, AA-T
- Elementary Teacher Education, AA-T
- English, AA-T
- Geography, AA-T
- History, AA-T
- Philosophy, AA-T
- Political Science, AA-T
- Psychology, AA-T
- Social Justice Studies: Chicano, AA-T
- Social Justice Studies: Ethnic, AA-T
- Social Justice Studies: Gender, AA-T
- Social Justice Studies: General, AA-T
- Social Work and Human Services, AA-T
- Social Work and Human Services, AA-T
- Sociology, AA-T
Spanish, AA-T
Studio Arts, AA-T

Associate in Science for Transfer Degrees (A.S.-T)

Biology, AS-T
Business Administration, AS-T
Business Administration, AS-T
Computer Science, AS-T
Early Childhood Education, AS-T
Geology, AS-T
Mathematics, AS-T
Nutrition and Dietetics, AS-T
Physics, AS-T

Transfer to Other Colleges

Transfer Success Center

The Transfer Success Center provides resources and services to assist students in researching, planning, and completing their transfer to a four-year college or university. The Transfer Success Center coordinates various events throughout the year, including tours of universities, university representative advising appointments, transfer fairs, and a variety of workshops to help students with each step in the transfer process. In addition, the Transfer Success Center provides many useful resources such as; updates via social media and e-mail, computers for use in research and completing applications, a comprehensive website, and expert advice from trained specialists and counselors. For more information, stop by D-104-N, call (714) 628-4865, visit www.sccollege.edu/transfer, and follow us @SCCTransfer on Facebook, Twitter, and Instagram.

Transferability of Courses

This section of the catalog is designed to help students plan an academic program for transfer to a four-year college or university. It includes information about the transfer process and general education requirements.

Since transfer requirements change frequently, students should meet with a counselor regularly to plan an academic program that will assure a smooth transition to the transfer institution of their choice.

Four-year colleges and universities often make changes in their requirements. The requirements listed in this section were updated at the time of publication; however, changes may have occurred after publication. Current transfer information and official articulation agreements are available in the Transfer Success Center and the Counseling Center at Santiago Canyon College. Articulation agreements are also available at www.assist.org.

There are four segments of higher education in California. They are:

- the University of California (UC) system with 10 campuses
- the California State University (CSU) system with 23 campuses
- over accredited independent colleges and universities
- the 113 California community colleges

Santiago Canyon College provides the first two years of a four-year college or university program.

Santiago Canyon College offers courses to meet general education, major or elective requirements. Students can transfer a maximum of 70 units to a UC or CSU campus.

All courses numbered 100 or above will transfer to a CALIFORNIA STATE UNIVERSITY campus. Courses that are transferable to the UNIVERSITY OF CALIFORNIA will be designated on the UC Transferable Course Agreement. Some of the courses which are transferable to the University of California have credit limitations. Check the UC Transferable Course Agreement to review these limitations. This list is available in the Counseling Center, Transfer Success Center, in this catalog, and at www.assist.org.

Independent and out-of-state colleges and universities usually accept most courses that are transferable to the University of California and many of the courses that are transferable to the California State University.

Begin a Transfer Major at Santiago Canyon College

To obtain a bachelor’s degree, students need to select a course of study in which to specialize. This course of study is called a major. Almost every major requires that certain courses be completed during the first and/ or second year of college. These are called Lower-Division Major Requirements. Many of these requirements can be completed at SCC prior to transferring. (The highly specific courses in
the major are called Upper-Division Requirements and these are completed after transfer). In developing a program for transfer, the first consideration in most cases should be given to completing the courses required in the transfer major or as preparation for the major.

Course Requirements for Transfer Students

A student can transfer from Santiago Canyon College to a four-year college or university as a junior without loss of time or credits by completing the following:

**Lower-Division Major Requirements.** Most majors at four-year colleges and universities require the completion of one or more lower-division courses as preparation for the upper-division course work in a major. Santiago Canyon College offers courses to meet the lower-division requirements for most majors at four-year colleges and universities. Information about many specific major requirements is available in the Counseling and Transfer Success Center, or at www.assist.org. Students should meet with a counselor for additional information about major programs and requirements.

**General Education Requirements.** These are the courses required of students to obtain a degree regardless of major. They are designed to provide students with the knowledge, skills, and understanding which will enable them to function as intelligent and creative members of the community. Courses in writing, critical thinking, mathematics, sciences, arts and humanities, and the social sciences are included in general education.

**Electives.** These are courses of choice taken in addition to courses for the major and general education requirements.

Students enrolled in a transfer program can complete most of their general education and lower-division major requirements before transferring. Students who are planning to transfer to a four-year college or university should meet with a Santiago Canyon College counselor in the Counseling Center to develop a Comprehensive Student Education Plan which will identify the courses needed to transfer.

Transfer students may also want to complete an associate degree. While not a requirement for transfer, the associate degree is generally recommended, and proper planning should enable students to satisfy both requirements for graduation from SCC and for transfer.

California State University

The California State University has 23 campuses located throughout the state. While each campus within the system has its own unique geographic and curricular character, all campuses offer undergraduate and graduate instruction for professional and occupational goals as well as a broad liberal education. The CSU offers more than 1,800 bachelor’s and master’s degrees in some 240 subject areas. Campuses are located at Bakersfield, Channel Islands, Chico, Dominguez Hills, East Bay, Fresno, Fullerton, Hayward, Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona (Cal Poly), Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo (Cal Poly), San Marcos, Sonoma, Stanislaus, and Vallejo (California Maritime).

To obtain a bachelor’s degree from the CSU system, a student must complete a minimum of 120-semester units (180 quarter units). A maximum of 70 units of transferable credit will be accepted for courses completed at a community college.

Prospective CSU transfer students should consult a counselor regarding CSU admission, as requirements vary depending upon the student’s status at the time of high school graduation.

California State University Admissions Requirements for Transfer Students

**Upper-Division Transfer**

Students are eligible for upper-division transfer if they complete at least 60 transferable semester units (90 quarter units) and if they:

- Earn a college grade point average of 2.0 (C) or better (2.4 for non-California residents) in all transferable units attempted. Are in good standing at the last college or university attended (eligible to enroll).
- Will complete the four basic subjects in English Composition, College Mathematics, Speech Communication, and Critical Reasoning, which are part of the general education requirements. These four sections of general education must be completed with a grade of "C" or better for each course. If the CSU GE area A1, A2, A3, or B4 course double- counts for GE and a major requirement, it is recommended these courses be completed with a grade of "C" or better for certification.
- Will complete additional general education units that comprise the total CSU general education pattern of 39 units.
NOTE: Some CSU campuses may impose a higher GPA admission standard based on impacted major or impacted campus status.

Lower-Division Transfer

A student may be eligible for lower-division transfer (completion of fewer than 60 units) if the student has completed all admission requirements required for first-time freshmen. Some CSU campuses may also require completion of general education classes in Mathematics and English, with a "C" or better prior to admission. If the student did not complete all the subject requirements in high school, appropriate college courses may be used to make up the missing subjects. Many CSU campuses will not accept lower-division transfer students. Please see a Santiago Canyon College counselor for more information.

have completed “a-g” course requirements in high school;
have graduated from high school (received a high school diploma or General Educational Development, or GED, certificate);
meet the Eligibility Index required of a first-time freshman;
have achieved an overall college GPA of at least 2.00 (This GPA is calculated using all transfer units attempted. In case of high-demand majors and campuses, a GPA of 2.00 may not be sufficient to be admitted);
be in good standing at the last college or university you attended. (In simple terms, “good standing” means you are eligible to re-enroll at your last college or university); and
have completed, with a grade of C- or better, a course in GE Section A2 in written communication and a course in GE section B4 in mathematics or quantitative reasoning.

General Education Requirements for California State University

To earn a bachelor's degree from the California State University, each student must complete a program of general education. Santiago Canyon College offers general education programs which will enable students to meet the lower-division general education requirements for all CSU campuses prior to transfer. Students can complete either the CSU General Education Breadth Requirements (Plan B) or the Intersegmental General Education Transfer Curriculum (IGETC/Plan C) for CSU.

Plan B CSU General Education Breadth Requirements

It is strongly recommended students meet with a counselor to discuss CSU GE Breadth Plan B Area D and F options.

A. COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING – 9 units
B. THE PHYSICAL UNIVERSE AND ITS LIFE FORMS – 9 units
C. ARTS, LITERATURE, PHILOSOPHY, FOREIGN LANGUAGE – 9 units
D. SOCIAL POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR; HISTORICAL BACKGROUND – 9 units
   New and returning students BEGINNING SCC Fall 2021 or later – MUST take 6-semester units from any discipline.
   Students staring SCC BEFORE Fall 2021 and have maintained continuous enrollment – MUST take 9-semester units from at least 2 different disciplines.
E. LIFELONG UNDERSTANDING AND SELF DEVELOPMENT – 3 units
F. ETHNIC STUDIES – 3 units
   New and returning students Beginning SCC Fall 2021 or later – MUST complete Area F
   Students starting SCC BEFORE Fall 2021 and have maintained continuous enrollment – do not need to complete Area F. Instead, students MUST complete Area D.

All California State Universities have a graduation requirement in U.S. History, Constitution, and American Ideals. This requirement can be satisfied before or after transfer to a CSU by taking coursework in three areas US-1, US-2, and US-3. A student must take one course from each of the three areas. A student may use the same course to satisfy more than one area (US-1, US-2, US-3) if applicable. Courses meeting this requirement may also be counted toward certification in general education.


Students who complete Plan B are eligible to receive a Certificate of Achievement in General Education (CSU).

University of California

The University of California has ten campuses located throughout the state. Each campus within the system has its own unique geographic and academic character. The University offers bachelor’s, master’s, and doctoral degrees in a variety of subject areas. Campuses of the University are located at Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco (Schools of Medicine, Dentistry and Pharmacy), Santa Barbara, and Santa Cruz.

To obtain a baccalaureate degree from the UC system, a student must complete a minimum of 120-semester units (180 quarter units). A maximum of 70 units of transferable credit will be accepted for courses completed at a community college.

University of California Admissions Requirements for Transfer Students

Upper-Division Transfer

The vast majority of transfer students enter the University of California at the junior level from a community college. To be eligible for admission as a junior or upper-division transfer student, a student must fulfill both of the following criteria:

1. Complete 60 semester or 90 quarter units of transferable college credit with a grade point average of at least 2.4 (2.8 for nonresidents). No more than 14-semester units (21 quarter) may be taken Pass/Not Pass, and

2. Complete the following seven-course pattern requirements and earn a grade of "C" or better in each course: or a Pass (P) grade if Pass is equivalent to a C (2.0):

   • Two transferable college courses (3 semester or 4-5 quarter units each) in English composition; and
   • One transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning; and
   • Four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: - arts and humanities - social and behavioral sciences - physical and biological sciences.

Students who satisfy the Intersegmental General Education Transfer Curriculum (IGETC/Plan C) prior to transferring to UC will satisfy section 2 of the transfer admission requirements listed above.

Lower-Division Transfer

The University of California admits a limited number of transfer students before they reach junior or upper-division standing if they have met specific requirements. Lower-division transfer admission decisions vary by UC campus, and it is not a common policy for many UC campuses. If a student were to be admitted as a lower-division transfer at a UC campus the following criteria would apply: If a student was eligible for admission to the University of California when he or she graduated from high school- meaning the student fulfilled the Subject, Scholarship, and Examination Requirements, or was identified by the University of California as eligible in the local context and completed the Subject examination requirements in the senior year, the student is eligible for transfer if he or she has a C (2.0) average in transferable college work. If a student met the Scholarship Requirement in high school but did not satisfy the Subject requirement, the student must take transferable college courses in the missing subjects, earn a “C” or better in each required course and maintain an overall 2.0 GPA in all transferable coursework to be eligible to transfer.
NOTE: UC campuses may impose a higher GPA admission standard; please see a Santiago Canyon College counselor for more information.

General Education Requirements for the University of California

To earn a bachelor’s degree from the University of California, each student must complete a program of general education. To meet the general education requirements of the University, students can complete either the Intersegmental General Education Transfer Curriculum (IGETC/Plan C) or individual campus general education requirements. Santiago Canyon College strongly recommends that students follow the IGETC rather than the individual campus general education/breadth requirements because this will usually provide more flexibility when applying for transfer. However, some UC campuses may discourage or restrict the use of IGETC for particular majors, especially majors that have many lower-division requirements that can be met at the community college. Students who began at a UC campus and who intend to transfer back to the same campus cannot use IGETC. Students who enrolled at a UC campus, leave that campus and attend Santiago Canyon College, and plan on transferring to a different UC campus may use the IGETC. Students are strongly encouraged to work with a Santiago Canyon College Counselor to develop an education plan that incorporates major preparation and appropriate general education requirements.

Plan C Intersegmental General Education Transfer Curriculum (IGETC) for CSU And UC

1. ENGLISH COMMUNICATION – 9 units (CSU) ENGLISH COMMUNICATION – 6 units (UC)
2. MATHEMATICAL CONCEPTS – 3 units (CSU and UC)
3. ARTS AND HUMANITIES – 9 units (CSU and UC)
4. SOCIAL AND BEHAVIORAL SCIENCE – 9 units (CSU and UC)
5. PHYSICAL AND BIOLOGICAL SCIENCES – 7-9 units (CSU and UC)
6. LANGUAGE OTHER THAN ENGLISH – 0-5 units (UC)

IGETC includes the California State University graduation requirement in US History, Constitution, and American Ideals. Completion of Political Science 101 and an approved US History course completes 6 of the 9 units required in IGETC area 4.

CSU Ethnic Studies mandatory Ethnic Studies graduation requirement can be met by taking one of the following Ethnic Studies courses: ETHN 101, 110, 120, 130, 140 in IGETC Area 4. It is highly recommended students meet with a counselor for further information on the above CSU graduation requirements.

Students following the IGETC pattern (Plan C) are strongly advised to complete all requirements prior to transfer. Completion of the pattern allows the student to petition for IGETC certification. IGETC certification means the student has met all lower-division general education requirements.

Students who complete Plan C are eligible to receive a Certificate of Achievement in General Education (IGETC).

Certification of General Education for Transfer to UC or CSU

Upon a student’s request, Santiago Canyon College will verify the completion of lower-division general education requirements for transfer to the University of California or the California State University. Students should request IGETC/Plan C or CSU GE/Plan B certification during the semester prior to the last term of attendance. Students who transfer without certification will have to meet the general education requirements of the specific UC or CSU campus to which they are transferring. Meeting these requirements usually necessitates taking additional courses.

Students who have taken courses at other colleges can have these courses approved in the certification process. Using the Intersegmental General Education Transfer Curriculum or CSU General Education Breadth, Santiago Canyon College will certify (guarantee) courses taken at other California community colleges in the areas designated by the offering college.
Courses taken at independent or out-of-state colleges/universities that are regionally accredited (which do not maintain a CSU GE Breadth or IGETC certification list) may be approved for certification via a “Pass Along Petition” and after a review by the Santiago Canyon College Articulation Officer. Courses are passed along for IGETC or CSU GE Breadth if they are equivalent to courses on the Santiago Canyon College or another California community college’s IGETC or CSU GE Breadth pattern. Pass Along Petitions are available at the Santiago Canyon College Counseling Department and must be accompanied by the appropriate documentation. Students must make an appointment with a Santiago Canyon College counselor before submitting a Pass Along Petition.

Courses from foreign institutions cannot be used in the certification process.

Students should request IGETC certification from the last California Community College they attend prior to transferring to UC or CSU.

Students requesting CSU GE Breadth certification must complete at least 12 units at Santiago Canyon College.

**IGETC - Partial Certification**

Partial certification is permitted if a student has completed all but two (2) courses on the IGETC/Plan C pattern. Specific rules apply to how and when the remaining courses must be completed after transfer. Please see a Santiago Canyon College counselor for guidelines.

*NOTE: Transcripts from all colleges attended must be submitted to the Admission Office prior to requesting certification.*

**Independent and Out-of-State Colleges and Universities**

In addition to state-supported colleges and universities in California, there are many outstanding independent institutions in the state. There are also many colleges, both private and public, located throughout the United States to which Santiago Canyon College students can transfer. Each of these institutions has its own unique requirements for admission. In order to determine eligibility, students should visit the website of the university to view admission requirements or obtain a copy of the university catalog.

Santiago Canyon College has articulated general education requirements and major preparation courses with a number of independent institutions such as Chapman University, The University of San Diego, and the University of Southern California. Students transferring to independent or out-of-state institutions should meet with a Santiago Canyon College counselor in order to determine appropriate general education and major preparation requirements.

California’s fully accredited independent colleges and universities provide many options at the undergraduate, graduate, and professional levels for students planning to continue their education beyond the community college. For a complete listing of independent colleges and universities in California, please visit www.aiccu.edu or the Santiago Canyon College transfer website at www.sccollege.edu/transfer.

**Pass Along Policy and Procedures**

Pass Along permits a student to use courses taken at colleges or universities that are not part of the California Community College system to meet general education requirements on the CSU GE/Plan B or IGETC/Plan C education plan. All completed coursework must come from a regionally accredited institution, meaning that an institution must be accredited by one of the six U.S. regional accrediting associations. The six regional accrediting associations are:

- Middle State Commission on Higher Education (MSCHE)
- New England Association of Schools and Colleges, Commission on Institutions of Higher Education (NEASC-CHE)
- Higher Learning Commission (HLC)
- Northwest Commission on Colleges and Universities (NWCCU)
- Southern Association of Colleges and Schools, Commission on Colleges (SACSCOC)
• Accrediting Commission for Community and Junior Colleges - Western Association of Schools and Colleges (ACCJC-WASC)

• WASC Senior College and University Commission (WSCUC)

Pass Along petitions are reviewed in fall and spring only and after the second week of school. To start the Pass Along process students must:

1. Be currently enrolled and actively attending Santiago Canyon College.
2. Complete twelve units of Santiago Canyon College coursework.
3. Submit official transcripts from all institutions attended to the SCC Admissions Office in E-101. Electronic transcripts are considered official only if the electronic transcript is sent directly to the SCC Admissions Office. Electronic transcripts sent directly to the student are not considered an official transcripts. Students are advised to obtain an extra set of transcripts for their personal files.
4. Make a copy of the course description for each course the student wants a pass-along review. The course description copy must be from the catalog year the student completed the course. If a course cannot be located, the student must contact the institution for the appropriate course description. For IGETC English pass along approval of Area 1A-English Composition and/or Area 1B-Critical Thinking a course syllabus of the English course must be provided. IGETC English Pass Along Petitions are reviewed by the English Department between the first through the sixth week of the fall and spring semester only.
5. Make an appointment with an SCC Counselor. Bring copies of the course descriptions/syllabi and official transcripts to the appointment. The counselor will assist the student in filling out the "Pass Along Petition." Courses submitted for IGETC pass-along approval must be completed with a grade of “C” or better. No “C-” grade can be approved for pass along on IGETC. If the CSU GE area A1, A2, A3, or B4 course double-counts for GE and a major requirement, it is recommended these courses be completed with a grade of “C” or better for certification. No “D-” grade can be approved for pass along on CSU GE Breadth (Plan B).
6. Completed Pass Along petitions are submitted to the Articulation Officer for review and take two to three weeks to process. Students will be notified by mail once a decision is made.

Courses from international institutions cannot be considered for Pass Along.

University of California and Santiago Canyon College Transfer Course Agreement

This agreement lists approved Santiago Canyon College courses transferable for unit credit at all UC campuses and explains UC credit provisions. Additional courses for 2021–2022 may be approved after this catalog publication date. Please see an SCC counselor for more information.

Accounting 101, 102

American College English 102*, 104, 116*

*ACE 102, 104, 116 maximum credit, 8 units

American Sign Language 110*, 111, 116, 210

* ASL 110 corresponds to two years of high school study

Anthropology 100, 100H, 101, 101L, 103, 104

Astronomy 100L, 102, 103, 112

Biology 109#, 109H#, 109L, 109HL, 115, 139*, 149, 190, 190L, 200, 211, 212, 214, 221, 229*, 231, 239, 249, 259, 290
# No credit for BIOL 109 or 109H if taken after BIOL 211
* BIOL 139 and 229 maximum credit one course

Business 100, 105

Chemistry 100*, 200A, 200AH, 200B, 280A, 280B
* No credit for CHEM 100 if taken after 200A/200AH

Chinese 101*, 102
* CHNS 101 corresponds to two years of high school study.

Child Development 107*, 110
* CDEV 107 and PSYC 157 maximum credit, one course.

Cinema Studies 103, 104, 105, 107, 108

Communication 100, 100H, 101, 110, 111, 120, 120H, 134, 135, 225, 225H

Computer Science 100, 105, 112, 120, 121, 129, 131, 205, 213

Counseling 101*, 106*, 110*, 111*, 113*, 116*
* Counseling 101, 106, 110, 111, 113, and 116 combined: maximum credit 3 units

Criminal Justice 101


Earth Sciences 100, 100L, 111, 120*, 121+, 130, 160, 200
* No credit for ERTH 120 if taken after ERTH 121
+ No credit for ERTH 121 if taken after ERTH 120

Economics 101, 102

Education 101, 200, 210
**Engineering** 210, 220, 225, 230


* ENGL 100, ENGL 101 and ENGL 101H combined: maximum credit, 1 course

^ ENGL 100 Maximum credit, 4 units

**Ethnic Studies** 101, 110, 120, 130, 140

**French** 101*, 102, 196, 201, 202

* FREN 101 corresponds to two years of high school study

**Gender, Sexuality, and Women's Studies** 101, 102, 103

**Geography** 100, 100H, 101, 101H, 101L, 102, 102H, 130, 130H, 140, 150, 155 (Same as SURV 155)

**History** 101, 101H, 102, 102H, 118, 120, 120H, 121, 121H, 122+, 124, 126, 127, 132, 133, 142, 152, 162, 240

+ No credit for HIST 122 if taken after HIST 120/120H or 121/121H

**Information Studies** 100, 103

**Italian** 101*, 102, 195, 201, 202

* ITAL 101 corresponds to two years of high school study


# KIN 102, 104, 110 maximum credit, one course; non-activity courses maximum credit, 8 units

* For any or all activity courses maximum credit, 4 units

+ Any or all of these courses combined maximum credit, 8 units

**Mathematics** 105, 140+, 150*, 170+, 171, 180*, 180H*, 185, 203, 219^, 219H^, 220^, 280, 287#, 290#, 295#, SOC 125^, SOC 125H^ + MATH 140 and 170 maximum credit, one course

* MATH 150, 180 and 180H maximum credit, one course

# MATH 287, 290 and 295 combined: maximum credit, 8 units

^ MATH 219, 219H, 220, SOC 125, SOC 125H combined: maximum credit, 1 course

Nutrition 115, 120


Physical Science 100

Physics 100+, 150A*, 150AC, 150B*, 150BC, 250A*, 250B*, 250C*
+ No credit for PHYS 100 if taken after PHYS 150A or 250A
* Maximum credit, one series; deduct credit for duplication of topics; PHYS 150A, 150B, or PHYS 250A, 250B, 250C

Political Science 101, 101H, 110, 150, 200, 200H, 201, 220, 221, 222, 230

Psychology 100, 100H, 157*, 160, 170, 180, 190, 200, 220, 230, 240+*, 250
* PSYC 157 and CDEV 107 maximum credit, one course
+ PSYC 240 and SOC 240 maximum credit, one course

Reading 151

Sociology 100, 100H, 115, 116/116H, 120, 125^, 125H^, 130, 150, 220, 240+, 240H, 286
+ SOC 240 and PSYC 240 maximum credit, one course
^ MATH 219, 219H, 220, SOC 125, SOC 125H combined: maximum credit, 1 course

* SPAN 101 or 101H correspond to two years of high school study
+ SPAN 101A and 101B combined are equivalent to SPAN 101. Combined correspond to two years of high school study

Surveying/Mapping Sciences 118*, 119*, 155 (Same as GEOG 155)
* SURV 118 and 119 maximum credit, one course


Water Utility Science 107

Note: Duplicate credit will not be awarded for both Honors and regular versions of a course. Credit will be awarded to the first course completed with a “C” or better

Santiago Canyon College Advanced Placement Guide and Policies
Advance Placement Examinations with a score of 3, 4, or 5 can be used to meet Santiago Canyon College Associate degree requirements, CSU admission, CSU GE certification, UC admission, and IGETC certification requirements. However AP credits cannot be used to meet Santiago Canyon College12 unit residency requirement for the Associate degree. **Students who have earned credit from an AP exam should not take a comparable college course since credit will not be granted for both.** Students using an AP exam for a requirement other than general education, such as major preparation, are strongly advised to check with a Santiago Canyon College counselor and/or the Admissions Office of their transfer campus to determine how the AP exam will be used to meet major and graduation requirements as policies may differ from SCC’s. **Students should submit official copies of Advance Placement Examination test scores to the Admissions and Record office for evaluation.**

<table>
<thead>
<tr>
<th>Advanced Placement Exam</th>
<th>SCC Course/AA, AS Units Awarded</th>
<th>CSU GE Certification Area/Semester Units1</th>
<th>CSU Minimum Admission Semester Units2</th>
<th>IGETC Certification Area/Semester Units3</th>
<th>UC Minimum Admission Semester Units4</th>
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<tr>
<td>Art History</td>
<td>ART 101 and 102</td>
<td>Area C1 or C2 3 units</td>
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<tr>
<td>Studio Art: 2-D Design</td>
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<td>Studio Art: 3-D Design</td>
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<td>Studio Art: Drawing</td>
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<td>Calculus BC</td>
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<td>Area E2 and G1 8 units</td>
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<td>Area A 5 units</td>
<td>(6 units prior to F’09)</td>
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<td>Chinese Language and Plan A</td>
<td>Area C Area C2 3 units</td>
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<td>Area 3B and 6A 3 units</td>
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<td>IGETC Certification</td>
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<td>Computer Science A</td>
<td>CMPR 121</td>
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<tr>
<td>Computer Science AB (discontinued after May 2009)</td>
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<td>Economics: Microeconomics</td>
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<td>CSU GE Certification</td>
<td>CSU Minimum Admission Semester Units</td>
<td>IGETC Certification</td>
<td>UC Minimum Admission Semester Units</td>
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<td>English: Literature and Composition</td>
<td>ENGL 101</td>
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<td>Environmental Science</td>
<td>BIOL 200</td>
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<td>Area 3B and 6A 3 units</td>
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<tr>
<td>POLT 201</td>
<td>Government and Politics: Comparative</td>
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<td>3 units</td>
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<td>POLT 101</td>
<td>Government and Politics: United States</td>
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<td>HIST 102</td>
<td>History: European</td>
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<td>6 units</td>
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<td>3 units</td>
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<td>HIST 120 and 121</td>
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<tr>
<td>HIST 102</td>
<td>History: World</td>
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<td>6 units</td>
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<tr>
<td>ITAL 101 and 102</td>
<td>Italian Language and Culture</td>
<td>A or C 3 units</td>
<td>6 units</td>
<td>Area C2</td>
<td>3 units</td>
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<td>Plan A Area C 3 units</td>
<td>Japanese Language and Culture</td>
<td>Area C2</td>
<td>3 units</td>
<td>Area C2</td>
<td>3 units</td>
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<tr>
<td>Plan A Area C 3 units</td>
<td>Latin: Literature</td>
<td>Area C2</td>
<td>6 units</td>
<td>Area C2 (if passed prior to F'09)</td>
<td>3 units</td>
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<tr>
<td>Plan A Area C 3 units</td>
<td>Latin</td>
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<tr>
<td>Plan A Area C 3 units</td>
<td>Latin: Vergil</td>
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<td>Area C1 (if passed prior to F'09)</td>
<td>3 units</td>
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<tr>
<td>N/A</td>
<td>Music Theory</td>
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<td></td>
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<tr>
<td>Plan A Area A 4 units</td>
<td>Physics 18,10</td>
<td>Area B1 and B3 4 units</td>
<td>4 units</td>
<td>Area 5A and 5C 4 units</td>
<td>5.3 units</td>
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<tr>
<td>Course</td>
<td>Plan A Area</td>
<td>Area B1 and B3</td>
<td>Area 5A and 5C</td>
<td>Units Awarded</td>
<td>Area/SEM Semester Units</td>
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<tr>
<td>Physics 28,10</td>
<td>Area A 4</td>
<td>4 units</td>
<td>Area 5 and SC 4</td>
<td>5.3 units</td>
<td>(5.3 units maximum credit for all Physics exams)</td>
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<td>Advanced Placement Exam</td>
<td>SCC Course/AA, AS</td>
<td>CSU GE Certification Area/SEM</td>
<td>CSU Minimum Admission Semester Units</td>
<td>IGETC Certification Area/SEM Semester Units</td>
<td>UC Minimum Admission Semester Units</td>
</tr>
<tr>
<td>Physics B8,10 (exam available prior to F'13)</td>
<td>PHYS 150A and 150B</td>
<td>Area B1 and B3</td>
<td>6 units</td>
<td>Area 5A and 5C</td>
<td>5.3 units</td>
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<td>Physics C (Electricity and Magnetism)8</td>
<td>PHYS 250B</td>
<td>Area A 5 units</td>
<td>4 units</td>
<td>Area 5A and 5C</td>
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<tr>
<td>Physics C (Mechanics)8</td>
<td>PHYS 250A</td>
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<td>Area 5A and 5C</td>
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<tr>
<td>Psychology</td>
<td>PSYC 100</td>
<td>Area D9 3 units</td>
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<td>Seminar</td>
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<tr>
<td>Spanish Language and SPAN 101 and 102</td>
<td>Area C 2 units</td>
<td>(6 units prior to SP’14)</td>
<td>6 units</td>
<td>Area 3B and 6A</td>
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<td>S’14 Spanish Language</td>
<td>Area C 10 units</td>
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<tr>
<td>Spanish Literature and Culture (Prior to S’13 Spanish Literature)</td>
<td>Plan A Area C</td>
<td>Area C 2 units</td>
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<td>Area 3B and 6A</td>
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<tr>
<td>Statistics</td>
<td>MATH 219</td>
<td>Area B4 3 units</td>
<td>3 units</td>
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### Santiago Canyon College College-Level Examination Program (CLEP) Placement Guide and Policies

Santiago Canyon College students who have taken CLEP examinations and have a score of 50 or higher (level II languages require a higher score) can earn credits towards Santiago Canyon College Associate degree general education requirements or electives, CSU admission, and CSU GE certification requirements. However, CLEP credits cannot be used to meet Santiago Canyon College twelve-unit residency requirement for the Associate degree. **Students who have earned credits from a CLEP exam should not take a comparable college course since credit will not be granted for both.** Students are strongly advised to check with an SCC counselor when using CLEP credit for CSU admission or for major requirements. The CSU has grandfathered in this policy the guide CLEP submissions for any year that the CLEP exams were taken. **Students should submit official copies of CLEP test scores to the Admissions and Record office for evaluation. The University of California does not accept CLEP exams to meet requirements for IGETC.**
<table>
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<tr>
<th>Course</th>
<th>Passing Score</th>
<th>SCC GE Area Semester Units Awarded</th>
<th>SCC AA Semester Units Awarded</th>
<th>CSU GE Certification Area/Semester Units Awarded</th>
<th>CSU Minimum Admission Semester Units Awarded</th>
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<td>CLEP EXAM</td>
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<td>American Government</td>
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<td>Area D8 3 units</td>
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<tr>
<td>American Literature</td>
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<td>Area C 3 units</td>
<td>3 units</td>
<td>Area C2 3 units</td>
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<tr>
<td>Analyzing and Interpreting Literature</td>
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<td>Area C 3 units</td>
<td>3 units</td>
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<tr>
<td>Biology</td>
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<td>Calculus</td>
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<td>Area E2 and G13 3 units</td>
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<td>Area B4 3 units</td>
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<td>Chemistry</td>
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<td>Financial Accounting</td>
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### Santiago Canyon College International Baccalaureate (IB) Examination Guide and Policies

Santiago Canyon College students who have taken IB examinations and have a score of 5 or higher (CSU accepts a score of 4 on some exams) can earn credits towards Santiago Canyon College Associate degree general education requirements, CSU admission, CSU GE certification, UC admission, and IGETC certification requirements. However, IB credits cannot be used to meet Santiago Canyon College twelve-unit residency requirement for the Associate degree. **Students who have earned credits from a IB exam should not take a comparable college course since credit will not be granted for both.** Students are strongly advised to check with an SCC counselor when using IB credit for CSU/UC admission or for major requirements. **Students should submit official copies of IB test scores to the Admissions and Record office for evaluation.**

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<thead>
<tr>
<th>INTERNATIONAL BACCALAUREATE (IB) EXAM</th>
<th>SCC GE</th>
<th>CSU GE</th>
<th>CSU Minimum Admission Semester Units Awarded</th>
<th>IGETC Minimum Admission Semester Units Awarded</th>
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<tbody>
<tr>
<td>IB Biology HL</td>
<td>Area A 3 units 3 units</td>
<td>Area B2 (without lab) 3 units 6 units</td>
<td>Area 5B (without lab) 3 units 5.3 units</td>
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<tr>
<td>IB Chemistry HL</td>
<td>Area A 3 units 3 units</td>
<td>Area B1 (without lab) 3 units 6 units</td>
<td>Area 5A (without lab) 3 units 5.3 units</td>
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</tr>
<tr>
<td>IB Economics HL</td>
<td>Area B2 3 units 3 units</td>
<td>Area D2 3 units 6 units</td>
<td>Area 4 5.3 units</td>
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<tr>
<td>IB Geography HL</td>
<td>Area B2 3 units 3 units</td>
<td>Area D5 3 units 6 units</td>
<td>Area 4 5.3 units</td>
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<td>Course Identification Numbering System (C-ID)</td>
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<tr>
<td>The Course Identification Numbering System (C-ID) is a statewide numbering system independent of course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course numbers. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example, COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to <a href="http://www.assist.org">www.assist.org</a> to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.</td>
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</table>

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at [www.assist.org](http://www.assist.org) for specific information on C-ID course designations. Santiago Canyon College counselors can always help students interpret or explain this information.

---

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>IB History (any Region) HL</td>
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<td></td>
<td>Area C2 or D6S 3 units</td>
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<td>Area 3B or 45 3 units</td>
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<tr>
<td>IB Language A Literature HL7</td>
<td>Area C 3 units</td>
<td>3 units</td>
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<tr>
<td></td>
<td>Area C2 3 units6</td>
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<td>5.3 units</td>
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<tr>
<td>IB Language A Literature HL7</td>
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<tr>
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<td>Area 3B and 6A (any language, except English) 3 units</td>
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<tr>
<td>IB Language A Language and Literature HL</td>
<td>Area C 3 units</td>
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<tr>
<td>IB Language B (any language) HL7</td>
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<td>3 units</td>
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<tr>
<td></td>
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<td>IB Theatre HL</td>
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Course Identification Number - SCC Course

ACCT 110 - ACCT 101, Financial Accounting
ACCT 120 - ACCT 102, Managerial Accounting
AJ 110 - CJ 101, Introduction to Criminal Justice
ANTH 120 - ANTH 100, Introduction to Cultural Anthropology
ANTH 120 - ANTH 100H, Honors Introduction to Cultural Anthropology
ANTH 130 - ANTH 104, Language and Culture
ANTH 150 - ANTH 103, Introduction to Archaeology
ARTH 100 - ART 100, Introduction to Art Concepts
ARTH 100 - ART 100H, Honors Introduction to Art Concepts
ARTH 110 - ART 101, Survey of Western Art History 1: Prehistory Through the Middle Ages
ARTH 110 - ART 101H, Honors Survey of Western Art History 1: Prehistory Through the Middle Ages
ARTS 100 - ART 110, Two-Dimensional Design
ARTS 101 - ART 111, Three-Dimensional Design
ARTS 110 - ART 130 Introduction to Drawing
ARTS 200 - ART 131, Beginning Life Drawing
ARTS 205 - ART 230, Intermediate Drawing
ARTS 210 - ART 141, Beginning Painting
ARTS 250 - ART 195, Introduction to Digital Media Arts
BIOL 110B - BIOL 239, General Human Anatomy
BIOL 120B - BIOL 249, Human Physiology
BIOL 130S - BIOL 221 + BIOL 231, Animal Diversity and Evolution + Plant Diversity and Ecology
BIOL 190 - BIOL 211, Cellular and Molecular Biology
BIOT 101 X - BIOL 190 + BIOL 190L, Introduction to Biotechnology+ Introduction to Biotechnology Lab
BIOT 210 X - BIOL 194, Quality and Regulatory Compliance in Biosciences
BIOT 220 X - BIOL 192, Biotech B: Proteins
BUS 110 - BUS 100, Fundamentals of Business
BUS 115 - BUS 222, Business Writing
BUS 120 - BUS 105, Legal Environment of Business
BUS 140 - BUS 150, Introduction to Information Systems and Applications
CDEV 100 - CDEV 107, Child Growth and Development (DS1)
CDEV 100 - PSYC 157, Introduction to Child Psychology
CDEV 110 - CDEV 110, Child, Family, and Community (DS2)
CHEM 101 - CHEM 100, Introductory Chemistry
CHEM 110 - CHEM 200A, General Chemistry
CHEM 110 - CHEM 200AH, Honors General Chemistry
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<td>CHEM 200A + CHEM 200B, General Chemistry + General Chemistry and Qualitative Analysis</td>
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<td>CHEM 120S</td>
<td>CHEM 200AH + CHEM 200B, Honors General Chemistry + General Chemistry and Qualitative Analysis</td>
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<td>CHEM 150</td>
<td>CHEM 280A, Organic Chemistry I</td>
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<td>CHEM 160S</td>
<td>CHEM 280A + CHEM 280B, Organic Chemistry I + Organic Chemistry II</td>
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<td>COMM 110</td>
<td>COMM 110, Public Communication</td>
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<tr>
<td>COMM 120</td>
<td>COMM 111, Argumentation and Debate</td>
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<td>COMM 130</td>
<td>COMM 100, Introduction to Interpersonal Communication</td>
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<tr>
<td>COMM 140</td>
<td>COMM 101, Group Dynamics</td>
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<td>COMM 150</td>
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<td>COMM 170</td>
<td>COMM 134, Oral Interpretation</td>
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<td>CDEV 108, Observation and Assessment for Early Learning and Development (DS3)</td>
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<td>ECE 220</td>
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<td>ENGL 100, Freshman Composition with Integrated Support</td>
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<td>ENGL 101, Freshman Composition</td>
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<td>ENGL 101H, Honors Freshman Composition</td>
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<td>ENGL 105</td>
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<td>ENGL 102H, Honors Literature and Composition</td>
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<td>ENGL 130</td>
<td>ENGL 241, Survey of American Literature, 1600-1865</td>
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ENGL 135 - ENGL 242, Survey of American Literature, 1865-Present
ENGL 140 - ENGL 271, Survey of World Literature I
ENGL 145 - ENGL 272, Survey of World Literature II
ENGL 160 - ENGL 231, Survey of English Literature I
ENGL 165 - ENGL 232, Survey of English Literature II
ENGL 180 - ENGL 270, Children's Literature
ENGL 200 - ENGL 213, Creative Writing
ENGR 130 - ENGR 220, Statics
ENGR 230 - ENGR 225, Dynamics
ENGR 260/260L - ENGR 230, Network Analysis
GEOG 110 - GEOG 101, Physical Geography
GEOG 111 - GEOG 101L, Physical Geography Laboratory
GEOG 120 - GEOG 102, Cultural Geography
GEOG 120 - GEOG 102H, Honors Cultural Geography
GEOG 125 - GEOG 100, World Regional Geography
GEOG 125 - GEOG 100H, Honors World Regional Geography
GEOG 130 - GEOG 130, Introduction to Weather and Climate
GEOG 130 - GEOG 130H, Honors Introduction to Weather and Climate
GEOG 140 - GEOG 140, California Geography
GEOG 150 - GEOG 150, Map Interpretation and Analysis
GEOG 155 - GEOG 155, Introduction to Geographic Information Systems
GEOG 155 - SURV 155, Introduction to Geographic Systems
GEOG 160 - GEOG 160, Regional Field Studies
GEOL 100 - ERTH 100, Physical Geology
GEOL 100L - ERTH 100L, Physical Geology Laboratory
GEOL 111 - ERTH 111, Historical Geology
GEOL 120 - ERTH 120, Earth Sciences
GEOL 121 - ERTH 121, Earth Sciences for Educators
GEOL 130 - ERTH 130, Environmental Geology
GEOL 200 - ERTH 200, Geology of California
HIST 130 - HIST 120, The United States to 1877
HIST 130 - HIST 120H, Honors The United States to 1877
HIST 140 - HIST 121, The United States Since 1865
HIST 140 - HIST 121H, Honors The United States Since 1865
HIST 150 - HIST 101, World Civilization to the 16th Century
HIST 150 - HIST 101H, Honors World Civilization to the 16th Century
HIST 160 - HIST 102, World Civilizations Since the 16th Century
HIST 160 - HIST 102H, Honors World Civilizations Since the 16th Century
KIN 100 - KIN 100, Introduction to Kinesiology
KIN 101 - KIN 101, First Aid and CPR
MATH 110 - MATH 219, Statistics
MATH 110 - MATH 219H, Honors Statistics
MATH 110 - MATH 220, Statistics and Probability with Integrated Review
MATH 120 - MATH 203, Fundamental Concepts of Elementary Mathematics
MATH 140 - MATH 150, Calculus for Biological, Management and Social Sciences
MATH 210 - MATH 180, Single Variable Calculus I
MATH 210 - MATH 180H, Honors Single Variable Calculus I
MATH 220 - MATH 185, Single Variable Calculus II
MATH 230 - MATH 280, Intermediate Calculus
MATH 240 - MATH 295, Differential Equations
MATH 250 - MATH 290, Linear Algebra
MATH 900S - MATH 180 + MATH 185, Single Variable Calculus I and Single Variable Calculus II
MATH 900S - MATH 180H + MATH 185, Honors Single Variable Calculus I and Single Variable Calculus II
MATH 910S - MATH 287, Introduction to Linear Algebra and Differential Equations
MATH 910S - MATH 290 + MATH 295, Linear Algebra + Differential Equations
MUS 100 - MUS 101, Music Appreciation
MUS 100 - MUS 101H, Honors Music Appreciation
PHIL 100 - PHIL 106, Introduction to Philosophy
PHIL 100 - PHIL 106H, Honors Introduction to Philosophy
PHIL 110 - PHIL 111, Introductory Logic
PHIL 120 - PHIL 108, Ethics
PHYS 100S - PHYS 150A + PHYS 150B, Introductory Physics I + Introductory Physics II
PHYS 105 - PHYS 150A, Introductory Physics I
PHYS 110 - PHYS 150B, Introductory Physics II
PHYS 140 - PSC 100, Survey of Chemistry and Physics
PHYS 200S - PHYS 250A + PHYS 250B + PHYS 250C, Physics for Scientists and Engineers I + Physics for Scientists and Engineers II + Physics for Scientists and Engineers III
PHYS 205 - PHYS 250A, Physics for Scientists and Engineers I
PHYS 210 - PHYS 250B, Physics for Scientists and Engineers II
PHYS 215 - PHYS 250C, Physics for Scientists and Engineers III
POLS 110 - POLT 101, Introduction to American Government
POLS 110 - POLT 101H, Honors Introduction to American Government
POLS 120 - POLT 230, Political Theory
POLS 140 - POLT 220, International Politics
PSY 110 - PSYC 100, Introduction to Psychology
PSY 110 - PSYC 100H, Honors Introduction to Psychology
PSY 120 - PSYC 250, Introduction to Abnormal Psychology
PSY 150 - PSYC 200, Introduction to Biological Psychology
PSY 170 - PSYC 240, Introduction to Social Psychology
PSY 170 - SOC 240, Introduction to Social Psychology
PSY 180 - PSYC 160, Introduction to Lifespan
PSY 200 - PSYC 220, Introduction to Research Methods Psychology
PSY 205B - PSYC 220, Introduction to Research Methods Psychology
SJS 110 - ETHN 101, Introduction into Ethnic Studies
SJS 120 - GSWS 101, Introduction to Women's Studies
SJS 130 - SOC 286, Introduction to LGBTQ Studies
SOC 110 - SOC 100, Introduction to Sociology
SOC 110 - SOC 100H, Honors Introduction to Sociology
SOC 115 - SOC 116, Social Problems
SOC 120 - SOC 120, Introduction to Sociological Research Methods
SOC 125 - SOC 125, Introduction to Statistics in Sociology
SOC 125H - SOC 125H, Honors Introduction to Statistics in Sociology
SOC 130 - SOC 130, Relationships, Marriages, and Family Dynamics
SOC 140 - SOC 220, Introduction to Gender and Sexualities
SOC 150 - SOC 150, Introduction to Race and Ethnicity
SPAN 100 - SPAN 101, Elementary Spanish I
SPAN 100 - SPAN 101H, Honors Elementary Spanish I
SPAN 100 - SPAN 101A, Elementary Spanish 1A + SPAN 101B, Elementary Spanish 1B
SPAN 110 - SPAN 102, Elementary Spanish II
SPAN 200 - SPAN 201, Intermediate Spanish I
SPAN 210 - SPAN 202, Intermediate Spanish II
SPAN 230 - SPAN 111, Spanish for Spanish Speakers 2
THTR 112 - THEA 100, Introduction to Theatre
THTR 151 - THEA 110, Acting Fundamentals
THTR 152 - THEA 111, Intermediate Acting
THTR 191 - THEA 180A + 180B, Rehearsal and Performance: Drama-Minor/Supporting Role + Rehearsal and Performance: Drama-Leading Role

Programs of Study

Identifiers and Definitions

Credit

Certificates

Certificates of Proficiency (CERT)
Certificates of Achievement (CA)

A Certificate of Achievement (CA) is 16 units or more (or state-approved as low as 8 units) and is a verification of achievement in a particular academic or occupational area, and it will be included on the official transcript. Certificate of Achievement programs normally includes only those courses which have a direct bearing upon specialized occupational competency since the certificate has the sole objective of immediate employment in a specialized area. For this reason, there is no general education requirement in a certificate program.

A Certificate of Proficiency CERT) is under 16 units and/or is not a state-approved program. This type of certificate is a verification of completion in a particular subject matter. A Certificate of Proficiency will NOT be included on the official or unofficial transcript. Certificate programs include only those courses which focus on vocational skills. The sole objective is employment in a specialized area and for this reason, there are no general education requirements for a Certificate of Proficiency.

Associate Degrees

Associate Degree of Arts (AA)
Associate Degree of Science (AS)

The Associate Degree is a certification of the student’s satisfactory completion of a program of study with a specific major or area of specialization. The Associate Degree is normally completed in two years, compared with the Baccalaureate Degree, which is normally completed in four years. Associate Degrees are commonly conferred by community colleges and are referenced as “local degrees.” They are usually of two types, the Associate of Arts and the Associate of Science. The distinction between the Associate of Arts and the Associate of Science degrees lies in the majors. If the major is in the fields of engineering, physical or biology science, or occupational curricula, the degree conferred is usually the Associate of Science. Otherwise, the Associate of Arts degree is conferred. Ordinarily, Associate Degrees have one of two major purposes. Either the program of study prepares the individual for transfer to a four-year college or university or the program of study is intended to prepare the student for immediate employment.

Associate Degrees for Transfer

Associate Degree of Arts for Transfer (AA-T)
Associate Degree of Science for Transfer (AS-T)

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer,” an established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high unit” major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Noncredit

Certificates

Certificates of Completion (CC)
Certificates of Competency (COM)

Certificates of Completion are geared toward Career Development.
Short-Term Vocational
Workforce Preparation

Certificates of Competency are geared toward College Preparation.

- Adult Basic Education
- Adult Secondary Education (including High School Diploma and High School Equivalency)
- English as a Second Language

Applied, Creative & Performing Arts

Are you a creative individual? Do you enjoy visual or performing arts? Do you often express yourself through art? The majors in the Interest Area of Applied and Creative Arts help students develop their talents and skills in areas such as visual, applied and performing arts. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

Programs

Art, AA
Cosmetology, AS
Cosmetology, CA
- Apprenticeship Dance Digital Marketing Specialist, CC (Noncredit)
Digital Media Arts: Graphic Design, CA
Digital Media Arts: Mobile Application Development and Design, CA
Digital Media Production, CERT
Digital Media Studies, CERT
Esthetician, CA
Food Handler, CC (Noncredit)
Food Service Manager, CC (Noncredit)
Gemology, AS
Graphic Design, AS
Music Studio Arts, AA-T
Theatre Arts

Art, AA
A.A. Degree Major

Control Number:
11911

Curriculum Id:
SCC.ART.AA

The Associate of Arts degree in Art provides students with an opportunity for individual creative stimulus and development. Completion of the associate in arts degree also prepares students to transfer to a four-year institution leading to a baccalaureate degree or into a professional art school. Possible careers in fine arts are art education, interior design, gallery operation, art merchandising, studio artist, illustration, art criticism, computer graphics and animation and related fields.

Program Courses

Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<td>ART100</td>
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<td>ART100H</td>
<td>Honors Introduction to Art Concepts</td>
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<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
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<td>ART101H</td>
<td>Honors Survey of Western Art History I: Prehistory Through the Middle Ages</td>
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<tr>
<td>ART102</td>
<td>Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
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<tr>
<td>ART110</td>
<td>Two-Dimensional Design</td>
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<td>ART111</td>
<td>Three-Dimensional Design</td>
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<tr>
<td>ART130</td>
<td>Introduction to Drawing</td>
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<tr>
<td>ART131</td>
<td>Beginning Life Drawing</td>
<td>3.0</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>ART141</td>
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Available Program Courses

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<td>ART149</td>
<td>Introduction to Digital Photography</td>
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<tr>
<td>ART159</td>
<td>Introduction to Mobile Application Development and Design</td>
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<tr>
<td>ART195</td>
<td>Introduction to Digital Media Arts</td>
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<tr>
<td>ART228</td>
<td>Intermediate Illustration</td>
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<td>ART230</td>
<td>Intermediate Drawing</td>
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<td>ART231</td>
<td>Intermediate Life Drawing</td>
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<tr>
<td>ART232</td>
<td>Advanced Life Drawing</td>
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<td>ART242</td>
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<td>ART259</td>
<td>Advanced Mobile Application Development and Design</td>
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Program Requirements

A.A. Degree Major

**Major requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART100</td>
<td>Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART100H</td>
<td>Honors Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
</tr>
<tr>
<td>ART101H</td>
<td>Honors Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
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</table>

OR

**AND**

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART102</td>
<td>Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
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OR
<table>
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<th>24.0 Units</th>
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<tr>
<td>ART102H - Honors Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
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</tr>
<tr>
<td>ART110 - Two-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART111 - Three-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART130 - Introduction to Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART131 - Beginning Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART141 - Beginning Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>Select six (6) units from the following:</td>
<td>6.0 Units</td>
</tr>
<tr>
<td>ART128 - Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART149 - Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
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<tr>
<td>ART159 - Introduction to Mobile Application Development and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART195 - Introduction to Digital Media Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART228 - Intermediate Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART230 - Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART231 - Intermediate Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART232 - Advanced Life Drawing</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART233 - Advanced Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Select six (6) units from the following: 6.0 Units

AND

ART241 - Intermediate Painting 3.0

AND

ART242 - Advanced Painting 3.0

AND

ART249 - Intermediate Digital Photography 3.0

AND

ART259 - Advanced Mobile Application Development and Design 3.0

AND

ART250 - Advanced Studio Concepts 3.0

Total Units 30.0

Learning Outcomes

Demonstrate the ability to create works of art using a variety of materials and techniques, visual elements and principles of design.

Demonstrate critical analysis of works of art in historical and cultural context.

Labor Market Data

Archivists

Job Growth

Wages

<table>
<thead>
<tr>
<th></th>
<th>60K</th>
<th>AVERAGE</th>
<th>38K</th>
<th>102K</th>
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<th>HIGH</th>
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Competition 59

Annual Openings

Graduates*

*For Program

Art Directors

Job Growth

Wages

<table>
<thead>
<tr>
<th></th>
<th>61K</th>
<th>AVERAGE</th>
<th>6K</th>
<th>189K</th>
<th>LOW</th>
<th>HIGH</th>
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Competition 2038

Annual Openings

Graduates*

*For Program

Commercial and Industrial Designers

Job Growth

Wages

<table>
<thead>
<tr>
<th></th>
<th>68K</th>
<th>AVERAGE</th>
<th>33K</th>
<th>144K</th>
<th>LOW</th>
<th>HIGH</th>
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</table>

Competition 253

Annual Openings

Graduates*

*For Program

Craft Artists
The page is either unavailable or doesn't exist.

Commercial Textile Worker, CC

Certificate of Completion

Control Number:
24146

Curriculum Id:
OEC.SEW.CC

The Certificate of Completion in Commercial Textile Worker prepares students for entry-level employment in the commercial textile industry. Students will learn different types of fabrics, seam finishes, garment styles, and garment construction and repair.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCLTH477</td>
<td>Fundamentals of Commercial Sewing</td>
<td>180.0</td>
</tr>
<tr>
<td>VCLTH483</td>
<td>Introduction to Commercial Sewing</td>
<td>160.0</td>
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</table>

Program Requirements

Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate requirements: 340 hours (credits are in hours)</th>
<th>340.0 Hours</th>
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</thead>
<tbody>
<tr>
<td>VCLTH477 - Fundamentals of Commercial Sewing</td>
<td>180.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VCLTH483 - Introduction to Commercial Sewing</td>
<td>160.0</td>
</tr>
</tbody>
</table>

Total Hours 340.0

Learning Outcomes

Apply the concept and skills of sewing to successfully construct a garment.
Labor Market Data

Fabric and Apparel Patternmakers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>57K AVERAGE</td>
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<tr>
<td></td>
<td>27K LOW</td>
<td>179 Annual Openings</td>
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<tr>
<td></td>
<td>99K HIGH</td>
<td>Graduates*</td>
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<tr>
<td></td>
<td></td>
<td>*For Program</td>
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</tbody>
</table>

Fashion Designers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81K AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36K LOW</td>
<td>704 Annual Openings</td>
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<tr>
<td></td>
<td>174K HIGH</td>
<td>Graduates*</td>
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<td></td>
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<td>*For Program</td>
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</table>

Cosmetology, AS

A.S. Degree Major

Control Number:
11948

Curriculum Id:
SCC.COSM.AS

The Associate of Science degree in Cosmetology is designed to exceed minimum California Board of Barbering and Cosmetology standards. Students will experience a combination of lecture and laboratory instruction covering various topics such as hairdressing, chemical waving and straightening, haircutting and shaping, hair coloring, scalp and hair treatments, facials, manicuring, and operation of a beauty salon. Proficiencies to be developed include principles of sanitation in compliance with laws and administrative regulations. Courses are offered on an open enrollment basis and students may enroll at any time. Students are required to purchase a basic cosmetology kit.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM005</td>
<td>Health and Safety</td>
<td>7.0</td>
</tr>
<tr>
<td>COSM040</td>
<td>Cosmetology</td>
<td>35.5</td>
</tr>
</tbody>
</table>

Program Requirements

A.S. Degree Major

Major requirements:
42.5 Units

COSM005 - Health and Safety
7.0

AND

COSM040 - Cosmetology
35.5

Total Units
42.5

Learning Outcomes

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbe-bed7-d32ba6eb18
Demonstrate and apply knowledge of principles, procedures and practices of cosmetology according to the California Board of Barbering and Cosmetology.

### Labor Market Data

<table>
<thead>
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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td><strong>Barbers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>27K</td>
<td>8K - 65K</td>
<td>697</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>LOW - HIGH</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
<td><strong>First-Line Supervisors of Personal Service and</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entertainment and Recreation Workers, Except</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gambling Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>37K</td>
<td>20K - 77K</td>
<td>1738</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>LOW - HIGH</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
<td><strong>Hairdressers, Hairstylists, and Cosmetologists</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>31K</td>
<td>12K - 72K</td>
<td>9231</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>LOW - HIGH</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
<td><strong>Makeup Artists, Theatrical and Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100K</td>
<td>25K - 156K</td>
<td>214</td>
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<tr>
<td></td>
<td>AVERAGE</td>
<td>LOW - HIGH</td>
<td>Annual</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Openings</td>
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<td></td>
<td></td>
<td>Graduates*</td>
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<td>*For Program</td>
</tr>
<tr>
<td><strong>Manicurists and Pedicurists</strong></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>27K</td>
<td>11K - 50K</td>
<td>3525</td>
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<td>AVERAGE</td>
<td>LOW - HIGH</td>
<td>Annual</td>
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<td></td>
<td></td>
<td>Openings</td>
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<tr>
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<td>Graduates*</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

[Apply Now](#)  [Request Info](#)

**Apprenticeship Cosmetology, CA**

Certificate of Achievement

**Control Number:**

11991

**Curriculum Id:**

https://sccollege.elumenapp.com/catalog/all-pages/4a0df669-c6e1-4cbe-bed7-d332ba6f6eb18
The Certificate of Achievement in Apprenticeship Cosmetology prepares students to obtain their license. The program is designed to offer the required related and supplemental classroom instruction as outlined by the apprenticeship agreement provided by the Division of Apprenticeship Standards and the State Board of Barbering and Cosmetology. All students must be indentured by the State of California. Interested apprentices should contact the Apprenticeship Office at Santiago Canyon College and the Orange County Barber and Cosmetology Joint Apprenticeship Committee.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACS035</td>
<td>Cosmetology Apprentice</td>
<td>14.0</td>
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**Program Requirements**

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>14.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACS035 - Cosmetology Apprentice</td>
<td>14.0</td>
</tr>
</tbody>
</table>

**Total Units**

| 14.0 |

**Learning Outcomes**

- Begin a career as a licensed cosmetologist.
- Have a basis for further college education.

**Cosmetology, CA**

Certificate of Achievement

**Control Number:**

21674

**Curriculum Id:**

SCC.COSM.CA

The Certificate of Achievement in Cosmetology is designed to exceed minimum California Board of Barbering and Cosmetology standards. Students will experience a combination of lecture and laboratory instruction covering various topics such as hairdressing, chemical waving and straightening, haircutting and shaping, hair coloring, scalp and hair treatments, facials, manicuring, and operation of a beauty salon. Proficiencies to be developed include principles of sanitation in compliance with laws and administrative regulations. Courses are offered on an open enrollment basis and students may enroll at any time. Students are required to purchase a basic cosmetology kit.

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<td>COSM005</td>
<td>Health and Safety</td>
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<td>COSM040</td>
<td>Cosmetology</td>
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**Program Requirements**

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>42.5 Units</th>
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</thead>
<tbody>
<tr>
<td>COSM005 - Health and Safety</td>
<td>7.0</td>
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</table>
Certificate requirements:

AND

COSM040 - Cosmetology

Total Units

Learning Outcomes

Demonstrate and apply knowledge of principles, procedures and practices of cosmetology according to the California Board of Barbering and Cosmetology.

Labor Market Data

<table>
<thead>
<tr>
<th>Job</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>27K</td>
<td>8K</td>
<td>697</td>
</tr>
<tr>
<td>AVERAGE</td>
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<td>65K</td>
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<td>LOW</td>
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<td>HIGH</td>
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<tr>
<td>Graduates*</td>
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<td>First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services</td>
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<td>Wages</td>
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<tr>
<td>Wages</td>
<td>31K</td>
<td>12K</td>
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<td>LOW</td>
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<td>Graduates*</td>
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<tr>
<td>Makeup Artists, Theatrical and Performance</td>
<td></td>
<td></td>
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<td>LOW</td>
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<td>HIGH</td>
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<tr>
<td>Graduates*</td>
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</tr>
<tr>
<td>Manicurists and Pedicurists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>27K</td>
<td>11K</td>
<td>3525</td>
</tr>
<tr>
<td>AVERAGE</td>
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<td>50K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
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<td>HIGH</td>
<td></td>
</tr>
<tr>
<td>Graduates*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Apply Now Request Info

Dance*

Mission

The Santiago Canyon College Performing Arts Department is dedicated to creating a student-centered learning environment which fosters the development of students' interests, knowledge, skills and talents in the performing arts. The Performing Arts Department is committed to creating a fertile cultural and communal environment where students, people in the community, faculty and staffs can combine their artistic expressions in performance disciplines (Dance, Music and Theatre) together to synergistically create a Local-Indigenous-Artistic-Language. The Performing Arts Department is working to expand its Performance Arts programs to engage the community at large and encourage through dance, music, and theatre events the public to come onto our campus and make it a cultural center of Orange and surrounding communities.

Department Chair

Binh Vu

(714) 628-4839

Vu_Binh@sccollege.edu

Course

DNCE100 - Dance History and Appreciation
DNCE106A - Modern Dance Fundamentals
DNCE106B - Intermediate Modern Dance
DNCE108A - Ballet Fundamentals
DNCE108B - Intermediate Ballet
DNCE115A - Tap Dance Fundamentals
DNCE115B - Intermediate Tap Dance
DNCE119A - Jazz Dance Fundamentals
DNCE119B - Intermediate Jazz Dance
DNCE204A - Dance Production
DNCE204B - Dance Production
DNCE205 - Performance Ensemble
DNCE250A - Hip Hop Dance I
DNCE250B - Hip Hop Dance II
DNCE251 - Hip Hop Dance III

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Digital Media Arts: Graphic Design, CA

Certificate of Achievement

Control Number:

21670

Curriculum Id:

SCC.ARTDGA.CA

The Certificate of Achievement in Digital Media Arts Graphic Design reflects the industry standard in the field of advertising/graphic design for printed media, the web, and digital imaging. The program is designed with a combination of courses from fine art, digital media, computer science, and marketing to develop technical skills and creativity in digital media. Graduates of this program will find entry into the profession at various levels with employment opportunities in the fields of advertising, graphic design, web design, application design, and digital imaging.

Program Courses

Available Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART100</td>
<td>Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART100H</td>
<td>Honors Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART110</td>
<td>Two-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART122</td>
<td>Graphic Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART129</td>
<td>Introduction to Web Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART130</td>
<td>Introduction to Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART195</td>
<td>Introduction to Digital Media Arts</td>
<td>3.0</td>
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</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
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<tr>
<td>ART128</td>
<td>Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART131</td>
<td>Beginning Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART141</td>
<td>Beginning Painting</td>
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</tr>
<tr>
<td>ART149</td>
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<td>3.0</td>
</tr>
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<td>ART221</td>
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<tr>
<td>ART228</td>
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</tr>
<tr>
<td>ART230</td>
<td>Intermediate Drawing</td>
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<tr>
<td>ART231</td>
<td>Intermediate Life Drawing</td>
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<tr>
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<td>Advanced Life Drawing</td>
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</tr>
<tr>
<td>ART250</td>
<td>Advanced Studio Concepts</td>
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<tr>
<td>CMPR105</td>
<td>Visual BASIC Programming</td>
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<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
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Program Requirements
Certificate of Achievement

<table>
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<tr>
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<tr>
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<td><strong>AND</strong></td>
<td></td>
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<tr>
<td>ART129 - Introduction to Web Design</td>
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</tr>
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<td>ART130 - Introduction to Drawing</td>
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<td><strong>AND</strong></td>
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<td>ART111 - Three-Dimensional Design</td>
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<tr>
<td><strong>AND</strong></td>
<td></td>
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<tr>
<td>ART128 - Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ART131 - Beginning Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ART141 - Beginning Painting</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ART149 - Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ART221 - Graphic Design II</td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
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</tr>
<tr>
<td>ART228 - Intermediate Illustration</td>
<td>3.0</td>
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Select one (1) course from the following: 3.0 Units

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<td>AND</td>
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<td></td>
</tr>
<tr>
<td>ART231</td>
<td>Intermediate Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART232</td>
<td>Advanced Life Drawing</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
<td></td>
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<tr>
<td>ART250</td>
<td>Advanced Studio Concepts</td>
<td>3.0</td>
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<td>AND</td>
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<td></td>
</tr>
<tr>
<td>CMPR105</td>
<td>Visual BASIC Programming</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units: 21.0

Learning Outcomes

- Demonstrate the use of a variety of digital media tools and techniques to create graphic design images.
- Demonstrate the ability to create graphic design images using visual elements and principles of design.

Digital Media Arts: Mobile Application Development and Design, CA

Certificate of Achievement

Control Number: 35016

Curriculum Id: SCC.ARTDMA.CA

The Certificate of Achievement in Digital Media Arts: Mobile Application Development and Design reflects the industry standard in the field of advertising/graphic design for mobile devices, the web, and digital imaging. The program is designed with a combination of courses from fine art, digital media, computer science, computer information systems, and marketing to develop technical skills and creativity in digital media. Graduates of this program will find entry into the profession at various levels with employment opportunities in the fields of mobile application design, advertising, graphic design, web design, and digital imaging.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART159</td>
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</tr>
<tr>
<td>CIS159</td>
<td>Introduction to iOS/iPhone Mobile App Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS259</td>
<td>Advanced iOS/iPhone Mobile App Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR112</td>
<td>Java Programming</td>
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<td>CMPR120</td>
<td>Introduction to Programming</td>
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<tr>
<td>CMPR213</td>
<td>C# Programming</td>
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</tr>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART122</td>
<td>Graphic Design I</td>
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<tr>
<td>ART129</td>
<td>Introduction to Web Design</td>
<td>3.0</td>
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<tr>
<td>ART149</td>
<td>Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART195</td>
<td>Introduction to Digital Media Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART221</td>
<td>Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>ART229</td>
<td>Multimedia Applications for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>ART259</td>
<td>Advanced Mobile Application Development and Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Achievement

Certificate requirements: 6.0 Units

- ART159 - Introduction to Mobile Application Development and Design 3.0
- AND
- CIS159 - Introduction to iOS/iPhone Mobile App Development 3.0

If emphasis is Digital Media Art and Design, select courses from List A. If emphasis is Programming, select courses from List B. 12.0 Units

Select four (4) courses from List A: Digital Media Art and Design 12 units 0.0 Units

- ART122 - Graphic Design I 3.0
- AND
- ART129 - Introduction to Web Design 3.0
- AND
- ART149 - Introduction to Digital Photography 3.0
- AND
- ART195 - Introduction to Digital Media Arts 3.0
Select four (4) courses from List A: Digital Media Art and Design 12 units 0.0 Units

AND

ART221 - Graphic Design II 3.0

AND

ART229 - Multimedia Applications for the Web 3.0

AND

ART259 - Advanced Mobile Application Development and Design 3.0

Select four (4) courses from List B: Programming 12 units 0.0 Units

CIS259 - Advanced iOS/iPhone Mobile App Development 3.0

AND

CMPR112 - Java Programming 3.0

AND

CMPR120 - Introduction to Programming 3.0

AND

CMPR213 - C# Programming 3.0

AND

MKTG112 - Principles of Advertising 3.0

Total Units 18.0

Learning Outcomes

Demonstrate the ability to create interface designs using a variety of digital media tools and techniques.

Demonstrate the ability to create interface designs using visual elements and principles of design.

Digital Media Production, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.TVDMP.CERT

The Certificate of Proficiency in Digital Media Production will provide students with the skills and practical experience to create digital content for employers and clients. The program introduces students to video and commercial production, non-linear editing, digital arts as well as elements associated with running a business.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART195</td>
<td>Introduction to Digital Media Arts</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
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<td>-------</td>
</tr>
<tr>
<td>CINE122</td>
<td>Screenwriting for Digital Media</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE124</td>
<td>Introduction to Digital Media Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Proficiency

Certificate requirements: 15.0 Units

- ART195 - Introduction to Digital Media Arts 3.0

AND

- CINE122 - Screenwriting for Digital Media 3.0

AND

- CINE124 - Introduction to Digital Media Production 3.0

Total Units 15.0

**Learning Outcomes**

Demonstrate readiness for careers in the fields of commercial and corporate video, and digital marketing.

**Digital Media Studies, CERT**

Certificate of Proficiency

Control Number:

Curriculum Id:

SCC.TVDMS.CER

The Certificate of Proficiency in Digital Media Studies is designed to develop students' understanding of television, film and digital media arts. The program includes an overview of the historical, theoretical, economic and technological impact of the industry on society. In addition, students will gain practical experience in scriptwriting, production and post-production. Upon completion of this certificate, students may choose one of three pathways: transfer to higher education, self-employment or a career in the entertainment industry.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CINE103</td>
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<td>CINE104</td>
<td>History of Film From 1945 to Present</td>
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<td>CINE105</td>
<td>Mass Media and Society</td>
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</tr>
<tr>
<td>CINE122</td>
<td>Screenwriting for Digital Media</td>
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<tr>
<td>CINE124</td>
<td>Introduction to Digital Media Production</td>
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**Program Requirements**

Certificate of Proficiency

Certificate requirements: 15.0 Units
Certificate requirements: 15.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>CINE103</td>
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<td>CINE104</td>
<td>History of Film From 1945 to Present</td>
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<tr>
<td>CINE105</td>
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<tr>
<td>CINE122</td>
<td>Screenwriting for Digital Media</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CINE124</td>
<td>Introduction to Digital Media Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units: 15.0

Learning Outcomes
Develop scripts, features, video productions and other content that demonstrate creative proficiency in the various media platforms including film, TV, radio, advertising, and the internet.

Esthetician, CA
Certificate of Achievement

Control Number: 36520

Curriculum Id: SCC.COSME.CA

The Certificate of Achievement in Esthetician is designed to exceed minimum California Board of Barbering and Cosmetology standards. Students will experience a combination of lecture and laboratory instruction covering various topics such as manual, electrical and chemical facials. Proficiencies to be developed include principles of sanitation, client management as well as compliance with laws and administrative regulations. Courses are offered on an open enrollment basis and students may enroll at any time. Students are required to purchase a basic cosmetology kit.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>COSM005</td>
<td>Health and Safety</td>
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<tr>
<td>COSM080</td>
<td>Esthetician</td>
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Program Requirements
Certificate of Achievement

Certificate requirements: 16.0 Units

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<th>Course Title</th>
<th>Units</th>
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Certificate requirements:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>COSM0080 - Esthetician</td>
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</table>

Total Units: 16.0

Learning Outcomes

Demonstrate and apply knowledge of principles, procedures and practices of skin care according to the California Board of Barbering and Cosmetology.

Labor Market Data

<table>
<thead>
<tr>
<th>Skincare Specialists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</table>

Food Handler, CC

Certificate of Completion

Control Number: 38181

Curriculum Id: OEC.FOODH.CC

The Certificate of Completion in Food Handler prepares students for employment in commercial and institutional food kitchens and hospitality industry, by providing knowledge and skills in hygiene, sanitation, storage, nutrition, and food service administration.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<td>Food Handler Test Preparation</td>
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<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
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</table>

Program Requirements

Certificate of Completion

Certificate Requirements: 96 hours (credits are in hours) 96.0 Hours

VFOOD005 - Food Handler Test Preparation 36.0

AND
Certificate Requirements: 96 hours (credits are in hours) 96.0 Hours

WKPR500 - Workforce Readiness 60.0

Total Hours 96.0

Learning Outcomes
Apply the concepts of safe food preparation in commercial and institutional kitchens.

Labor Market Data

<table>
<thead>
<tr>
<th>Cooks, Institution and Cafeteria</th>
<th>Job Growth</th>
<th>Wages</th>
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<td>Annual</td>
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<td></td>
<td></td>
<td>34K</td>
<td>Openings</td>
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</table>

Food Service Manager, CC
Certificate of Completion

Control Number: 24093

Curriculum Id: OEC.FOOD.CC

The Certificate of Completion in Food Service Manager prepares students for employment in commercial and institutional food kitchens, especially in the restaurant industry, by providing knowledge and skills in food safety and management, facilities management, and food service administration.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
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</table>
Course Code | Course Title       | Hours
-------------|-------------------|-------
WKPR500      | Workforce Readiness | 60.0  

Program Requirements
Certificate of Completion

Certificate Requirements: 132 hours (credits are in hours) 132.0 Hours

VFOOD010 - Food Service Manager Test Preparation 72.0

AND

WKPR500 - Workforce Readiness 60.0

Total Hours 132.0

Learning Outcomes
Apply the concepts of food service administration in commercial and institutional kitchens.

Labor Market Data

Dining Room and Cafeteria Attendants and Bartender Helpers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
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<td>AVERAGE</td>
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</tbody>
</table>

First-Line Supervisors of Food Preparation and Serving Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34K</td>
<td>6817</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>25K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>60K</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Waiters and Waitresses

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28K</td>
<td>21864</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>25K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>53K</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Gemology, AS
A.S. Degree Major

Control Number:
11874

Curriculum Id:
SCC.GEM.AS
The Associate of Science degree in Gemology provides technical and practical theory and knowledge in diamonds and colored stones including laboratory grading, identification and evaluation of gems. Employment opportunities upon completion of this program: jewelry appraiser, diamond and colored stones sales, jewelry buyer, jewelry wholesaler and laboratory gemologist.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEM011</td>
<td>Introductory Colored Stones</td>
<td>4.0</td>
</tr>
<tr>
<td>GEM012</td>
<td>Advanced Colored Stones</td>
<td>4.0</td>
</tr>
<tr>
<td>GEM020</td>
<td>Diamonds</td>
<td>4.0</td>
</tr>
<tr>
<td>GEM030</td>
<td>Antique and Period Jewelry</td>
<td>3.0</td>
</tr>
<tr>
<td>GEM050</td>
<td>Pearls</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
A.S. Degree Major

Major requirements: 18.0 Units

GEM011 - Introductory Colored Stones 4.0

AND

GEM012 - Advanced Colored Stones 4.0

AND

GEM020 - Diamonds 4.0

AND

GEM030 - Antique and Period Jewelry 3.0

AND

GEM050 - Pearls 3.0

Total Units 18.0

Learning Outcomes
Demonstrate the theory and practice of gemology.
Demonstrate knowledge of the business of gem stones.

Gemology, CA
Certificate of Achievement

Control Number: 21644

Curriculum Id: SCC.GEM.CA

The Certificate of Achievement in Gemology provides technical and practical theory and knowledge in diamonds and colored stones including laboratory grading, identification and evaluation of gems. Employment opportunities upon completion of this program: jewelry appraiser, diamond and colored stones sales, jewelry buyer, jewelry wholesaler and laboratory gemologist.
Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEM011</td>
<td>Introductory Colored Stones</td>
<td>4.0</td>
</tr>
<tr>
<td>GEM012</td>
<td>Advanced Colored Stones</td>
<td>4.0</td>
</tr>
<tr>
<td>GEM020</td>
<td>Diamonds</td>
<td>4.0</td>
</tr>
<tr>
<td>GEM030</td>
<td>Antique and Period Jewelry</td>
<td>3.0</td>
</tr>
<tr>
<td>GEM050</td>
<td>Pearls</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>18.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEM011 - Introductory Colored Stones</td>
<td>4.0</td>
</tr>
</tbody>
</table>

AND

| GEM012 - Advanced Colored Stones | 4.0    |

AND

| GEM020 - Diamonds            | 4.0    |

AND

| GEM030 - Antique and Period Jewelry | 3.0    |

AND

| GEM050 - Pearls               | 3.0    |

Total Units 18.0

Learning Outcomes

Demonstrate the theory and practice of gemology.

Demonstrate knowledge of the business of gem stones.

Graphic Design, AS

A.S. Degree Major

Control Number: 11921

Curriculum Id: SCC.ARTGDA.AS

The Associate of Science degree in Graphic Design prepares students for entry into the broad field of visual communication, with an emphasis on the development of problem solving in the practical application of graphic design. These applications include design for the print media, advertising, architectural and environmental graphics, packaging, logos, corporate identity, the web and other electronic media, using both digital media tools as well as traditional hand skills. It also enables students to enter a four-year institution leading to a baccalaureate degree or into a professional art school with a graphic design emphasis.

Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART100</td>
<td>Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART100H</td>
<td>Honors Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART110</td>
<td>Two-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART111</td>
<td>Three-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART122</td>
<td>Graphic Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART129</td>
<td>Introduction to Web Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART130</td>
<td>Introduction to Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART131</td>
<td>Beginning Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART195</td>
<td>Introduction to Digital Media Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
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<td>ART101H</td>
<td>Honors Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
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<tr>
<td>ART102</td>
<td>Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
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<td>Honors Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>ART128</td>
<td>Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART149</td>
<td>Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART159</td>
<td>Introduction to Mobile Application Development and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART221</td>
<td>Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>ART228</td>
<td>Intermediate Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART229</td>
<td>Multimedia Applications for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>ART230</td>
<td>Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART231</td>
<td>Intermediate Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART232</td>
<td>Advanced Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART233</td>
<td>Advanced Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART241</td>
<td>Intermediate Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART242</td>
<td>Advanced Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART249</td>
<td>Intermediate Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
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<tr>
<td>ART250</td>
<td>Advanced Studio Concepts</td>
<td>3.0</td>
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<tr>
<td>ART259</td>
<td>Advanced Mobile Application Development and Design</td>
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</tr>
<tr>
<td>CMPR105</td>
<td>Visual BASIC Programming</td>
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</tbody>
</table>

### Program Requirements

A.S. Degree Major

**Major requirements:**

- ART100 - Introduction to Art Concepts
  - 3.0

**OR**

- ART100H - Honors Introduction to Art Concepts
  - 3.0

**AND**

- ART110 - Two-Dimensional Design
  - 3.0

**AND**

- ART111 - Three-Dimensional Design
  - 3.0

**AND**

- ART122 - Graphic Design I
  - 3.0

**AND**

- ART129 - Introduction to Web Design
  - 3.0

**AND**

- ART130 - Introduction to Drawing
  - 3.0

**AND**

- ART131 - Beginning Life Drawing
  - 3.0

**AND**

- ART195 - Introduction to Digital Media Arts
  - 3.0

**AND**

- MKTG112 - Principles of Advertising
  - 3.0

Select one (1) course from the following:

- ART101 - Survey of Western Art History I: Prehistory Through the Middle Ages
  - 3.0

**OR**

- ART101H - Honors Survey of Western Art History I: Prehistory Through the Middle Ages
  - 3.0
Select one (1) course from the following:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AND</td>
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</tr>
<tr>
<td>ART102 - Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
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</tr>
<tr>
<td>ART102H - Honors Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
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<td>AND</td>
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</tr>
<tr>
<td>ART128 - Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART149 - Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART159 - Introduction to Mobile Application Development and Design</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART221 - Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART228 - Intermediate Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART229 - Multimedia Applications for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART230 - Intermediate Drawing</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>ART231 - Intermediate Life Drawing</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>ART232 - Advanced Life Drawing</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>ART233 - Advanced Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART241 - Intermediate Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART242 - Advanced Painting</td>
<td>3.0</td>
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</table>
Select one (1) course from the following: 3.0 Units

**ART249 - Intermediate Digital Photography** 3.0

**AND**

**ART250 - Advanced Studio Concepts** 3.0

**AND**

**ART259 - Advanced Mobile Application Development and Design** 3.0

**AND**

**CMPR105 - Visual BASIC Programming** 3.0

**Total Units** 30.0

**Learning Outcomes**

Demonstrate the use of tools and techniques to create graphic design images using visual elements and principles of design.

Demonstrate critical analysis of works of art in historical and cultural context.

**Labor Market Data**

### Art Directors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>61K</td>
<td><strong>AVERAGE</strong> 189K</td>
<td>2038 Annual Openings Graduates*</td>
</tr>
<tr>
<td>6K</td>
<td>LOW 189K</td>
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</tbody>
</table>

*For Program

### Artists and Related Workers, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>29K</td>
<td><strong>AVERAGE</strong> 111K</td>
<td>195 Annual Openings Graduates*</td>
</tr>
<tr>
<td>3K</td>
<td>LOW 111K</td>
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</tr>
</tbody>
</table>

*For Program

### Desktop Publishers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td>57K</td>
<td><strong>AVERAGE</strong> 144K</td>
<td>53 Annual Openings Graduates*</td>
</tr>
<tr>
<td>21K</td>
<td>LOW 144K</td>
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</tr>
</tbody>
</table>

*For Program

### Graphic Designers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>56K</td>
<td><strong>AVERAGE</strong> 108K</td>
<td>2588 Annual Openings Graduates*</td>
</tr>
<tr>
<td>21K</td>
<td>LOW 108K</td>
<td></td>
</tr>
</tbody>
</table>

*For Program
Music*

Mission

The Santiago Canyon College Performing Arts Department is dedicated to creating a student-centered learning environment which fosters the development of students' interests, knowledge, skills and talents in the performing arts. The Performing Arts Department is committed to creating a fertile cultural and communal environment where students, people in the community, faculty and staffs can combine their artistic expressions in performance disciplines (Dance, Music and Theatre) together to synergistically create a Local-Indigenous-Artistic-Language. The Performing Arts Department is working to expand its Performance Arts programs to engage the community at large and encourage through dance, music, and theatre events the public to come onto our campus and make it a cultural center of Orange and surrounding communities.

Department Chair

Binh Vu

(714) 628-4839

Vu.Binh@sccollege.edu

Course

MUS061 - Basic Piano Skills
MUS101 - Music Appreciation
MUS101H - Honors Music Appreciation
MUS102 - World Music
MUS103 - Jazz in America
MUS104 - Rock Music History and Appreciation
MUS121 - Beginning Voice
MUS122 - Intermediate Voice
MUS123 - Advanced Voice
MUS124 - Advanced Vocal Production and Repertoire
MUS126 - Collegiate Choir
MUS127 - Concert Chorale
MUS128 - Masterworks Chorale
MUS129 - Chamber Choir
MUS161 - Class Piano I
MUS162 - Class Piano II
MUS163 - Class Piano III
MUS164A - Intermediate Piano Repertoire I
MUS164B - Intermediate Piano Repertoire II
MUS182 - Musical Ensemble
MUS185 - Beginning Classical Guitar
MUS186 - Intermediate Classical Guitar
MUS187 - Advanced Classical Guitar
MUS188 - Advanced Classical Guitar Technique and Repertoire

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.
Studio Arts, AA-T

A.A. Degree for Transfer

Control Number:
31715

Curriculum Id:
SCC.ARTST.AAT

The Associate in Arts in Studio Arts for Transfer degree provides students with an opportunity to explore studio arts both conceptually and aesthetically by utilizing critical analysis and experimental practice. Possible careers in fine arts are studio artist, art educator, art designer, gallery personnel, museum technician, illustrator, digital media artist, animator and related fields. Successful completion of the transfer degree in studio arts guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in studio arts or a related field.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
</tr>
<tr>
<td>ART101H</td>
<td>Honors Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
</tr>
<tr>
<td>ART102</td>
<td>Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>ART102H</td>
<td>Honors Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>ART110</td>
<td>Two-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART111</td>
<td>Three-Dimensional Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART130</td>
<td>Introduction to Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART141</td>
<td>Beginning Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART128</td>
<td>Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART131</td>
<td>Beginning Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART149</td>
<td>Introduction to Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>ART195</td>
<td>Introduction to Digital Media Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART230</td>
<td>Intermediate Drawing</td>
<td>3.0</td>
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<td>ART231</td>
<td>Intermediate Life Drawing</td>
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<td>ART232</td>
<td>Advanced Life Drawing</td>
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<tr>
<td>ART233</td>
<td>Advanced Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART241</td>
<td>Intermediate Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART242</td>
<td>Advanced Painting</td>
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</tbody>
</table>
### Program Requirements

**A.A. Degree for Transfer**

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>18.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ART101 - Survey of Western Art History I: Prehistory Through the Middle Ages</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td><strong>ART101H - Honors Survey of Western Art History I: Prehistory Through the Middle Ages</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART102 - Survey of Western Art History II: Renaissance Through the Twentieth Century</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td><strong>ART102H - Honors Survey of Western Art History II: Renaissance Through the Twentieth Century</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART110 - Two-Dimensional Design</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART111 - Three-Dimensional Design</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART130 - Introduction to Drawing</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART141 - Beginning Painting</strong></td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select two (2) courses from the following (List B): 6.0 Units

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>ART128 - Introduction to Illustration</strong></td>
<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td><strong>ART131 - Beginning Life Drawing</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART149 - Introduction to Digital Photography</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART195 - Introduction to Digital Media Arts</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART230 - Intermediate Drawing</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ART231 - Intermediate Life Drawing</strong></td>
<td>3.0</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-d329aa6eb18
Select two (2) courses from the following (List B):  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART232 - Advanced Life Drawing</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART233 - Advanced Drawing</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ART241 - Intermediate Painting</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ART242 - Advanced Painting</td>
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</table>

Total Units 24.0

Learning Outcomes

- Demonstrate the ability to create works of art using a variety of materials and techniques, visual elements and principles of design.
- Demonstrate critical analysis of works of art in historical and cultural context.

Theatre Arts*

Mission

The Santiago Canyon College Performing Arts Department is dedicated to creating a student-centered learning environment which fosters the development of students' interests, knowledge, skills and talents in the performing arts. The Performing Arts Department is committed to creating a fertile cultural and communal environment where students, people in the community, faculty and staffs can combine their artistic expressions in performance disciplines (Dance, Music and Theatre) together to synergistically create a Local-Indigenous-Artistic-Language. The Performing Arts Department is working to expand its Performance Arts programs to engage the community at large and encourage through dance, music, and theatre events the public to come onto our campus and make it a cultural center of Orange and surrounding communities.

Department Chair

Binh Vu

(714) 628-4839

Vu_Binh@sccollege.edu

Course

THEA100 - Introduction to Theatre
THEA110 - Acting Fundamentals
THEA111 - Intermediate Acting
THEA118 - Fundamentals of Scene Study
THEA121 - Beginning Performance Ensemble
THEA122 - Beginning Production Showcase
THEA180A - Rehearsal and Performance: Drama - Minor/Supporting Role
THEA180B - Rehearsal and Performance: Drama - Leading Role
THEA181A - Rehearsal and Performance: Comedy - Minor/Supporting Role
THEA181B - Rehearsal and Performance: Comedy - Leading Role
THEA182A - Rehearsal and Performance: One-Act Plays
THEA182B - Rehearsal and Performance: Original One-Act Plays
THEA183A - Rehearsal and Performance: Musical - Minor/Supporting Role
THEA183B - Rehearsal and Performance: Musical - Leading Role
THEA186A - Beginning Technical Theatre Production
THEA186B - Intermediate Technical Theatre Production
THEA186C - Advanced Technical Theatre Production

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Behavioral & Social Sciences
Do you get intrigued by history or politics? Do you enjoy learning about different social issues? The majors in the Interest Area of Social and Behavior Sciences prepare students to study areas of human interactions. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

Programs


Anthropology, AA
A.A. Degree Major

Control Number:
11939

Curriculum Id:
SCC.ANTH.AA

The Associate of Arts degree in Anthropology is designed as a program of basic courses for students considering professional careers as archaeologists, ethnographers, linguists, physical anthropologists; for those preparing to become social science teachers in elementary or secondary schools; for such diverse fields as psychology, medicine, law, political science, international relations, economics, or history; and for individuals who plan public service careers in social work, health and welfare programs, and foreign service. Students should consult with faculty members for advice in selecting course offerings best suited to the individual’s particular career objectives. The associate of arts degree prepares the student to move into a curriculum at a four-year institution leading to a baccalaureate degree in these careers.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>ANTH101L</td>
<td>Physical Anthropology Laboratory</td>
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<tr>
<td>BIOL109</td>
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<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109HL</td>
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<td>Fundamentals of Biology Laboratory</td>
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</tr>
<tr>
<td>BIOL149</td>
<td>Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL211</td>
<td>Cellular and Molecular Biology</td>
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<td>Physical Geology</td>
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<td>ERTH100L</td>
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</tr>
<tr>
<td>ERTH111</td>
<td>Historical Geology</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<td>GEOG101</td>
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Available Program Courses

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<tbody>
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<td>ECON102</td>
<td>Principles/Macro</td>
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<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
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<td>GEOG100</td>
<td>World Regional Geography</td>
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<td>GEOG102</td>
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<td>GEOG102H</td>
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<td>GSWS101</td>
<td>Introduction to Women's Studies</td>
<td>3.0</td>
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<tr>
<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
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<td>Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
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<tr>
<td>PSYC100</td>
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<tr>
<td>PSYC100H</td>
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<td>Introduction to Sociology</td>
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<tr>
<td>SOC100H</td>
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Available Program Courses

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<th>Course Title</th>
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<tbody>
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<td>ANTH100</td>
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<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH101</td>
<td>Introduction to Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH103</td>
<td>Introduction to Archaeology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH104</td>
<td>Language and Culture</td>
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Program Requirements

A.A. Degree Major

List A - If emphasis is Cultural Anthropology, select courses from List A. Select six (6) units from the following: 6.0 Units

ECON102 - Principles/Macro 3.0

OR
List A - If emphasis is Cultural Anthropology, select courses from List A. Select six (6) units from the following:

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
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<td>OR</td>
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<tr>
<td>GEOG100</td>
<td>World Regional Geography</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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<td></td>
</tr>
<tr>
<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>GEOG102</td>
<td>Cultural Geography</td>
<td>3.0</td>
</tr>
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<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG102H</td>
<td>Honors Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSWS101</td>
<td>Introduction to Women's Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
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</tr>
<tr>
<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
<td>3.0</td>
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<td>OR</td>
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</tr>
<tr>
<td>PSYC100</td>
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<tr>
<td>OR</td>
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<td>PSYC100H</td>
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<tr>
<td>SOC100</td>
<td>Introduction to Sociology</td>
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<tr>
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<tr>
<td>SOC100H</td>
<td>Honors Introduction to Sociology</td>
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List B - If emphasis is Physical Anthropology, select courses from List B. Select six (6) units from the following:

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<tr>
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<th>Units</th>
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<tbody>
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<td>BIOL109</td>
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</tr>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
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</tbody>
</table>
List B - If emphasis is Physical Anthropology, select courses from List B. Select six (6) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>OR</td>
<td>BIOL109L - Fundamentals of Biology Laboratory</td>
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</tr>
<tr>
<td>OR</td>
<td>BIOL109HL - Honors Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td>BIOL149 - Human Anatomy and Physiology</td>
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<td>OR</td>
<td>BIOL211 - Cellular and Molecular Biology</td>
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<tr>
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<td>ERTH100 - Physical Geology</td>
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</tr>
<tr>
<td>OR</td>
<td>ERTH100L - Physical Geology Laboratory</td>
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<tr>
<td>OR</td>
<td>ERTH111 - Historical Geology</td>
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<td>GEOG101 - Physical Geography</td>
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Major requirements: 12.0 Units

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</tr>
<tr>
<td>OR</td>
<td>ANTH100H - Honors Introduction to Cultural Anthropology</td>
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<tr>
<td>AND</td>
<td>ANTH101 - Introduction to Physical Anthropology</td>
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<tr>
<td>AND</td>
<td>ANTH103 - Introduction to Archaeology</td>
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Major requirements:

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<tbody>
<tr>
<td>ANTH104</td>
<td>Language and Culture</td>
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</tbody>
</table>

Total Units: 18.0

Learning Outcomes

- Understand cultures past and present and how cultures fit into modern globalization.
- Understand human biological development over millennium and primates and their social and biological attributes.
- Study culture in Archaeological context and try to interpret artifacts into economic, religious, political and social context.

Labor Market Data

<table>
<thead>
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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td><strong>62K</strong></td>
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<td>Annual</td>
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<td>LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
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Anthropologists and Archeologists

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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td><strong>13K - 201K</strong></td>
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<td>LOW</td>
<td>Graduates*</td>
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<td>HIGH</td>
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Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other

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<td>MATH220</td>
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Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>ANTH101</td>
<td>Introduction to Physical Anthropology</td>
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<tr>
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Available Program Courses

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<td>Survey of World Literature I</td>
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<td>ENGL272</td>
<td>Survey of World Literature II</td>
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<td>Introduction to Ethnic Studies</td>
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<td>ETHN130</td>
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<td>Introduction to Women's Studies</td>
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<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
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<td>World Civilizations Since the 16th Century</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<td>ANTH104</td>
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<td>GEOG101H</td>
<td>Honors Physical Geography</td>
<td>3.0</td>
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<tr>
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**Program Requirements**

A.A. Degree for Transfer

**Major requirements:**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
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<td>OR</td>
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<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
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<td>AND</td>
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<td>ANTH101</td>
<td>Introduction to Physical Anthropology</td>
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<td>ANTH103</td>
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**Select one (1) course from the following (List A):**

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<th>Units</th>
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</thead>
<tbody>
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<tr>
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<tr>
<td>ERTH100</td>
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<tr>
<td>OR</td>
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<tr>
<td>GEOG101</td>
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<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG101H</td>
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</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
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<tr>
<td>GEOG102</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>GEOG102H</td>
<td>Honors Cultural Geography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Select one (1) course from the following (List B): An additional course from List A (may not be used to satisfy the requirements in List A)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td></td>
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<tr>
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<td></td>
<td></td>
<td>3.0 - 4.0 Units</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321ba6eb18
<table>
<thead>
<tr>
<th>Select one (1) course from the following (List B): An additional course from List A (may not be used to satisfy the requirements in List A)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG155 - Introduction to Geographic Information Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH219 - Statistics and Probability</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH219H - Honors Statistics and Probability</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Select one (1) course from the following (List C): An additional course from List A or B (may not be used to satisfy the requirements in List A or B)</th>
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<tbody>
<tr>
<td>COMM225 - Gender Communication</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>COMM225H - Honors Gender Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ENGL271 - Survey of World Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ENGL272 - Survey of World Literature II</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ETHN101 - Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>GEOG100 - World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>GEOG100H - Honors World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>GSWS101 - Introduction to Women's Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HIST101 - World Civilizations to the 16th Century</td>
<td>3.0</td>
</tr>
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<td>OR</td>
<td></td>
</tr>
<tr>
<td>HIST101H - Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
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</table>
Select one (1) course from the following (List C): An additional course from List A or B (may not be used to satisfy the requirements in List A or B)  

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST102 - World Civilizations Since the 16th Century</td>
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<tr>
<td>HIST102H - Honors World Civilizations Since the 16th Century</td>
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</tr>
<tr>
<td>HIST124 - Mexican-American History in the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS102 - World Music</td>
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<tr>
<td>PHIL112 - World Religions</td>
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<tr>
<td>PSYC170 - Multicultural Psychology</td>
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</tr>
<tr>
<td>SOC100 - Introduction to Sociology</td>
<td>3.0</td>
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<tr>
<td>ETHN130 - Introduction to Chicano Studies</td>
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</table>

Total Units: 18.0 - 19.0

**Learning Outcomes**

- Explain cultures past and present and how cultures fit into modern globalization.
- Discuss hominidae biological development over millennium and their social and biological attributes.
- Understand and explain culture in Archaeological terms and try to interpret artifacts into economic, religious, political and social context.

**Labor Market Data**

**Anthropologists and Archeologists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td>77 Annual Openings</td>
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<td></td>
<td>62K</td>
<td>Graduates*</td>
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<td></td>
<td>35K LOW</td>
<td>*For Program</td>
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<td></td>
<td>102K HIGH</td>
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</table>

**Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32baf6eb18
Criminal Justice*

Mission

The mission of the Criminal Justice Department is to enhance community safety by providing a distinguished criminal justice program to students pursuing occupations in the criminal justice field or seeking knowledge regarding criminal justice issues.

Department Chair

Andrew Gonis

(714) 564-6802

Gonis_Andrew@sac.edu

Course

CJ101 - Introduction to Criminal Justice

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Economics, AA

A.A. Degree Major

Control Number:

11943

Curriculum Id:

SCC.ECON.AA

The Associate of Arts degree in Economics is a program of basic courses which enable students to move into a curriculum in a four-year institution leading to a baccalaureate degree. Economics prepares the student for a number of career opportunities such as accounting and marketing in the areas of business, government and teaching.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH150</td>
<td>Calculus for Biological, Management, and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
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<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
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Program Requirements

A.A. Degree Major

Major requirements: **21.0 - 23.0 Units**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT102</td>
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<td>AND</td>
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<td>ECON101</td>
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<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
<td>3.0</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
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</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>MATH150</td>
<td>Calculus for Biological, Management and Social Sciences</td>
<td>5.0</td>
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<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
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<tr>
<td>MATH219H</td>
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<td>4.0</td>
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<td>OR</td>
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<td></td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Units **21.0 - 23.0**

Learning Outcomes

Describe the economic approach to analyzing and explaining human behavior, communicate using basic economic terminology, interpret relevant economic data, and follow and construct fundamental economic arguments using verbal, graphical, and basic mathematical tools.
Apply analytical reasoning and problem solving skills to formulate predictions and deduce cause-and-effect relationships in hypothetical scenarios and actual real world situations.
Identify study skills, methods, and strategies that are effective for the student's learning style and likely to be effective for the student in further study of economics and other fields.

Labor Market Data
## Economists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>125K</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td><strong>57K</strong></td>
<td><strong>196K</strong></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
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### Job Growth

**Annual Openings**

**Graduates***

*For Program

---

## Environmental Scientists and Specialists, Including Health

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<td></td>
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<td><strong>47K</strong></td>
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### Job Growth

**Annual Openings**

**Graduates***

*For Program

---

## Market Research Analysts and Marketing Specialists

<table>
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</thead>
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<tr>
<td></td>
<td>65K</td>
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<tr>
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<td><strong>34K</strong></td>
<td><strong>131K</strong></td>
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</table>

### Job Growth

**Annual Openings**

**Graduates***

*For Program

---

## Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td></td>
<td>63K</td>
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<tr>
<td></td>
<td><strong>13K</strong></td>
<td><strong>201K</strong></td>
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<td>HIGH</td>
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### Job Growth

**Annual Openings**

**Graduates***

*For Program

---

## Social Science Research Assistants

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<td>50K</td>
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<td></td>
<td><strong>25K</strong></td>
<td><strong>98K</strong></td>
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<td>HIGH</td>
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</table>

### Job Growth

**Annual Openings**

**Graduates***

*For Program

---

### Economics, AA-T

A.A. Degree for Transfer

#### Control Number:

32968

#### Curriculum Id:

SCC.ECON.AAT

The Associate in Arts in Economics for Transfer degree provides students with a program of basic courses which enables students to experience a seamless transition into a curriculum at a CSU leading to a baccalaureate degree with career opportunities in economic research, consulting, accounting, and marketing in the areas of business, teaching, and public policy. Economics is the social science that
studies how individuals, businesses, and governments make choices to cope with scarcity and the incentives that influence and reconcile those choices.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH185</td>
<td>Single Variable Calculus II</td>
<td>4.0</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
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<tr>
<td>MATH150</td>
<td>Calculus for Biological, Management, and Social Sciences</td>
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</tr>
<tr>
<td>MATH180</td>
<td>Single Variable Calculus I</td>
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<tr>
<td>MATH180H</td>
<td>Honors Single Variable Calculus I</td>
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</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
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<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
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<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
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Available Program Courses

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<thead>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT102</td>
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<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>4.0</td>
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<tr>
<td>BUS222</td>
<td>Business Writing</td>
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<td>MATH280</td>
<td>Intermediate Calculus</td>
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<td>MATH287</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
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<tr>
<td>MATH290</td>
<td>Linear Algebra</td>
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Available Program Courses

No value

Program Requirements

A.A. Degree for Transfer

Major requirements: 14.0 - 15.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ECON101</td>
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AND

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<th>Course Title</th>
<th>Units</th>
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<td>ECON102</td>
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<td>Major requirements:</td>
<td>14.0 - 15.0 Units</td>
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<tr>
<td>AND</td>
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<tr>
<td>MATH219 - Statistics and Probability</td>
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<tr>
<td>MATH219H - Honors Statistics and Probability</td>
<td>4.0</td>
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<td>OR</td>
<td></td>
<td></td>
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<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
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<td></td>
<td></td>
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<tr>
<td>MATH150 - Calculus for Biological, Management and Social Sciences</td>
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<td>OR</td>
<td></td>
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</tr>
<tr>
<td>MATH180 - Single Variable Calculus I</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH180H - Honors Single Variable Calculus I</td>
<td>4.0</td>
<td></td>
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</table>

Select one (1) course from the following (List A): 4.0 Units

| ACCT101 - Financial Accounting | 4.0 |
| ACCT185 - Single Variable Calculus II | 4.0 |

Select one (1) course from the following (List B): 3.0 - 5.0 Units

| An additional course from List A (may not be a course used to satisfy the requirements in List A) | 4.0 |
| ACCT102 - Managerial Accounting | 4.0 |

| BUS150 - Introduction to Information Systems and Applications | 4.0 |
| BUS222 - Business Writing | 3.0 |

| MATH280 - Intermediate Calculus | 3.0 |

| MATH287 - Introduction to Linear Algebra and Differential Equations | 4.0 |

<table>
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<tr>
<th>AND</th>
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</table>
Select one (1) course from the following (List B):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH290 - Linear Algebra</td>
<td>5.0</td>
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</table>

Total Units

21.0 - 24.0

Learning Outcomes

- Identify and explain the fundamental economic problem of allocating scarce resources and the role of positive economics in explaining choices.
- Communicate using basic economic terminology, interpret relevant economic data, and follow and construct fundamental economic arguments.

Labor Market Data

<table>
<thead>
<tr>
<th>Economists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>125K</td>
<td>57K</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>196K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
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<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
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</table>

<table>
<thead>
<tr>
<th>Environmental Scientists and Specialists, Including Health</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
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<td>*For Program</td>
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</table>

<table>
<thead>
<tr>
<th>Market Research Analysts and Marketing Specialists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>Annual</td>
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<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
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<td></td>
<td></td>
<td>Graduates*</td>
</tr>
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<td></td>
<td></td>
<td>*For Program</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63K</td>
<td>13K</td>
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<td></td>
<td>AVERAGE</td>
<td>201K</td>
<td>Annual</td>
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<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
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<table>
<thead>
<tr>
<th>Social Science Research Assistants</th>
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<th>Wages</th>
<th>Competition</th>
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<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>*For Program</td>
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</table>
Gender, Sexuality, and Women's Studies, AA
A.A. Degree Major

Control Number:
11938

Curriculum Id:
SCC.WMNS.AA

The Associate of Arts degree in Gender, Sexuality, and Women's Studies is a liberal arts major offering interdisciplinary perspectives on the importance of gender and sexualities in relation to issues such as race, class, ethnicity, nationality, religion, age, (dis)ability, labor, multiculturalism, globalization, and the environment. Utilizing a variety of theoretical and methodological approaches in their study of the intersections of gender and sexuality with multiple identities, students are empowered to make theoretically informed personal, social, cultural, and institutional changes. Completion of the associate of arts degree prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWS101</td>
<td>Introduction to Women's Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>GWS102</td>
<td>Money, Sex, and Power</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST127</td>
<td>Women in U.S. History</td>
<td>3.0</td>
</tr>
<tr>
<td>IDS155</td>
<td>Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
<td>3.0</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNSL116</td>
<td>Career/Life Planning and Personal Exploration</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM225</td>
<td>Gender Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM225H</td>
<td>Honors Gender Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL278</td>
<td>Survey of Literature by Women</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBI103</td>
<td>Advanced Internet Research</td>
<td>1.0</td>
</tr>
<tr>
<td>PHIL108</td>
<td>Ethics</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC180</td>
<td>Psychology of Gender</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
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</tr>
<tr>
<td>SOC130</td>
<td>Relationships, Marriages, and Family Dynamics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.A. Degree Major

Major requirements: 15.0 Units

- GSWS101 - Introduction to Women's Studies 3.0
  AND
- GSWS102 - Women in America: Work, Family, Self 3.0
  AND
- HIST127 - Women in U.S. History 3.0
  AND
- IDS155 - Human Sexuality 3.0
  AND
- SOC220 - Introduction to Gender and Sexualities 3.0

Select three (3) to four (4) units from the following: 3.0 - 4.0 Units

- CNSL116 - Career/Life Planning and Personal Exploration 3.0
  AND
- COMM225 - Gender Communication 3.0
  OR
- COMM225H - Honors Gender Communication 3.0
  AND
- ENGL278 - Survey of Literature by Women 3.0
  AND
- KIN110 - Women's Health Issues 3.0
  AND
- LIBI103 - Advanced Internet Research 1.0
  AND
- PHIL108 - Ethics 3.0
  AND
- POLT221 - Women in American Politics 3.0
Select three (3) to four (4) units from the following:  

AND

**PSYC180 - Psychology of Gender**  
3.0

AND

**SOC130 - Relationships, Marriages, and Family Dynamics**  
3.0

**Total Units**  
18.0 - 19.0

**Learning Outcomes**

Understand the socio-historic context of gender and its intersection with sexuality, race, class, nationality, ability, and other dimensions of differences.

Articulate interdisciplinary perspectives of gender and sexuality through writing, digital, and oral presentations.

**Labor Market Data**

### Anthropologists and Archeologists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
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<td>62K</td>
<td><strong>AVERAGE</strong> 62K</td>
<td>77 Annual Openings Graduates*</td>
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<td>35K</td>
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### Compliance Officers

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### Geographers

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<th>Competition</th>
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<td><strong>AVERAGE</strong> 92K</td>
<td>4 Annual Openings Graduates*</td>
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<td>56K</td>
<td>LOW 56K</td>
<td><strong>AVERAGE</strong> 92K</td>
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<td>122K</td>
<td>HIGH 122K</td>
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### Historians

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<td><strong>AVERAGE</strong> 51K</td>
<td>47 Annual Openings Graduates*</td>
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<td>11K</td>
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### Political Scientists
Geography, AA-T

A.A. Degree for Transfer

Control Number:
32364

Curriculum Id:
SCC.GEOG.AAT

The Associate in Arts in Geography for Transfer degree provides students with an interdisciplinary background for entry into a curriculum at a four-year institution leading to a baccalaureate degree with career opportunities in a wide range of jobs in government, such as Bureau of Census, Central Intelligence Agency (CIA), Drug Enforcement Administration (DEA), United States Geological Survey (USGS), United States Citizenship and Immigration Services (USCIS), United States Immigration and Customs Enforcement (ICE), United States Department of State, and in private industry, such as planning market research, land use analysis, transportation, travel and tourism, and education.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG100</td>
<td>World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG130</td>
<td>Introduction to Weather and Climate</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG130H</td>
<td>Honors Introduction to Weather and Climate</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG140</td>
<td>California Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG150</td>
<td>Exploring Maps and Geographic Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG155</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG160</td>
<td>Regional Field Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>SURV155</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
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Available Program Courses

No value

Available Program Courses

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<thead>
<tr>
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<th>Course Title</th>
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<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
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<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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</tr>
<tr>
<td>ERTH100</td>
<td>Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>ERTH160</td>
<td>Oceanography</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT220</td>
<td>International Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
<td>3.0</td>
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Available Program Courses

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<thead>
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<th>Course Title</th>
<th>Units</th>
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<td>GEOG101</td>
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<td>GEOG101H</td>
<td>Honors Physical Geography</td>
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</tr>
<tr>
<td>GEOG101L</td>
<td>Physical Geography Laboratory</td>
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</tr>
<tr>
<td>GEOG102</td>
<td>Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG102H</td>
<td>Honors Cultural Geography</td>
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Program Requirements

A.A. Degree for Transfer

Major requirements: 7.0 Units

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<td>Physical Geography</td>
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OR

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AND

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<th>Units</th>
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<tbody>
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AND

<table>
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OR

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<td>GEOG102H</td>
<td>Honors Cultural Geography</td>
<td>3.0</td>
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Select two (2) courses from the following (List A): 6.0 Units

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<tr>
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<tbody>
<tr>
<td>GEOG100</td>
<td>World Regional Geography</td>
<td>3.0</td>
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</table>

OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
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AND

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG130</td>
<td>Introduction to Weather and Climate</td>
<td>3.0</td>
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</table>
Select two (2) courses from the following (List A):

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG130H</td>
<td>Honors Introduction to Weather and Climate</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
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<tr>
<td>GEOG140</td>
<td>California Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG150</td>
<td>Exploring Maps and Geographic Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG155</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURV155</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
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</tr>
<tr>
<td>GEOG160</td>
<td>Regional Field Studies</td>
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Select two (2) courses from the following (List B):

<table>
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<tbody>
<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<td></td>
</tr>
<tr>
<td>ERTH100</td>
<td>Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLT220</td>
<td>International Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERTH160</td>
<td>Oceanography</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
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<td>AND</td>
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An additional course from List A

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<tr>
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</table>
Total Units 19.0

Learning Outcomes
Communicate using basic terminology, interpret spatial patterns as indicated on maps, graphs and charts, and utilize tabular and textual information as a means to produce basic maps.
Apply knowledge of the fundamentals of global and regional political, economic, social, and cultural systems to academic, professional and everyday endeavors.
Integrate fundamentals of physical and social sciences within a spatial network of human-environment interactions.

Labor Market Data

<table>
<thead>
<tr>
<th>Archivists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
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<td>LOW</td>
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<tr>
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<table>
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<tr>
<th>Civil Engineering Technologists and Technicians</th>
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</table>

Apply Now Request Info

Global Studies, CA
Certificate of Achievement

Control Number:

Curriculum Id:

The certificate in Global Studies within the Department of History is intended to prepare a student in the History Department with particular insights into global perspectives and historical experiences such that the student may successfully enter a globally-oriented program of study after transfer to a four-year institution. It provides students access to a concentrated course of study that offers a full scope of knowledge from lower-division survey courses centered on global states and societies. Additionally, it offers exposure to interdisciplinary education, which is central to many programs of study at four-year institutions such as international relations and global studies. Students will complete a total of 12 units, 9 of which will be in the History Department and 3 of which will be in either the Geography Department or Political Science Department. Completion of a History Department Certificate in Global Studies can be completed over one to two years.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST102</td>
<td>World Civilizations Since the 16th Century</td>
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<tr>
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Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HIST132</td>
<td>Modern African History</td>
<td>3.0</td>
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<tr>
<td>HIST142</td>
<td>History of the Modern Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST152</td>
<td>Latin American History</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST162</td>
<td>Asian Civilizations</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GEOG100</td>
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<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT220</td>
<td>International Politics</td>
<td>3.0</td>
</tr>
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</table>

Program Requirements

Certificate of Achievement

Certificate Requirements: 3.0 Units

HIST102 - World Civilizations Since the 16th Century 3.0

OR

HIST102H - Honors World Civilizations Since the 16th Century 3.0

Select one (1) course from the following: 3.0 Units

GEOG100 - World Regional Geography 3.0

OR
Select one (1) course from the following: 3.0 Units

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
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<td>POLT220</td>
<td>International Politics</td>
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</table>

Select two (2) courses from the following: 6.0 Units

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<th>Course Title</th>
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<tbody>
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<td>Modern African History</td>
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<tr>
<td>OR</td>
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<tr>
<td>HIST142</td>
<td>History of the Modern Middle East</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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<tr>
<td>HIST152</td>
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<td></td>
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</tr>
<tr>
<td>HIST162</td>
<td>Asian Civilizations</td>
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</table>

Total Units 12.0

Learning Outcomes

- Critical Analysis: Analyze primary and secondary sources to develop analytical skill skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Communication Skills: Develop communication skills through writing exercises and discussion of critical historical events.
- Global Citizenship: Demonstrate the ability to discuss, analyze, and compare and contrast, diverse world cultural, religious, and political traditions.
- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussions of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.
- Discuss, analyze, compare and contrast, diverse world cultural, religious, and political traditions.

Labor Market Data

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<thead>
<tr>
<th></th>
<th>Economists</th>
<th>Historians</th>
<th>Legislators</th>
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<tbody>
<tr>
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<td>3.5K</td>
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<tr>
<td>Wages</td>
<td>196K</td>
<td>207K</td>
<td>3.5K</td>
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<td>Competition</td>
<td>45 Annual Openings</td>
<td>47 Annual Openings</td>
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<td>Graduates*</td>
<td>Economists</td>
<td>Historians</td>
<td>Legislators</td>
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<td>57K</td>
<td>11K</td>
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<tr>
<td>HIGH</td>
<td>196K</td>
<td>207K</td>
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<td>*For Program</td>
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History, AA-T

A.A. Degree for Transfer

Control Number:
31720

Curriculum Id:
SCC.HIST.AAT

The Associate in Arts in History for Transfer degree provides a basic program to aid a student in thinking critically about one’s self, one’s cultural heritage, social and economic processes, and national and international affairs. Successful completion of the transfer degree in History guarantees the student acceptance to the California State University system to pursue a baccalaureate degree in History or a related field to pursue careers in a variety of government agencies, nongovernmental organizations (NGO), nonprofit organizations (NPO), international government organization (IGO), libraries or museums, and research programs.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
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<tr>
<td>HIST101H</td>
<td>Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST102</td>
<td>World Civilizations Since the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST102H</td>
<td>Honors World Civilizations Since the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST120</td>
<td>The United States to 1877</td>
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<td>HIST120H</td>
<td>Honors: The United States to 1877</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST121</td>
<td>The United States Since 1877</td>
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### Course Code

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<thead>
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### Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<td>ECON102</td>
<td>Principles/Macro</td>
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<td>World Regional Geography</td>
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<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST126</td>
<td>United States since 1945</td>
<td>3.0</td>
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<tr>
<td>HIST133</td>
<td>History of California</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST240</td>
<td>Introduction to Peace and Conflict Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL118</td>
<td>History of Philosophy</td>
<td>3.0</td>
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<td>POLT101</td>
<td>American Government and Politics</td>
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<td>POLT101H</td>
<td>Honors American Government and Politics</td>
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<td>POLT200</td>
<td>American Political Thought</td>
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<td>POLT201</td>
<td>Introduction to Comparative Politics</td>
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<td>POLT220</td>
<td>International Politics</td>
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<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
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<td>POLT230</td>
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### Available Program Courses

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<td>Mexican-American History in the United States</td>
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<td>HIST127</td>
<td>Women in U.S. History</td>
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<td>HIST152</td>
<td>Latin American History</td>
<td>3.0</td>
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<tr>
<td>HIST162</td>
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### Program Requirements

A.A. Degree for Transfer

**Major requirements:**

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<tr>
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<td>World Civilizations to the 16th Century</td>
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OR

<table>
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<tr>
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Major requirements: 12.0 Units

AND

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<td>HIST120 - The United States to 1877</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>HIST120H - Honors: The United States to 1877</td>
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<tr>
<td>HIST121 - The United States Since 1877</td>
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<td>OR</td>
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Select one (1) course from Area 1: 3.0 Units

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<td>HIST124 - Mexican-American History in the United States</td>
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<td>HIST127 - Women in U.S. History</td>
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<tr>
<td>AND</td>
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<tr>
<td>HIST152 - Latin American History</td>
<td>3.0</td>
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<td>HIST162 - Asian Civilizations</td>
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</table>

Select one (1) course from Area 2: 3.0 Units

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<td>AND</td>
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<tr>
<td>GEOG100 - World Regional Geography</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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<tr>
<td>GEOG100H - Honors World Regional Geography</td>
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Select one (1) course from Area 2:  

<table>
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<tr>
<td>HIST133 - History of California</td>
<td>3.0</td>
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<tr>
<td>HIST240 - Introduction to Peace and Conflict Studies</td>
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<td>PHIL118 - History of Philosophy</td>
<td>3.0</td>
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<tr>
<td>POLT101 - American Government and Politics</td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>POLT101H - Honors American Government and Politics</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>POLT200 - American Political Thought</td>
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<tr>
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<tr>
<td>POLT220 - International Politics</td>
<td>3.0</td>
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<tr>
<td>POLT221 - Women in American Politics</td>
<td>3.0</td>
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<tr>
<td>POLT230 - Political Theory</td>
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Total Units 18.0

Learning Outcomes

- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussions of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.
- Discuss, analyze, compare and contrast, diverse world cultural, religious, and political traditions.

Labor Market Data

<table>
<thead>
<tr>
<th>Anthropologists and Archeologists</th>
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<tbody>
<tr>
<td>Job Growth</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d6699-c6e1-4cbc-bed7-d32fba6eb18
**Kinesiology - Sport Studies, AS**

A.S. Degree Major

**Control Number:**

**Curriculum Id:**
SCC.KINS.AS

The Associate in Science degree in Kinesiology - Sport Studies provides students with a qualification in Kinesiology and may also be used in transferring to a CSU or private institution for completion of a 4-year degree. Please consult a counselor regarding specific course requirements for transfer. Upon completion of the Associate in Science degree in Kinesiology - Sport Studies, students will have a general understanding of kinesthetic forms, processes, and structures as they apply to the personal expression and culture of human movement, and be able to apply fitness-based concepts.

**Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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### DNCE Courses

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<td>DNCE108A</td>
<td>Ballet Fundamentals</td>
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<td>DNCE108B</td>
<td>Intermediate Ballet</td>
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<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
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<td>DNCE119A</td>
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</tr>
<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
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### Available Program Courses

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<td>4.0</td>
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<tr>
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<td>General Microbiology</td>
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<tr>
<td>BIOL239</td>
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<td>KIN104</td>
<td>Healthful Living</td>
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<tr>
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<td>Course Title</td>
<td>Units</td>
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<tr>
<td>KIN160B</td>
<td>Intermediate Basketball</td>
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<td>Basic Indoor Soccer</td>
<td>0.5 - 1.0</td>
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<td>KIN168A</td>
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<td>KIN168B</td>
<td>Intermediate Volleyball</td>
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Available Program Courses

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<td>Intermediate Cardio Kickboxing</td>
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<td>Basic Tai Chi</td>
<td>0.5 - 1.0</td>
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<table>
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</tr>
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<td>KIN100</td>
<td>Introduction to Kinesiology</td>
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<td>KIN109</td>
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</tr>
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Available Program Courses

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<td>KIN119</td>
<td>Personal Fitness Evaluation</td>
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<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126A</td>
<td>Basic Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127B</td>
<td>Intermediate Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127C</td>
<td>Advanced Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<tr>
<td>-------------</td>
<td>--------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
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</tr>
<tr>
<td>KIN140A</td>
<td>Basic Circuit Weight Training</td>
<td>0.5 - 1.0</td>
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<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146B</td>
<td>Intermediate Strength Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146C</td>
<td>Advanced Strength Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN147</td>
<td>Strength Training for Women</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN200</td>
<td>Conditioning for Athletes-Men</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN201</td>
<td>Conditioning for Athletes-Co-Ed</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN202</td>
<td>Conditioning for Athletes-Women</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN203</td>
<td>Speed and Agility-Men</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN204</td>
<td>Speed and Agility-Women</td>
<td>0.5 - 1.0</td>
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### Available Program Courses

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>KIN185A</td>
<td>Basic Swimming</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN185B</td>
<td>Intermediate Swimming</td>
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<tr>
<td>KIN185C</td>
<td>Advanced Swimming</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN189A</td>
<td>Basic Aqua Aerobics</td>
<td>0.5 - 1.0</td>
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### Program Requirements

**A.S. Degree Major**

AQUATICS - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

- **KIN185A - Basic Swimming**
  - 1.0 Units

  OR

- **KIN185B - Intermediate Swimming**
  - 1.0 Units

  OR

- **KIN185C - Advanced Swimming**
  - 1.0 Units

  OR

- **KIN189A - Basic Aqua Aerobics**
  - 1.0 Units
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN125A</td>
<td>Basic Cardio Kickboxing</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN125B</td>
<td>Intermediate Cardio Kickboxing</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>1.0</td>
</tr>
<tr>
<td>DANCE</td>
<td>Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.</td>
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</tr>
<tr>
<td>DNCE106A</td>
<td>Modern Dance Fundamentals</td>
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<tr>
<td>DNCE106B</td>
<td>Intermediate Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE108A</td>
<td>Ballet Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE108B</td>
<td>Intermediate Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE115B</td>
<td>Intermediate Tap Dance</td>
<td>1.0</td>
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<tr>
<td>OR</td>
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<td></td>
</tr>
<tr>
<td>DNCE119A</td>
<td>Jazz Dance Fundamentals</td>
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<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
<td>1.0</td>
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<td>FITNESS</td>
<td>Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.</td>
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<tr>
<td>KIN119</td>
<td>Personal Fitness Evaluation</td>
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<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>1.0</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
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<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
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</table>
FITNESS - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>KIN121A</td>
<td>Basic Step Aerobics</td>
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<td>KIN126A</td>
<td>Basic Spin</td>
<td>1.0</td>
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<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
<td>1.0</td>
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<tr>
<td>KIN127B</td>
<td>Intermediate Yoga</td>
<td>1.0</td>
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<tr>
<td>KIN127C</td>
<td>Advanced Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>1.0</td>
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<tr>
<td>KIN140A</td>
<td>Basic Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>1.0</td>
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<tr>
<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>1.0</td>
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<tr>
<td>KIN146B</td>
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<td>KIN146C</td>
<td>Advanced Strength Training</td>
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<tr>
<td>KIN147</td>
<td>Strength Training for Women</td>
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**FITNESS** - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

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<thead>
<tr>
<th>Course</th>
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<td>KIN201 - Conditioning for Athletes-Co-Ed</td>
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<tr>
<td>KIN202 - Conditioning for Athletes-Women</td>
<td>1.0</td>
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<tr>
<td>KIN203 - Speed and Agility-Men</td>
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<tr>
<td>KIN204 - Speed and Agility-Women</td>
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**Major Requirements:**

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<td>BIOL109H - Honors Fundamentals of Biology</td>
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<td>AND</td>
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<tr>
<td>BIOL109L - Fundamentals of Biology Laboratory</td>
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<td>BIOL109HL - Honors Fundamentals of Biology Laboratory</td>
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<tr>
<td>KIN100 - Introduction to Kinesiology</td>
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<td>AND</td>
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</tr>
<tr>
<td>KIN109 - Sport in US Society</td>
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<tr>
<td>AND</td>
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<td>MATH219 - Statistics and Probability</td>
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<td>OR</td>
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Select a minimum of three (3) units from the following:

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<th>Course</th>
<th>Units</th>
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<tbody>
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Select a minimum of three (3) units from the following:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>BIOL109H - Honors Fundamentals of Biology</td>
<td>3.0</td>
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<tr>
<td>BIOL139 - Health Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL149 - Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL229 - General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL239 - General Human Anatomy</td>
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<td>BIOL249 - Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL259 - Environmental Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>KIN101 - First Aid and CPR</td>
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</tr>
<tr>
<td>KIN102 - Nutrition and Fitness</td>
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<tr>
<td>KIN104 - Healthful Living</td>
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<tr>
<td>KIN110 - Women's Health Issues</td>
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<tr>
<td>KIN111 - Sports Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR115 - Nutrition</td>
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<tr>
<td>PSYC100 - Introduction to Psychology</td>
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</table>
Select a minimum of three (3) units from the following:  

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>OR PSYC100H - Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

TEAM SPORTS - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN160A - Basic Basketball</td>
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</tr>
<tr>
<td>OR KIN160B - Intermediate Basketball</td>
<td>1.0</td>
</tr>
<tr>
<td>OR KIN163A - Basic Indoor Soccer</td>
<td>1.0</td>
</tr>
<tr>
<td>OR KIN168A - Basic Volleyball</td>
<td>1.0</td>
</tr>
<tr>
<td>OR KIN168B - Intermediate Volleyball</td>
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</tbody>
</table>

Total Units 20.0

Learning Outcomes
- Demonstrate knowledge of kinesthetic forms, processes and structures as they apply to the personal expression and culture of human movement.
- Demonstrate practical application of fitness concepts.

Labor Market Data

Postsecondary Teachers

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<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td>190K HIGH</td>
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<td>Annual</td>
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<tr>
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<td>Openings</td>
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</table>

Kinesiology - Sport Studies, CA

Certificate of Achievement

Control Number: SCC.KINS.CA

The Certificate of Achievement in Kinesiology - Sport Studies provides students with a qualification in Kinesiology and may also be used in transferring to a CSU or private institution for completion of a 4-year degree. Please consult a counselor regarding specific course requirements for transfer. Upon completion of the Certificate of Achievement of Kinesiology - Sport Studies, students will have a general understanding of kinesthetic forms, processes and structures as they apply to the personal expression and culture of human movement, and be able to apply fitness-based concepts.
# Program Courses

## Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL139</td>
<td>Health Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL149</td>
<td>Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
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<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL259</td>
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</tr>
<tr>
<td>KIN101</td>
<td>First Aid and CPR</td>
<td>3.0</td>
</tr>
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<td>KIN102</td>
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<td>2.0</td>
</tr>
<tr>
<td>KIN104</td>
<td>Healthful Living</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN111</td>
<td>Sports Psychology</td>
<td>3.0</td>
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<td>NUTR115</td>
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<td>3.0</td>
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## Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>KIN119</td>
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<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>0.5 - 1.0</td>
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<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
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<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>0.5 - 1.0</td>
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<td>KIN126A</td>
<td>Basic Spin</td>
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<td>KIN1268</td>
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<td>Intermediate Yoga</td>
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<td>Advanced Yoga</td>
<td>0.5 - 1.0</td>
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<td>KIN128A</td>
<td>Basic Tai Chi</td>
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<td>Basic Circuit Weight Training</td>
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<td>Advanced Circuit Weight Training</td>
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<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN146B</td>
<td>Intermediate Strength Training</td>
<td>0.5 - 1.0</td>
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<td>KIN147</td>
<td>Strength Training for Women</td>
<td>0.5 - 1.0</td>
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<td>Conditioning for Athletes-Men</td>
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<td>Conditioning for Athletes-Co-Ed</td>
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Available Program Courses

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<th>Course Title</th>
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<td>Intermediate Cardio Kickboxing</td>
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<td>Basic Tai Chi</td>
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<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
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<td>BIOL109L</td>
<td>Fundamentals of Biology Laboratory</td>
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<td>Introduction to Kinesiology</td>
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<td>Sport in US Society</td>
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<tr>
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<td>KIN160B</td>
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<td>Course Title</td>
<td>Units</td>
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<tr>
<td>KIN163A</td>
<td>Basic Indoor Soccer</td>
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<td>KIN168A</td>
<td>Basic Volleyball</td>
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**Available Program Courses**

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<tr>
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<tr>
<td>KIN185B</td>
<td>Intermediate Swimming</td>
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<td>KIN185C</td>
<td>Advanced Swimming</td>
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<tr>
<td>KIN189A</td>
<td>Basic Aqua Aerobics</td>
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**Available Program Courses**

<table>
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<th>Course Title</th>
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<tr>
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<td>DNCE106B</td>
<td>Intermediate Modern Dance</td>
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<tr>
<td>DNCE108A</td>
<td>Ballet Fundamentals</td>
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<td>DNCE108B</td>
<td>Intermediate Ballet</td>
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<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
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<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
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**Program Requirements**

Certificate of Achievement

**AQUATICS** - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>3.0</td>
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- KIN185A - Basic Swimming | 1.0

**OR**

- KIN185B - Intermediate Swimming | 1.0

**OR**

- KIN185C - Advanced Swimming | 1.0

**OR**

- KIN189A - Basic Aqua Aerobics | 1.0
<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>KIN125A</td>
<td>Basic Cardio Kickboxing</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN125B</td>
<td>Intermediate Cardio Kickboxing</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
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**Certificate Requirements:**

14.0 Units

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<tbody>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
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<td>BIOL109L</td>
<td>Fundamentals of Biology Laboratory</td>
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</tr>
<tr>
<td>KIN100</td>
<td>Introduction to Kinesiology</td>
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<td>KIN109</td>
<td>Sport in US Society</td>
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<td>MATH219</td>
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<tr>
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<td>Honors Statistics and Probability</td>
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DANCE - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports

0.0 Units

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<tr>
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<tbody>
<tr>
<td>DNCE106A</td>
<td>Modern Dance Fundamentals</td>
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<td>DNCE106B</td>
<td>Intermediate Modern Dance</td>
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</table>
### DANCE - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports

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<td>Ballet Fundamentals</td>
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<td>DNCE108B</td>
<td>Intermediate Ballet</td>
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</tr>
<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
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<tr>
<td>DNCE115B</td>
<td>Intermediate Tap Dance</td>
<td>1.0</td>
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<tr>
<td>DNCE119A</td>
<td>Jazz Dance Fundamentals</td>
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<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
<td>1.0</td>
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### FITNESS - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
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<td>Personal Fitness Evaluation</td>
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<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN126A</td>
<td>Basic Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
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FITNESS - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports

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<td>Advanced Yoga</td>
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<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN140A</td>
<td>Basic Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN146B</td>
<td>Intermediate Strength Training</td>
<td>0.5 - 1.0</td>
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<td>KIN146C</td>
<td>Advanced Strength Training</td>
<td>0.5 - 1.0</td>
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<td>KIN147</td>
<td>Strength Training for Women</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN200</td>
<td>Conditioning for Athletes-Men</td>
<td>0.5 - 1.0</td>
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<td>Fitness</td>
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<tr>
<td>KIN201 - Conditioning for Athletes-Co-Ed</td>
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<td>OR</td>
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<tr>
<td>KIN203 - Speed and Agility-Men</td>
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<td>OR</td>
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<tr>
<td>KIN204 - Speed and Agility-Women</td>
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<td>BIOL249 - Human Physiology</td>
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<td>BIOL259 - Environmental Biology</td>
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<td>KIN101 - First Aid and CPR</td>
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<td>OR</td>
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<tr>
<td>KIN102 - Nutrition and Fitness</td>
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<td>OR</td>
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<tr>
<td>KIN104 - Healthful Living</td>
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Select a minimum of three (3) units from the following: 3.0 Units

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
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<tr>
<td>KIN111</td>
<td>Sports Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
<td>3.0</td>
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TEAM SPORTS - Select three (3) units from the following. Must select one (1) unit course from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports 0.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>KIN160A</td>
<td>Basic Basketball</td>
<td>0.5   - 1.0</td>
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<td>KIN160B</td>
<td>Intermediate Basketball</td>
<td>0.5   - 1.0</td>
</tr>
<tr>
<td>KIN163A</td>
<td>Basic Indoor Soccer</td>
<td>0.5   - 1.0</td>
</tr>
<tr>
<td>KIN168A</td>
<td>Basic Volleyball</td>
<td>0.5   - 1.0</td>
</tr>
<tr>
<td>KIN168B</td>
<td>Intermediate Volleyball</td>
<td>0.5   - 1.0</td>
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</table>

Total Units 20.0

Learning Outcomes

- Demonstrate knowledge of kinesthetic forms, processes and structures as they apply to the personal expression and culture of human movement.
- Demonstrate practical application of fitness concepts.

Labor Market Data

Postsecondary Teachers
Philosophy, AA-T

A.A. Degree for Transfer

Control Number:
32042

Curriculum Id:
SCC.PHILAAT

The Associate in Arts in Philosophy for Transfer degree prepares students to transfer to a four-year institution leading to a baccalaureate degree. Successful completion of the transfer degree in Philosophy guarantees the student acceptance to a California State University to pursue a baccalaureate degree. The transfer degree prepares students who plan to teach philosophy, or who plan to study theology or law, and establishes a foundation for graduate studies in the areas of liberal arts, critical theory, international relations, cognitive science and specialized historical studies.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL110</td>
<td>Critical Thinking</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL112</td>
<td>World Religions</td>
<td>4.0</td>
</tr>
<tr>
<td>PHIL118</td>
<td>History of Philosophy</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL120</td>
<td>Introduction to Social and Political Philosophy</td>
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Available Program Courses

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<thead>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHIL106</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHIL106H</td>
<td>Honors Introduction to Philosophy</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL108</td>
<td>Ethics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL111</td>
<td>Introductory Logic</td>
<td>4.0</td>
</tr>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL115</td>
<td>Philosophy of Religion</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.A. Degree for Transfer

Major requirements - Required Core 7.0 Units
### Major requirements - Required Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL106 - Introduction to Philosophy</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PHIL106H - Honors Introduction to Philosophy</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PHIL108 - Ethics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PHIL111 - Introductory Logic</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following (List A): (An additional course from Core 3 units) 3.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL110 - Critical Thinking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL112 - World Religions</td>
<td>4.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL118 - History of Philosophy</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following (List C): (An additional course from Core, List A or B 3-4 units) 3.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL120 - Introduction to Social and Political Philosophy</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select two (2) courses from the following (List B): (An additional course from Core or List A 3-4 units) 6.0 - 7.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL115 - Philosophy of Religion</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 19.0 - 20.0

### Learning Outcomes

- Demonstrate knowledge of the discipline of philosophy.
- Demonstrate an ability to analyze and evaluate topics and problems in a way that comports with philosophic method.

### Labor Market Data

#### Lawyers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>140K</td>
<td>3588 Annual Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>52K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>HIGH</td>
<td>295K</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

#### Legislators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51K</td>
<td>80 Annual</td>
</tr>
</tbody>
</table>
Political Science, AA-T

A.A. Degree for Transfer

Control Number:
31730

Curriculum Id:
SCC.POLT.AAT

The Associate in Arts in Political Science for Transfer degree prepares students to transfer to a four-year institution leading to a baccalaureate degree. Successful completion of the transfer degree in Political Science guarantees the student acceptance to a local California State University to pursue a baccalaureate degree and prepares students for law school, teaching, public relations, journalism, government service on the local, state and national levels, and private employment where government institutions are involved.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLT201</td>
<td>Introduction to Comparative Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT220</td>
<td>International Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT230</td>
<td>Political Theory</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLT101</td>
<td>American Government and Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT101H</td>
<td>Honors American Government and Politics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
<td>3.0</td>
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</table>
Program Requirements
A.A. Degree for Transfer

Major requirements: 3.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST101H</td>
<td>Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
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<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
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</tr>
<tr>
<td>SOC100</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC100H</td>
<td>Honors Introduction to Sociology</td>
<td>3.0</td>
</tr>
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Select two (2) courses from the following (List B): 6.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
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<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST101H</td>
<td>Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC100</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC100H</td>
<td>Honors Introduction to Sociology</td>
<td>3.0</td>
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</table>

Students are required to take the following (List A): 9.0 Units
Students are required to take the following (List A):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>POLT201 - Introduction to Comparative Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>POLT220 - International Politics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>POLT230 - Political Theory</td>
<td>3.0</td>
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</tbody>
</table>

Total Units: 18.0

Learning Outcomes
- Demonstrate critical thinking skills and formulate a thesis in a written and/or oral format.
- Demonstrate a basic knowledge of political institutions and processes of American government.
- Demonstrate how individuals by applying their political science skills can make a difference in their local communities.

Labor Market Data

**Compliance Officers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>81K</td>
<td>AVERAGE</td>
<td>1571</td>
</tr>
<tr>
<td>46K</td>
<td>LOW</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>121K</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>47K</td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>150K</td>
<td>HIGH</td>
<td></td>
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</tbody>
</table>

**Environmental Scientists and Specialists, Including Health**

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<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>91K</td>
<td>AVERAGE</td>
<td>375</td>
</tr>
<tr>
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<td>LOW</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>150K</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>49K</td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>128K</td>
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</table>

**Labor Relations Specialists**

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<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>49K</td>
<td>LOW</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>128K</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>51K</td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>133K</td>
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</table>

**Legislators**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>51K</td>
<td>AVERAGE</td>
<td>80</td>
</tr>
<tr>
<td>35K</td>
<td>LOW</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>133K</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>33K</td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>133K</td>
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</table>

**Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling:**
Psychology, AA-T

A.A. Degree for Transfer

Control Number:
31041

Curriculum Id:
SCC.PSYC.AAT

The Associate in Arts in Psychology for Transfer degree prepares students to transfer to a four-year institution leading to a baccalaureate degree for specialization in any of more than twenty branches of psychology including: child, clinical, personality, vocational, marriage and family counseling, industrial, mental health, and college teaching. Completion of the two-year program is appropriate for students whose vocational plans include helping people, i.e., teaching, social welfare, probation, criminology, nursing, law, and personnel work. Successful completion of the transfer degree in Psychology guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in Psychology or a related field.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC157</td>
<td>Introduction to Child Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC240</td>
<td>Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC240</td>
<td>Introduction to Social Psychology</td>
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Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC200</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH101</td>
<td>Introduction to Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL110</td>
<td>Critical Thinking</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL111</td>
<td>Introductory Logic</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Course Code | Course Title | Units
--- | --- | ---
PSYC160 | Introduction to Lifespan Psychology | 4.0
PSYC170 | Multicultural Psychology | 3.0
PSYC180 | Psychology of Gender | 3.0
PSYC190 | Psychology of Human Sexuality | 3.0
PSYC230 | Psychology and Effective Behavior | 3.0
PSYC250 | Introduction to Abnormal Psychology | 3.0
SOC100 | Introduction to Sociology | 3.0
SOC100H | Honors Introduction to Sociology | 3.0

Available Program Courses

Course Code | Course Title | Units
--- | --- | ---
MATH219 | Statistics and Probability | 4.0
MATH219H | Honors Statistics and Probability | 4.0
MATH220 | Statistics and Probability with Integrated Review | 4.0
PSYC100 | Introduction to Psychology | 3.0
PSYC100H | Honors Introduction to Psychology | 3.0
PSYC220 | Introduction to Research Methods in Psychology | 4.0

Program Requirements
A.A. Degree for Transfer

Major requirements: 11.0 Units

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>11.0 Units</th>
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</thead>
<tbody>
<tr>
<td>MATH219 - Statistics and Probability</td>
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OR

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>11.0 Units</th>
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</thead>
<tbody>
<tr>
<td>MATH219H - Honors Statistics and Probability</td>
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OR

<table>
<thead>
<tr>
<th>Major requirements:</th>
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</thead>
<tbody>
<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
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</table>

AND

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>11.0 Units</th>
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</thead>
<tbody>
<tr>
<td>PSYC100 - Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>11.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC100H - Honors Introduction to Psychology</td>
<td>3.0</td>
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</table>

AND

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>11.0 Units</th>
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</thead>
<tbody>
<tr>
<td>PSYC220 - Introduction to Research Methods in Psychology</td>
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</table>
Select one (1) course from the following (List A):  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL109 - Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL109H - Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC200 - Introduction to Biological Psychology</td>
<td>3.0</td>
</tr>
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</table>

Select one (1) course from the following (List B):  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107 - Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PSYC157 - Introduction to Child Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PSYC240 - Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOC240 - Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following (List C):  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH100 - Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ANTH100H - Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ANTH101 - Introduction to Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PHIL110 - Critical Thinking</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PHIL111 - Introductory Logic</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC160 - Introduction to Lifespan Psychology</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC170 - Multicultural Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC180 - Psychology of Gender</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Select one (1) course from the following (List C): 3.0 - 4.0 Units

AND

PSYC230 - Psychology and Effective Behavior 3.0

AND

PSYC250 - Introduction to Abnormal Psychology 3.0

AND

PSYC190 - Psychology of Human Sexuality 3.0

AND

SOC100 - Introduction to Sociology 3.0

OR

SOC100H - Honors Introduction to Sociology 3.0

Total Units 20.0 - 21.0

Learning Outcomes

Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology. Respect and use critical thinking, skeptical inquiry, and when possible, the scientific approach to solve problems related to behavior and mental processes. Develop insight into their own and others' behavior and mental processes and apply effective strategies for self-management and self-improvement.

Labor Market Data

<table>
<thead>
<tr>
<th>Child, Family, and School Social Workers</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td>1879 Annual Openings</td>
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<td></td>
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<tr>
<td></td>
<td>35K</td>
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<table>
<thead>
<tr>
<th>Clinical, Counseling, and School Psychologists</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
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*For Program
Healthcare Social Workers

Job Growth

Wages

77K
AVERAGE
43K  131K
LOW  HIGH

Competition

1155
Annual
Openings
Graduates*
*For Program

Industrial-Organizational Psychologists

Job Growth

Wages

105K
AVERAGE
38K  271K
LOW  HIGH

Competition

12
Annual
Openings
Graduates*
*For Program

Social Justice Studies: Chicano, AA-T

A.A. Degree for Transfer

Control Number:

37132

Curriculum Id:

SCC.SOCC.AAT

The Associate of Arts in Social Justice: Chicano Studies for Transfer degree is an interdisciplinary social science and humanities program providing students an understanding of intersectional identities, marginalized groups, social structure, critical race studies, intersectional feminist studies within Chicana/o studies through both a historic and contemporary lens. This degree will enable students to understand and critique systematic oppression within social structures affecting the Chicana/o populations. Successful completion of the transfer degree in Social Justice: Chicano Studies guarantees the student acceptance into the California State University system to pursue a baccalaureate degree in Social Justice or a related field.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC120</td>
<td>Introduction to Sociological Research Methods</td>
<td>3.0</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
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</tr>
<tr>
<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HIST118</td>
<td>Social and Cultural History of the United States</td>
<td>3.0</td>
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<tr>
<td>HIST124</td>
<td>Mexican-American History in the United States</td>
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### Available Program Courses

<table>
<thead>
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<th>Course Title</th>
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<td>Introduction to Ethnic Studies</td>
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### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL246</td>
<td>Survey of Chicano Literature</td>
<td>3.0</td>
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<tr>
<td>HIST152</td>
<td>Latin American History</td>
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### Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMM120</td>
<td>Intercultural Communication</td>
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<tr>
<td>COMM120H</td>
<td>Honors Introduction to Intercultural Commun</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC170</td>
<td>Multicultural Psychology</td>
<td>3.0</td>
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### Program Requirements

**A.A. Degree for Transfer**

**Area 1: History and Government**

- **HIST118 - Social and Cultural History of the United States** | 3.0
- **OR**
- **HIST124 - Mexican-American History in the United States** | 3.0

**Area 2: Arts and Humanities**

- **ENGL246 - Survey of Chicano Literature** | 3.0
- **OR**
- **HIST152 - Latin American History** | 3.0

**Area 3: Social Science**

- **COMM120 - Intercultural Communication** | 3.0
- **OR**
- **COMM120H - Honors Introduction to Intercultural Communication** | 3.0
- **OR**
- **PSYC170 - Multicultural Psychology** | 3.0

**Area 4: Quantitative Reasoning and Research Methods** | 0.0 Units
Area 4: Quantitative Reasoning and Research Methods

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC120 - Introduction to Sociological Research Methods</td>
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Area 5: Major Preparation

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ETHN101 - Introduction to Ethnic Studies</td>
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Major requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHST101 - Introduction to Chicano Studies</td>
<td>3.0</td>
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AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC150 - Introduction to Race and Ethnicity</td>
<td>3.0</td>
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AND

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SOC220 - Introduction to Gender and Sexualities</td>
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AND

Select three (3) courses from at least two (2) of the following areas (List A):

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<thead>
<tr>
<th>Units</th>
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Total Units

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<tr>
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<tbody>
<tr>
<td>18.0</td>
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</table>

Learning Outcomes

Demonstrate familiarity with theories and theoretical perspectives, concepts, findings, assessments, problems, institutions, history, and trends within the field of Social Justice: Chicano Studies.

Articulate theoretical perspectives of social justice in Chicano studies, institutional oppression, marginalized groups, intersectional identities, decolonialism, and social institutions.

Labor Market Data

<table>
<thead>
<tr>
<th>Field</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropologists and Archeologists</td>
<td>62K</td>
<td>35K - 102K AVERAGE</td>
<td>77 Annual Openings Graduates*</td>
</tr>
<tr>
<td>Compliance Officers</td>
<td>81K</td>
<td>46K - 121K AVERAGE</td>
<td>1571 Annual Openings Graduates*</td>
</tr>
<tr>
<td>Geographers</td>
<td>92K</td>
<td>46K - 121K AVERAGE</td>
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</table>

*For Program
Social Justice Studies: Ethnic, AA-T

A.A. Degree for Transfer

Control Number:
37162

Curriculum Id:
SCC.SOCE.AAT

The Associate of Arts in Social Justice: Ethnic Studies for Transfer degree is an interdisciplinary social science and humanities program providing students an understanding of intersectional identities, marginalized groups, social structure, critical race studies, intersectional feminist studies, and ethnic studies through both a historic and contemporary lens. This degree will enable students to understand and critique systematic oppression within social structures. Successful completion of the transfer degree in Social Justice: Ethnic Studies guarantees the student acceptance into the California State University system to pursue a baccalaureate degree in Social Justice or a related field.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM120</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM120H</td>
<td>Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST240</td>
<td>Introduction to Peace and Conflict Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC170</td>
<td>Multicultural Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC180</td>
<td>Psychology of Gender</td>
<td>3.0</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST118</td>
<td>Social and Cultural History of the United States</td>
<td>3.0</td>
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<td>HIST124</td>
<td>Mexican-American History in the United States</td>
<td>3.0</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<tr>
<td>HIST127</td>
<td>Women in U.S. History</td>
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<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
<td>3.0</td>
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Available Program Courses

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<thead>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
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<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
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</tr>
<tr>
<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
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Available Program Courses

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Available Program Courses

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Available Program Courses

No value

Available Program Courses

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<td>ENGL278</td>
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<td>HIST152</td>
<td>Latin American History</td>
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</tr>
<tr>
<td>HIST162</td>
<td>Asian Civilizations</td>
<td>3.0</td>
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Program Requirements

A.A. Degree for Transfer

Area 1: History and Government 0.0 Units

HIST118 - Social and Cultural History of the United States 3.0

OR

HIST124 - Mexican-American History in the United States 3.0

OR

HIST127 - Women in U.S. History 3.0

OR

POLT221 - Women in American Politics 3.0
Area 2: Arts and Humanities 0.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL246 - Survey of Chicano Literature</td>
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<tr>
<td>OR</td>
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<tr>
<td>ENGL278 - Survey of Literature by Women</td>
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<tr>
<td>OR</td>
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<td>HIST152 - Latin American History</td>
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<td>OR</td>
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<td>HIST162 - Asian Civilizations</td>
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Area 3: Social Science 0.0 Units

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<th>Units</th>
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<tbody>
<tr>
<td>COMM120 - Intercultural Communication</td>
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</tr>
<tr>
<td>COMM120H - Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HIST240 - Introduction to Peace and Conflict Studies</td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>PSYC180 - Psychology of Gender</td>
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Area 4: Quantitative Reasoning and Research Methods 0.0 Units

<table>
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<th>Units</th>
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<tbody>
<tr>
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Area 5: Major Preparation 0.0 Units

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<td>ETHN101 - Introduction to Ethnic Studies</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>SOC150 - Introduction to Race and Ethnicity</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SOC220 - Introduction to Gender and Sexualities</td>
<td>3.0</td>
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<td>AND</td>
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</table>
Major requirements:  

Select three (3) courses from at least two (2) of the following areas (List A): 

Total Units  

Learning Outcomes  
Demonstrate familiarity with theories and theoretical perspectives, concepts, findings, assessments, problems, institutions, history, and trends within the field of Social Justice: Ethnic Studies.  
Articulate theoretical perspectives of social justice in ethnic studies, institutional oppression, marginalized groups, intersectional identities, decolonialism, and social institutions.

Labor Market Data

<table>
<thead>
<tr>
<th>Anthropologists and Archeologists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
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<td>AVERAGE</td>
<td>Annual</td>
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<tr>
<td></td>
<td></td>
<td>35K 102K</td>
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<table>
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<th>Compliance Officers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46K 121K</td>
<td>Openings</td>
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<td></td>
<td>LOW HIGH</td>
<td>Graduates*</td>
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<table>
<thead>
<tr>
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<td>56K 122K</td>
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<table>
<thead>
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<td></td>
<td>11K 207K</td>
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<td>Graduates*</td>
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<td>*For Program</td>
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<table>
<thead>
<tr>
<th>Interpreters and Translators</th>
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<th>Wages</th>
<th>Competition</th>
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<tr>
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<td></td>
<td>18K 203K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW HIGH</td>
<td>Graduates*</td>
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<td></td>
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</table>
Social Justice Studies: Gender, AA-T
A.A. Degree for Transfer

Control Number:
37133

Curriculum Id:
SCC.SOCG.AAT

The Associate of Arts in Social Justice Studies: Gender Studies for Transfer degree is an interdisciplinary social science and humanities program providing students with an intersectional understanding of gender studies through both a historic and contemporary lens. This degree will enable students to use a gendered lens to understand and critique multiple forms of oppression within social structures. Successful completion of the transfer degree in Social Justice guarantees the student acceptance into the California State University system to pursue a baccalaureate degree in Social Justice or a related field.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST127</td>
<td>Women in U.S. History</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
<td>3.0</td>
</tr>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SOC120</td>
<td>Introduction to Sociological Research Methods</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>ETHN130</td>
<td>Introduction to Chicano Studies</td>
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<tr>
<td>GSWS101</td>
<td>Introduction to Women's Studies</td>
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<tr>
<td>GSWS102</td>
<td>Money, Sex, and Power</td>
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Available Program Courses

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<th>Course Code</th>
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<thead>
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<tbody>
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</tr>
<tr>
<td>GSWS101</td>
<td>Introduction to Women's Studies</td>
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</tr>
<tr>
<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
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<tr>
<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
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Available Program Courses

No value

Available Program Courses

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<th>Units</th>
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<tbody>
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</tr>
<tr>
<td>PHIL120</td>
<td>Introduction to Social and Political Philosophy</td>
<td>3.0</td>
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Available Program Courses

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<th>Course Title</th>
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<tbody>
<tr>
<td>COMM225</td>
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<td>COMM225H</td>
<td>Honors Gender Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC180</td>
<td>Psychology of Gender</td>
<td>3.0</td>
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Program Requirements

A.A. Degree for Transfer

<table>
<thead>
<tr>
<th>Area 1: History or Government</th>
<th>Units</th>
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<tbody>
<tr>
<td>HIST127 - Women in U.S. History</td>
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<td>OR</td>
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<tr>
<td>POLT221 - Women in American Politics</td>
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<table>
<thead>
<tr>
<th>Area 2: Arts and Humanities</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL278 - Survey of Literature by Women</td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PHIL120 - Introduction to Social and Political Philosophy</td>
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<table>
<thead>
<tr>
<th>Area 3: Social Science</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMM225 - Gender Communication</td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>COMM225H - Honors Gender Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PSYC180 - Psychology of Gender</td>
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<table>
<thead>
<tr>
<th>Area 4: Quantitative Reasoning and Research Methods</th>
<th>Units</th>
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<td></td>
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</table>
Area 4: Quantitative Reasoning and Research Methods  
SOC120 - Introduction to Sociological Research Methods  3.0

Area 5: Major Preparation (may not be a course used to satisfy the core requirements)  
ETHN101 - Introduction to Ethnic Studies  3.0

OR

ETHN130 - Introduction to Chicano Studies  3.0

OR

GSWS101 - Introduction to Women's Studies  3.0

OR

GSWS102 - Money, Sex, and Power  3.0

Major Requirement:  
SOC150 - Introduction to Race and Ethnicity  3.0

AND

SOC220 - Introduction to Gender and Sexualities  3.0

AND

LIST A - Select three (3) courses from at least (2) two of the areas.  9.0

AND

ETHN101 - Introduction to Ethnic Studies  3.0

OR

ETHN130 - Introduction to Chicano Studies  3.0

OR

GSWS101 - Introduction to Women's Studies  3.0

Total Units  18.0

Learning Outcomes

Demonstrate familiarity with gender theories, concepts, findings, assessments, problems, institutions, history, and trends within the field of Social Justice and Gender Studies.

Articulate perspectives of social justice, institutional oppression, marginalized groups, intersectional identities, and social institutions through a gendered lens.

Labor Market Data

<table>
<thead>
<tr>
<th>Anthropologists and Archeologists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>62K</td>
<td>77</td>
</tr>
</tbody>
</table>
The Associate of Arts in Social Justice for Transfer degree is an interdisciplinary social science and humanities program providing students an understanding of intersectional identities, marginalized groups, social structure, critical race studies, gender and women’s studies, and ethnic studies through both a historic and contemporary lens. This degree will enable students to understand and critique systematic oppression within social structures. Successful completion of the transfer degree in Social Justice guarantees the student acceptance into the California State University system to pursue a baccalaureate degree in Social Justice or a related field.

**Program Courses**

Available Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>COMM225</td>
<td>Gender Communication</td>
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</tr>
<tr>
<td>COMM225H</td>
<td>Honors Gender Communication</td>
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</tr>
<tr>
<td>HIST240</td>
<td>Introduction to Peace and Conflict Studies</td>
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</tr>
<tr>
<td>PSYC170</td>
<td>Multicultural Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC180</td>
<td>Psychology of Gender</td>
<td>3.0</td>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL246</td>
<td>Survey of Chicano Literature</td>
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<tr>
<td>ENGL278</td>
<td>Survey of Literature by Women</td>
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<td>Latin American History</td>
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</tr>
<tr>
<td>HIST162</td>
<td>Asian Civilizations</td>
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<tr>
<td>PHIL120</td>
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<tbody>
<tr>
<td>ETHN101</td>
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<td>ETHN130</td>
<td>Introduction to Chicano Studies</td>
<td>3.0</td>
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<tr>
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<th>Course Title</th>
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<tr>
<td>ETHN130</td>
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<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
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<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
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<td>HIST124</td>
<td>Mexican-American History in the United States</td>
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<td>HIST127</td>
<td>Women in U.S. History</td>
<td>3.0</td>
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<tr>
<td>HIST132</td>
<td>Modern African History</td>
<td>3.0</td>
</tr>
<tr>
<td>POLT221</td>
<td>Women in American Politics</td>
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Available Program Courses

No value

Available Program Courses

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<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
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<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC120</td>
<td>Introduction to Sociological Research Methods</td>
<td>3.0</td>
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<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
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<tr>
<td>ETHN130</td>
<td>Introduction to Chicano Studies</td>
<td>3.0</td>
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Program Requirements

A.A. Degree for Transfer

<table>
<thead>
<tr>
<th>Area: History or Government</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>HIST124 - Mexican-American History in the United States</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>HIST127 - Women in U.S. History</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>POLT221 - Women in American Politics</td>
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Area 2: Arts and Humanities

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<th>Units</th>
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ENGL246 - Survey of Chicano Literature | 3.0 |
<p>| OR                          |       |
| ENGL278 - Survey of Literature by Women | 3.0 |
| OR                          |       |
| HIST152 - Latin American History | 3.0 |
| OR                          |       |</p>
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<thead>
<tr>
<th>Area 2: Arts and Humanities</th>
<th>0.0 Units</th>
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<tbody>
<tr>
<td>HIST162 - Asian Civilizations</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>PHIL120 - Introduction to Social and Political Philosophy</td>
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<table>
<thead>
<tr>
<th>Area 3: Social Science</th>
<th>0.0 Units</th>
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<tbody>
<tr>
<td>COMM120 - Intercultural Communication</td>
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<tr>
<td>COMM120H - Honors Introduction to Intercultural Communication</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>COMM225 - Gender Communication</td>
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<tr>
<td>OR</td>
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<td>COMM225H - Honors Gender Communication</td>
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<tr>
<td>OR</td>
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<tr>
<td>HIST240 - Introduction to Peace and Conflict Studies</td>
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<td>OR</td>
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<td>PSYC170 - Multicultural Psychology</td>
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<td>PSYC180 - Psychology of Gender</td>
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<tr>
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<tbody>
<tr>
<td>MATH219 - Statistics and Probability</td>
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<td>OR</td>
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<tr>
<td>MATH219H - Honors Statistics and Probability</td>
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</tr>
<tr>
<td>OR</td>
<td></td>
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<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOC120 - Introduction to Sociological Research Methods</td>
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<table>
<thead>
<tr>
<th>Area 5: Major Preparation (may not be a course used to satisfy the core requirements)</th>
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</thead>
<tbody>
<tr>
<td>ETHN101 - Introduction to Ethnic Studies</td>
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</table>
Area 5: Major Preparation (may not be a course used to satisfy the core requirements) 0.0 Units

ETHN130 - Introduction to Chicano Studies 3.0

Major Requirements: 18.0 - 19.0 Units

SOC150 - Introduction to Race and Ethnicity 3.0

AND

SOC220 - Introduction to Gender and Sexualities 3.0

AND

ETHN101 - Introduction to Ethnic Studies 3.0

OR

ETHN130 - Introduction to Chicano Studies 3.0

AND

Select three (3) courses from at least two (2) of the following areas (List A): 9.0 - 10.0

Total Units 18.0 - 19.0

Learning Outcomes

- Demonstrate familiarity with theories and theoretical perspectives, concepts, findings, assessments, problems, institutions, history, and trends within the field of Social Justice.
- Articulate perspectives of social justice, institutional oppression, marginalized groups, intersectional identities, and social institutions.

Labor Market Data

<table>
<thead>
<tr>
<th>Anthropolists and Archeologists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tr>
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<td>*For Program</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
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<table>
<thead>
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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td>*For Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Geographers</th>
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<th>Competition</th>
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<td></td>
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Sociology, AA
A.A. Degree Major

Control Number:
11947

Curriculum Id:
SCC.SOC.AA

The Associate of Arts degree in Sociology is an interdisciplinary social science program providing students an understanding of interpersonal behavior and social structure, a critical appreciation of contemporary social life, a form of reference for an analysis of human behavior. Completion of the associate in arts degree prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANTH100</td>
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<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
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<tr>
<td>ENGL103</td>
<td>Critical Thinking and Writing</td>
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<td>Honors Critical Thinking and Writing</td>
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<td>PSYC100</td>
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<td>PSYC100H</td>
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<tr>
<td>SOC100</td>
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<tr>
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<td>Introduction to Sociological Research Methods</td>
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### Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>ANTH104</td>
<td>Language and Culture</td>
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<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
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<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC157</td>
<td>Introduction to Child Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC240</td>
<td>Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC130</td>
<td>Relationships, Marriages, and Family Dynamics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC240</td>
<td>Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Program Requirements

**A.A. Degree Major**

**Major requirements:**

- SOC100H - Honors Introduction to Sociology 3.0

**OR**

- SOC100 - Introduction to Sociology 3.0

**Select two (1) courses from the following (List B):**

- ANTH100 - Introduction to Cultural Anthropology 3.0

**OR**

- ANTH100H - Honors Introduction to Cultural Anthropology 3.0

**AND**

- ENGL103 - Critical Thinking and Writing 4.0

**OR**

- ENGL103H - Honors Critical Thinking and Writing 4.0

**AND**

- PSYC100 - Introduction to Psychology 3.0
Select two (1) courses from the following (List B): 3.0 - 4.0 Units

OR

PSYC100H - Honors Introduction to Psychology 3.0

AND

SOC115 - Death and Dying 3.0

Select two (2) courses from the following (List A): 6.0 Units

SOC130 - Relationships, Marriages, and Family Dynamics 3.0

AND

SOC150 - Introduction to Race and Ethnicity 3.0

AND

SOC220 - Introduction to Gender and Sexualities 3.0

AND

SOC240 - Introduction to Social Psychology 3.0

Select two (2) courses from the following core requirements: 6.0 - 7.0 Units

MATH219 - Statistics and Probability 4.0

OR

MATH219H - Honors Statistics and Probability 4.0

OR

MATH220 - Statistics and Probability with Integrated Review 4.0

AND

SOC116 - Social Problems 3.0

AND

SOC120 - Introduction to Sociological Research Methods 3.0

Total Units 18.0 - 20.0

Learning Outcomes

- Learn to implement perspectives in dealing with social dynamics.
- Learn the application of research methods in investigating social problems.
- Understand group interaction, including gender, ethnicity, age differences, and social class.
- Learn the influence of social institutions on individuals and groups.

Labor Market Data

Compliance Officers
### Environmental Scientists and Specialists, Including Health

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>91K</td>
<td>47K</td>
<td>150K</td>
</tr>
</tbody>
</table>

### Historians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>51K</td>
<td>11K</td>
<td>207K</td>
</tr>
</tbody>
</table>

### Labor Relations Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>79K</td>
<td>49K</td>
<td>128K</td>
</tr>
</tbody>
</table>

### Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>63K</td>
<td>13K</td>
<td>201K</td>
</tr>
</tbody>
</table>

---

**Sociology, AA-T**

**A.A. Degree for Transfer**

**Control Number:**

30600

**Curriculum Id:**

SCC.SOC.AAT

The Associate in Arts in Sociology for Transfer degree is an interdisciplinary social science program providing students an understanding of interpersonal behavior and social structure, a critical appreciation of contemporary social life, and a form of reference for an analysis of human behavior. Successful completion of the transfer degree in Sociology guarantees the student acceptance to a local California
State University to pursue a baccalaureate degree in Sociology or a related field.

## Program Courses

### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC100</td>
<td>Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC100H</td>
<td>Honors Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC116</td>
<td>Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC240</td>
<td>Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC130</td>
<td>Relationships, Marriages, and Family Dynamics</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC240</td>
<td>Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL103</td>
<td>Critical Thinking and Writing</td>
<td>4.0</td>
</tr>
<tr>
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<td>Honors Critical Thinking and Writing</td>
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</tr>
<tr>
<td>PSYC100</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC115</td>
<td>Death and Dying</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
<td>3.0</td>
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### Program Requirements

#### A.A. Degree for Transfer

**Major requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td><strong>OR</strong></td>
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</table>
Major requirements: 10.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
<td>4.0</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>SOC100 - Introduction to Sociology</td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOC100H - Honors Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SOC116 - Social Problems</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following (List B): 3.0 - 4.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH100 - Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ANTH100H - Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ENGL103 - Critical Thinking and Writing</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ENGL103H - Honors Critical Thinking and Writing</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SOC115 - Death and Dying</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SOC220 - Introduction to Gender and Sexualities</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select two (2) courses from the following (List A): 6.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC130 - Relationships, Marriages, and Family Dynamics</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC240 - Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>SOC240 - Introduction to Social Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units 19.0 - 20.0

Learning Outcomes

Demonstrate familiarity with the theoretical perspectives, concepts, findings, problems, institutions, history, and trends in the field of sociology.
## Labor Market Data

### Compliance Officers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>81K</td>
<td></td>
<td>1571</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46K</td>
<td>121K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
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</tbody>
</table>

### Environmental Scientists and Specialists, Including Health

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>91K</td>
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<td>375</td>
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<tr>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47K</td>
<td>150K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Historians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>51K</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11K</td>
<td>207K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Labor Relations Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>79K</td>
<td></td>
<td>320</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49K</td>
<td>128K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>63K</td>
<td></td>
<td>10566</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13K</td>
<td>201K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

---

### Business, Finance & Management

Have you ever considered starting your own business? Does working with financial information appeal to you? Do you have an eye for marketing? The majors in the Interest Area of Business and Management prepare students to work in fields such as Accounting, Computer Information Systems, Management, Marketing and more. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

### Programs

[3D Printing / Advanced Manufacturing, CC](https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32fba6eb18)
The Certificate of Completion 3D Printing / Advanced Manufacturing is designed to teach students how to use a 3D printer and the technology behind 3D printing. Students will learn about the different plastic filaments that are used, and they will learn techniques for feeding the plastic filament into the 3D printer for optimal performance. Students will also learn about components of the printer, such
as the extruder nozzle, contact sensor, calibration techniques, software, design methods, and reducing defects. An emphasis is placed on familiarizing students with the use of 3D printing in the areas of personal applications, engineering, design and manufacturing. It will also be of interest to all students who would like to learn more about 3D printing and the future applications of this exciting technology.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS101</td>
<td>Introduction to 3D Modeling using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS105</td>
<td>Introduction to 3D Animation using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS130</td>
<td>Introduction to 3D Printing</td>
<td>60.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate Requirement: 180 hours (credits are in hours)</th>
<th>180.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS101 - Introduction to 3D Modeling using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VBUS105 - Introduction to 3D Animation using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VBUS130 - Introduction to 3D Printing</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 180.0

**Learning Outcomes**

Demonstrate how to make 3D models and designs.

**Labor Market Data**

**Architectural and Engineering Managers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>171K</td>
<td>814 Annual Openings Graduates*</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>107K LOW</td>
<td>315K HIGH</td>
</tr>
</tbody>
</table>

**Cost Estimators**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66K</td>
<td>997 Annual Openings Graduates*</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32K LOW</td>
<td>129K HIGH</td>
</tr>
</tbody>
</table>

**Engineers, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>104K</td>
<td>788 Annual Openings</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
</tbody>
</table>
Accounting, AS  
A.S. Degree Major

Control Number:  
11858

Curriculum Id:  
SCC.ACCT.AS

The Associate of Science degree in Accounting prepares students for entry-level positions and promotional opportunities in accounting and administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision making. Entry-level employment opportunities include positions in accounts receivable/payable, payroll, income tax preparation, cost accounting, and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation and financial statement analysis.

Program Courses  
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT204</td>
<td>Managerial Cost Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT205</td>
<td>Intermediate Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS106</td>
<td>Microsoft Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements  
A.S. Degree Major

**Major requirements:**  
20.0 Units

ACCT101 - Financial Accounting  
4.0

AND
Major requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT102 - Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CIS101 - Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CIS106 - Microsoft Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACCT204 - Managerial Cost Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACCT205 - Intermediate Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS222 - Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MGMT122 - Business Communications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units: 20.0

Learning Outcomes

Be prepared for a job or transfer to a four-year institution.

Labor Market Data

**Accountants and Auditors**

- Job Growth: 8419 Annual Openings
- Graduates* for Program
- Wages:
  - AVERAGE: 72K
  - LOW: 39K
  - HIGH: 142K
- Competition: 8419

**Bookkeeping, Accounting, and Auditing Clerks**

- Job Growth: 10421 Annual Openings
- Graduates* for Program
- Wages:
  - AVERAGE: 47K
  - LOW: 27K
  - HIGH: 70K
- Competition: 10421

**Brokerage Clerks**

- Job Growth: 224 Annual Openings
- Wages:
  - AVERAGE: 56K
  - LOW: 41K
  - HIGH: 78K
- Competition: 224
Accounting, CA
Certificate of Achievement

Control Number:
21631

Curriculum Id:
SCC.ACCT.CA

The Certificate of Achievement in Accounting prepares students for entry-level positions and promotional opportunities in accounting and administrative departments of businesses in public and private sector areas such as manufacturing, merchandising, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision making. Entry-level employment opportunities include positions in accounts receivable/payable, payroll, income tax preparation, cost accounting, and a number of trainee positions. Promotional opportunities include higher-level responsibilities in these areas and the areas of general ledger, financial statement preparation and financial statement analysis.

Program Courses
Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT204</td>
<td>Managerial Cost Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT205</td>
<td>Intermediate Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS106</td>
<td>Microsoft Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Program Requirements
Certificate of Achievement

Certificate requirements: 20.0 Units

ACCT101 - Financial Accounting 4.0

AND

ACCT102 - Managerial Accounting 4.0

AND

CIS101 - Introduction to Microsoft Office 3.0

AND

CIS106 - Microsoft Excel 3.0

AND

ACCT204 - Managerial Cost Accounting 3.0

OR

ACCT205 - Intermediate Accounting I 3.0

AND

BUS222 - Business Writing 3.0

OR

MGMT122 - Business Communications 3.0

Total Units 20.0

Learning Outcomes
Be eligible to apply for a job in accounting.

Labor Market Data

<table>
<thead>
<tr>
<th>Accountants and Auditors</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>72K</td>
<td>8419</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>LOW</td>
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</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bookkeeping, Accounting, and Auditing Clerks</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>47K</td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<td>HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For Program
Advertising, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.MKTGA.CERT

The Certificate of Proficiency in Advertising is designed to prepare students for various marketing, sales, and retail store management positions; to assist existing marketing managers and sales professionals in upgrading their skills; and to open up new career opportunities within the marketing field. Program content includes selection and buying of merchandise, advertising, sales, product distribution, customer relations, and pricing. The student will then specialize in one of the option areas: general marketing, professional selling, advertising, or retailing management. The certificate program provides practical skills for the student within specific areas of marketing.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG115</td>
<td>Consumer Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG135</td>
<td>Web Marketing and Promotion</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Proficiency

Certificate requirements: 12.0 Units
Certificate requirements:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG112 - Principles of Advertising</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113 - Principles of Marketing</td>
<td>3.0</td>
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<tr>
<td>MKTG115 - Consumer Behavior</td>
<td>3.0</td>
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<tr>
<td>MKTG135 - Web Marketing and Promotion</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>12.0</strong></td>
</tr>
</tbody>
</table>

Learning Outcomes  
Be employable at a first-level advertising position.

Labor Market Data

**Advertising and Promotions Managers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>111K</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>26K</td>
<td>287K</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**Advertising Sales Agents**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>59K</td>
<td>1425</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26K</td>
<td>144K</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**Computer Occupations, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77K</td>
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<td></td>
<td>AVERAGE</td>
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<td></td>
<td>39K</td>
<td>143K</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**Graphic Designers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56K</td>
<td>2588</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21K</td>
<td>108K</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

*For Program
Market Research Analysts and Marketing Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>65K</td>
<td>34K</td>
<td>5529 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>131K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

Apply Now  Request Info

Business Administration, AS
A.S. Degree Major

Control Number:
11857

Curriculum Id:
SCC.BUS.AS

The Associate of Science degree in Business Administration enables students to transfer to a four-year institution leading to a baccalaureate degree. Career opportunities exist in many areas of business administration such as accounting, financial planning and analysis, financial service specialties, management, marketing and sales, production and logistics, and systems and technology development.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS100</td>
<td>Fundamentals of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH150</td>
<td>Calculus for Biological, Management, and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MGMT120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS105</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
### A.S. Degree Major

**Major requirements:** 23.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101 - Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACCT102 - Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS105 - Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS150 - Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS222 - Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ECON101 - Principles/Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ECON102 - Principles/Macro</td>
<td>3.0</td>
</tr>
<tr>
<td>Select one (1) course from the following:</td>
<td>3.0 - 5.0 Units</td>
</tr>
<tr>
<td>BUS100 - Fundamentals of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>MATH150 - Calculus for Biological, Management and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>MKTG113 - Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACCT100 - Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS120 - Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MGMT120 - Principles of Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 26.0 - 28.0

### Learning Outcomes

Transfer to a four-year institution. Prepare students for entry-level business occupations.
## Labor Market Data

### Accountants and Auditors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72K</td>
<td>8419</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>39K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>142K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Graduates</strong>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Chief Executives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>141K</td>
<td>2434</td>
</tr>
<tr>
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<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20K</td>
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</tr>
<tr>
<td></td>
<td>446K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Graduates</strong>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Computer and Information Systems Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>159K</td>
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<td></td>
<td>90K</td>
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<tr>
<td></td>
<td>283K</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Graduates</strong>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Computer User Support Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56K</td>
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<td><strong>AVERAGE</strong></td>
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<td>36K</td>
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<td></td>
<td>92K</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Graduates</strong>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Customer Service Representatives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td></td>
<td>26K</td>
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</tr>
<tr>
<td></td>
<td>63K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Graduates</strong>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

---

**Business Administration, AS-T**

A.S. Degree for Transfer

**Control Number:**

31365

**Curriculum Id:**

SCC.BUS.AST
The Associate in Science in Business Administration for Transfer degree provides students with a comprehensive business education in the principles and practices of all phases of business. A student graduating with an Associate in Science degree in Business for Transfer will seamlessly transfer to a California State University (CSU) to complete a bachelor’s degree. Completion of the requirements guarantees students the ability to transfer to a CSU school. Students will be able to pursue a baccalaureate degree and prepare to pursue a career in the field of business, industry or government.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS100</td>
<td>Fundamentals of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR100</td>
<td>The Computer and Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH150</td>
<td>Calculus for Biological, Management, and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
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</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS105</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

A.S. Degree for Transfer

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101 - Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACCT102 - Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS105 - Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
</tbody>
</table>
## Major requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECON101 - Principles/Micro</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td><strong>ECON102 - Principles/Macro</strong></td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Select one (1) course from the following (List A):</strong></td>
<td></td>
</tr>
<tr>
<td>MATH219 - Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH219H - Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>MATH150 - Calculus for Biological, Management and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Select two (2) courses from the following (List B): An additional course from List A (may not be a course used to satisfy the requirements of List A)</strong></td>
<td></td>
</tr>
<tr>
<td>BUS100 - Fundamentals of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS222 - Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BUS150 - Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CMPR100 - The Computer and Society</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>27.0 - 29.0</td>
</tr>
</tbody>
</table>

## Learning Outcomes

- Transfer to a four-year institution.
- Have a broad background in the fundamentals of business leading to a career in management, finance, teaching or entrepreneurship.

## Labor Market Data

### Accountants and Auditors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
<td><strong>AVERAGE</strong></td>
<td>8419</td>
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*For Program
### Chief Executives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
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<td>20K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
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<td>20K</td>
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### Computer and Information Systems Managers

<table>
<thead>
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<th>Competition</th>
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<tr>
<td></td>
<td>283K</td>
<td>Graduates*</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
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<tr>
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<td>90K</td>
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### Computer User Support Specialists

<table>
<thead>
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<tbody>
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<tr>
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<tr>
<td>LOW</td>
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### Customer Service Representatives

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<td>LOW</td>
<td>HIGH</td>
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</tr>
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<td></td>
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---

### Business Information Worker, CERT

Certificate of Proficiency

**Control Number:**

**Curriculum Id:**

SCC.BIW.CERT

The certificate of proficiency in Business Information Worker (BIW) is designed to prepare students for entry-level office and administrative support in a variety of job positions, including general office clerks, retail salespersons, customer service representatives, receptionists, and information clerks. With solid foundation in Microsoft Windows and Office, as well as strong digital and web literacy skills, students will be prepared to meet the workforce demands of today's business environment.

### Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
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<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
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<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
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</tr>
<tr>
<td>CMPR100</td>
<td>The Computer and Society</td>
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<tr>
<td>MGMT121</td>
<td>Human Relations and Organizational Behavior</td>
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</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
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</table>

**Program Requirements**

Certificate of Proficiency

**Certificate requirements:** 12.0 Units

- CIS101 - Introduction to Microsoft Office 3.0

**AND**

- BUS121 - Human Relations and Organizational Behavior 3.0

**OR**

- MGMT121 - Human Relations and Organizational Behavior 3.0

**AND**

- BUS150 - Introduction to Information Systems and Applications 3.0

**OR**

- CMPR100 - The Computer and Society 3.0

**AND**

- BUS222 - Business Writing 3.0

**OR**

- MGMT122 - Business Communications 3.0

**Total Units** 12.0

**Learning Outcomes**

Perform basic computer application skills including beginning Excel, Word and Outlook while exhibiting basic oral and written communication skills for basic office employment.

**Labor Market Data**

**Data Entry Keyers**

<table>
<thead>
<tr>
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<th>Competition</th>
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<tbody>
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*For Program
Executive Secretaries and Executive Administrative Assistants

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<thead>
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File Clerks

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<th>Competition</th>
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Office Clerks, General

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<th>Competition</th>
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Receptionists and Information Clerks

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Business Management, AS

A.S. Degree Major

Control Number:
11859

Curriculum Id:
SCC.BM.AS

The Associate of Science degree in Business Management is designed to enable students to handle basic problems encountered in managing within a business environment including the managing of a marketing program, the making of decisions and problem solving, the coordinating of activities, the influencing of staff, and the understanding of finance. Entry-level careers include management trainees and assistant managers or supervisors.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
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<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
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</table>
## Course Code | Course Title | Units
---|---|---
BUS100 | Fundamentals of Business | 3.0
BUS120 | Principles of Management | 3.0
BUS222 | Business Writing | 3.0
MGMT120 | Principles of Management | 3.0
MKTG113 | Principles of Marketing | 3.0

### Available Program Courses

| Course Code | Course Title | Units |
---|---|---|
BUS105 | Legal Environment of Business | 3.0
BUS121 | Human Relations and Organizational Behavior | 3.0
BUS127 | Introduction to E-Commerce | 3.0
BUS150 | Introduction to Information Systems and Applications | 3.0
MGMT121 | Human Relations and Organizational Behavior | 3.0
MGMT135 | Human Resource Management | 3.0

### Program Requirements

**A.S. Degree Major**

Major requirements: 15.0 - 16.0 Units

**ACCT100 - Accounting for Small Business**  
3.0

OR

**ACCT101 - Financial Accounting**  
4.0

AND

**BUS100 - Fundamentals of Business**  
3.0

AND

**BUS120 - Principles of Management**  
3.0

OR

**MGMT120 - Principles of Management**  
3.0

AND

**BUS222 - Business Writing**  
3.0

AND

**MKTG113 - Principles of Marketing**  
3.0

Select two (2) courses from the following: 6.0 Units
Select two (2) courses from the following: 6.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BUS105 - Legal Environment of Business</td>
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</tr>
<tr>
<td>BUS127 - Introduction to E-Commerce</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS150 - Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT135 - Human Resource Management</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td>BUS121 - Human Relations and Organizational Behavior</td>
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Total Units 21.0 - 22.0

Learning Outcomes

Labor Market Data

Accountants and Auditors

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Chief Executives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
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Computer and Information Systems Managers

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<th>Competition</th>
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<td>Graduates*</td>
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Computer User Support Specialists

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</tr>
<tr>
<td>HIGH</td>
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*For Program
Code Enforcement and Compliance, AS
A.S. Degree Major

Control Number:
37073

Curriculum Id:
SCC.PBLCD.AS

This program is designed to provide academic and professional training for code enforcement personnel and/or individuals seeking employment in Public Sector Agencies such as Public works, Planning & Building, Community Development, and any municipal agency that provide code compliance dealing directly with the public. If approved by the State, this will be the first associate degree of its kind within the State of California.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>BUS222</td>
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<td>3.0</td>
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<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CJ101</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>3.0</td>
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<tr>
<td>COMM100H</td>
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<td>3.0</td>
</tr>
<tr>
<td>COMM120</td>
<td>Intercultural Communication</td>
<td>3.0</td>
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<tr>
<td>COMM120H</td>
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<td>PBLC085</td>
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<td>PBLC151</td>
<td>Ethics and Professionalism: The High Calling of Public Service</td>
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<td>PBLC155</td>
<td>The Art of Politics and Policymaking</td>
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<td>POLT101</td>
<td>American Government and Politics</td>
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<td>RE103</td>
<td>Legal Aspects of Real Estate</td>
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Program Requirements
A.S. Degree Major

Major requirements: 9.0 Units

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<tr>
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<th>Course Title</th>
<th>Units</th>
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<td>CIS101</td>
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Select nine (9) units from the following: 9.0 Units

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<tr>
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<td>Business Writing</td>
<td>3.0</td>
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<tr>
<td>MGMT122</td>
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<td>COMM100</td>
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OR
Select nine (9) units from the following:  

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<th>Course Title</th>
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<td>POLT101H</td>
<td>Honors American Government and Politics</td>
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<td>OR</td>
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<td>COMM120H</td>
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</table>

Total Units 18.0

Learning Outcomes
Assess the laws and procedures related to code enforcement for Substandard Housing, Zoning, and Vehicle Abatement. Formulate the elements for preparation and documentation for Administrative Hearings and prosecution in court.

Labor Market Data

**Construction and Building Inspectors**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
<td>AVERAGE</td>
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<tr>
<td></td>
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<td>722 Annual Openings</td>
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<tr>
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</tr>
<tr>
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<tr>
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**Fire Inspectors and Investigators**

<table>
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<tr>
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<th>Competition</th>
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<tr>
<td></td>
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<tr>
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Code Enforcement and Compliance, CA
Certificate of Achievement

Control Number:
37102

Curriculum Id:
SCC.PBLCD.CA

The Certificate of Achievement in Code Enforcement and Compliance provides students with the course work necessary for employment. It is designed for individuals seeking a career as a Code Enforcement Officer as well as sworn or non-sworn inspectors, officers, or investigators employed by a city, state, or county agency seeking specialized training in prevention, detection, investigation, and enforcement of violations of statutes or ordinances regulating public health, safety, and welfare, public works, business activities, and consumer protection, building standards, land use, or municipal affairs.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>BUS090</td>
<td>Principles of Project Management</td>
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<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CJ101</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
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<tr>
<td>COMM120</td>
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</tr>
<tr>
<td>PBLC050</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC061</td>
<td>Plan Interpretation and Cost Estimating</td>
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<td>Principles of Project Management</td>
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<tr>
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<td>Ethics and Professionalism: The High Calling of Public Service</td>
<td>3.0</td>
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<td>The Art of Politics and Policymaking</td>
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<td>POLT101</td>
<td>American Government and Politics</td>
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<tr>
<td>RE103</td>
<td>Legal Aspects of Real Estate</td>
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Program Requirements
Certificate of Achievement

Certificate Requirements: 9.0 Units
**Certificate Requirements:**

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td>PBLC085 - Code Enforcement Officer</td>
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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td></td>
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<tr>
<td>BUS222 - Business Writing</td>
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<td>OR</td>
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<tr>
<td>MGMT122 - Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>COMM100 - Introduction to Interpersonal Communication</td>
<td>3.0</td>
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<tr>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
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<tr>
<td>OR</td>
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<tr>
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<td>OR</td>
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<tr>
<td>COMM120H - Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PBLC050 - Fundamentals of Public Works</td>
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<td>OR</td>
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<td>PBLC061 - Plan Interpretation and Cost Estimating</td>
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<td>PBLC151 - Ethics and Professionalism: The High Calling of Public Service</td>
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<td>PBLC155 - The Art of Politics and Policymaking</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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<tr>
<td>POLT101 - American Government and Politics</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Select nine (9) units from the following: 9.0 Units

OR

POLT101H - Honors American Government and Politics 3.0

OR

BUS090 - Principles of Project Management 3.0

OR

PBLC080 - Principles of Project Management 3.0

Total Units 18.0

Learning Outcomes
Assess the laws and procedures related to code enforcement for Substandard Housing, Zoning, and Vehicle Abatement.
Formulate the elements for preparation and documentation for Administrative Hearings and prosecution in court.

Labor Market Data

<table>
<thead>
<tr>
<th>Construction and Building Inspectors</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
<td>32K</td>
<td>722</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>132K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>132K</td>
<td>Openings</td>
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<tr>
<td></td>
<td>HIGH</td>
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<td>Graduates*</td>
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<td>LOW</td>
<td>132K</td>
<td>For Program</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fire Inspectors and Investigators</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>137K</td>
<td>86K</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>165K</td>
<td>Annual</td>
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<tr>
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<td>LOW</td>
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<td>Openings</td>
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<td>HIGH</td>
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</tr>
<tr>
<td></td>
<td>LOW</td>
<td>165K</td>
<td>For Program</td>
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</table>

Apply Now Request Info

Code Enforcement Officer, CERT
Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.PBLCO.CERT

The Certificate of Proficiency in Code Enforcement provides students with the course work necessary for employment. It also includes the basic information for a successful career in code enforcement. It is designed for individuals seeking a career as a Code Enforcement Officer as well as sworn or non-sworn inspectors, officers, or investigators employed by a city, state, or county agency seeking specialized training in prevention, detection, investigation and enforcement of violations of statutes or ordinances regulating public health, safety, and welfare, public works, business activities and consumer protection, building standards, land-use, or municipal affairs.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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</table>
### Program Requirements

**Certificate of Proficiency**

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>Units</th>
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<td>PBLC088 - Advanced Code Enforcement Officer</td>
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<tr>
<td>PBLC089 - Code Enforcement Officer-Supervision</td>
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</table>

**Total Units**

4.0

### Learning Outcomes

Assess the laws and procedures related to code enforcement for Substandard Housing, Zoning, and Vehicle Abatement. Formulate the elements for preparation and documentation for Administrative Hearings and prosecution in court.

### Labor Market Data

#### Construction and Building Inspectors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
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<td></td>
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<tr>
<td>LOW</td>
<td>32K</td>
<td>32K</td>
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<td>HIGH</td>
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<td>132K</td>
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#### Fire Inspectors and Investigators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
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<tbody>
<tr>
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<td><strong>Graduates</strong></td>
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<tr>
<td>HIGH</td>
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<td>165K</td>
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*For Program*
The Associate of Science degree in Computer Information Systems is concerned with the development of procedures which are effective and efficient, computer languages suitable for starting these procedures, and systems for executing the procedures. This may include the ability to write programs in Visual BASIC, C++ or Java and applications such as Excel. Graduates of the program are prepared for employment as trainees in information systems, computer programming, and systems analysis. Completion of the degree provides background for curriculum at a four-year institution such as the California State University system at Fullerton or Pomona. Students intending to obtain a bachelor’s degree in Computer Information Systems should consult the major requirements for upper-division standing listed under the Business Administration major at the school of their choice.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<td>ACCT102</td>
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<td>CIS103</td>
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<td>3.0</td>
</tr>
<tr>
<td>CIS108</td>
<td>Microsoft Access</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS110</td>
<td>Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR121</td>
<td>Programming Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR213</td>
<td>C# Programming</td>
<td>3.0</td>
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<tr>
<td>PBLC110</td>
<td>Introduction to Microsoft Project</td>
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### Program Requirements

**A.S. Degree Major**

<table>
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### Major requirements:

19.0 Units

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<td>CIS106 - Microsoft Excel</td>
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<td>AND</td>
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<td>CMPR105 - Visual BASIC Programming</td>
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<td>CMPR112 - Java Programming</td>
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<td>CMPR120 - Introduction to Programming</td>
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Select one (1) course from the following: 3.0 - 4.0 Units

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<th>Course</th>
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<td>ACCT102 - Managerial Accounting</td>
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<td>CIS103 - Microsoft Word</td>
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<td>CIS108 - Microsoft Access</td>
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<td>CMPR213 - C# Programming</td>
<td>3.0</td>
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<tr>
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OR

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>PBLC110 - Introduction to Microsoft Project</td>
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Total Units 22.0 - 23.0

### Learning Outcomes

- Demonstrate knowledge and practice of CIS systems and computer science.
- Demonstrate knowledge of software applications.
## Labor Market Data

<table>
<thead>
<tr>
<th>Computer and Information Research Scientists</th>
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<thead>
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<table>
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<td>112K HIGH</td>
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</table>

<table>
<thead>
<tr>
<th>Computer Occupations, All Other</th>
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<th>Competition</th>
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<td>AVERAGE</td>
<td>Graduates*</td>
</tr>
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<td></td>
<td>39K LOW</td>
<td>*For Program</td>
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<tr>
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**Computer Information Systems, CA**

Certificate of Achievement

**Control Number:**
21647

**Curriculum Id:**
SCC.CIS.CA
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Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS106</td>
<td>Microsoft Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR105</td>
<td>Visual BASIC Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR112</td>
<td>Java Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR120</td>
<td>Introduction to Programming</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS103</td>
<td>Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS108</td>
<td>Microsoft Access</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS110</td>
<td>Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR121</td>
<td>Programming Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR213</td>
<td>C# Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC110</td>
<td>Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>19.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101 - Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS150 - Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CIS106 - Microsoft Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
</tbody>
</table>
Certificate requirements:  19.0 Units

CMPR105 - Visual BASIC Programming     3.0

AND

CMPR112 - Java Programming     3.0

AND

CMPR120 - Introduction to Programming     3.0

Select one (1) course from the following:  3.0 - 4.0 Units

ACCT100 - Accounting for Small Business     3.0

AND

ACCT102 - Managerial Accounting     4.0

AND

CIS103 - Microsoft Word     3.0

AND

CIS108 - Microsoft Access     3.0

AND

CMPR121 - Programming Concepts     3.0

AND

CMPR213 - C# Programming     3.0

AND

CIS110 - Introduction to Microsoft Project     3.0

OR

PBLC110 - Introduction to Microsoft Project     3.0

Total Units     22.0 - 23.0

Learning Outcomes

Demonstrate knowledge and practice of CIS systems and computer science.
Demonstrate knowledge of software applications.

Labor Market Data

<table>
<thead>
<tr>
<th>Computer and Information Research Scientists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>129K</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>186K</td>
<td>Graduates</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
The Computerized Accounting Certificate program is designed to provide students with basic accounting skills and knowledge necessary to obtain entry-level accounting and other accounting support positions in small and medium-sized businesses which use computerized accounting systems.

**Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT035</td>
<td>QuickBooks</td>
<td>2.0</td>
</tr>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS106</td>
<td>Microsoft Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR100</td>
<td>The Computer and Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 11.0 - 12.0 Units

- ACCT035 - QuickBooks: 2.0
- AND
- ACCT101 - Financial Accounting: 4.0
- OR
- ACCT100 - Accounting for Small Business: 3.0
  - AND
  - CIS101 - Introduction to Microsoft Office: 3.0
  - OR
  - CMPR100 - The Computer and Society: 3.0
    - AND
    - CIS106 - Microsoft Excel: 3.0

Total Units 11.0 - 12.0

Learning Outcomes
Be eligible for employment as a bookkeeper, accounting clerk, or other comparable jobs.

Labor Market Data

Accountants and Auditors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72K</td>
<td>8419 Annual</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>39K LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>142K HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Bookkeeping, Accounting, and Auditing Clerks

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47K</td>
<td>10421 Annual</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>27K 70K</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>
Brokerage Clerks

Job Growth

Wages

56K

AVERAGE

41K

LOW

78K

HIGH

Competition

224

Annual

Openings

Graduates*

*For Program

Payroll and Timekeeping Clerks

Job Growth

Wages

54K

AVERAGE

34K

LOW

76K

HIGH

Competition

910

Annual

Openings

Graduates*

*For Program

Statistical Assistants

Job Growth

Wages

51K

AVERAGE

35K

LOW

79K

HIGH

Competition

30

Annual

Openings

Graduates*

*For Program

Construction Inspection, AS

A.S. Degree Major

Control Number:

32319

Curriculum Id:

SCC.PBLCC.AS

Public Works Inspectors entering the field or advancing within the field have a designated course of study to improve their employability. Course content is specifically designed to provide the inspectors with coursework relative to the field of inspection and related responsibilities.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC050</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC051</td>
<td>Infrastructure Construction and Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC061</td>
<td>Plan Interpretation and Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PBLC063</td>
<td>Construction Materials and Testing</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC070</td>
<td>Construction Inspection</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

A.S. Degree Major

**Major requirements:**

- **21.0 Units**
- PBLC050 - Fundamentals of Public Works
- AND
- PBLC051 - Infrastructure Construction and Maintenance
- AND
- PBLC061 - Plan Interpretation and Cost Estimating
- AND
- PBLC063 - Construction Materials and Testing
- AND
- PBLC070 - Construction Inspection
- AND
- BUS222 - Business Writing
- OR
- MGMT122 - Business Communications
- AND
- CIS101 - Introduction to Microsoft Office

**Total Units:** 21.0

**Learning Outcomes**

Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Inspection.

**Labor Market Data**

**Construction and Building Inspectors**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85K</td>
<td>32K</td>
<td>722</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>132K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
</tbody>
</table>

**Fire Inspectors and Investigators**

*For Program
Construction Inspection, CA
Certificate of Achievement

Control Number:
11910

Curriculum Id:
SCC.PBLCC.CA

Public Works Inspectors entering the field or advancing within the field have a designated course of study to improve their employability. Course content is specifically designed to provide the inspectors with coursework relative to the field of inspection and related responsibilities.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC050</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC051</td>
<td>Infrastructure Construction and Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC061</td>
<td>Plan Interpretation and Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC063</td>
<td>Construction Materials and Testing</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC070</td>
<td>Construction Inspection</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

Certificate requirements: 21.0 Units

PBLC050 - Fundamentals of Public Works 3.0

AND

PBLC051 - Infrastructure Construction and Maintenance 3.0

AND

PBLC061 - Plan Interpretation and Cost Estimating 3.0

AND

PBLC063 - Construction Materials and Testing 3.0
Certificate requirements: 21.0 Units

AND

PBLC070 - Construction Inspection 3.0

AND

BUS222 - Business Writing 3.0

OR

MGMT122 - Business Communications 3.0

AND

CIS101 - Introduction to Microsoft Office 3.0

Total Units 21.0

Learning Outcomes

Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Inspection.

Labor Market Data

<table>
<thead>
<tr>
<th>Construction and Building Inspectors</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
<td>32K</td>
<td>722 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>AVERAGE 132K</td>
<td>LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fire Inspectors and Investigators</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>137K</td>
<td>86K</td>
<td>26 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>AVERAGE 165K</td>
<td>LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Construction Management, AS

A.S. Degree Major

Control Number:

11909

Curriculum Id:

SCC.PBLCM.AS

This Associate of Science degree in Construction Management is for current, new or future project managers and team members and those who may seek the PMP (Project Management Professional®) designation as part of their future career plan. The content includes project definition, planning, group dynamics, workplace diversity, team roles and communication techniques, problem solving, evaluation and final reporting on results in both a classroom setting and with opportunities for application.
## Program Courses

### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS090</td>
<td>Principles of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS110</td>
<td>Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLCD05</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLCD061</td>
<td>Plan Interpretation and Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLCD074</td>
<td>Contract Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLCD080</td>
<td>Principles of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLCD110</td>
<td>Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
</tbody>
</table>

## Program Requirements

### A.S. Degree Major

Major requirements: **21.0 Units**

- PBLCD050 - Fundamentals of Public Works **3.0**
- AND
- PBLCD061 - Plan Interpretation and Cost Estimating **3.0**
- AND
- PBLCD074 - Contract Administration **3.0**
- AND
- PBLCD080 - Principles of Project Management **3.0**
- OR
- BUS090 - Principles of Project Management **3.0**
- AND
- PBLCD110 - Introduction to Microsoft Project **3.0**
- OR
- CIS110 - Introduction to Microsoft Project **3.0**
- AND
- BUS222 - Business Writing **3.0**
- OR
Major requirements:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT122 - Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CIS101 - Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units  21.0

**Learning Outcomes**

Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Management.

**Labor Market Data**

**Construction Managers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>79K AVERAGE</td>
<td>1898 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>23K LOW 177K HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

**Cost Estimators**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66K AVERAGE</td>
<td>997 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>32K LOW 129K HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

**First-Line Supervisors of Construction Trades and Extraction Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72K AVERAGE</td>
<td>3114 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>30K LOW 121K HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

**Manufactured Building and Mobile Home Installers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33K AVERAGE</td>
<td>6 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>9K LOW 61K HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

[Apply Now Request Info]

Construction Management, CA

Certificate of Achievement

Control Number:  21673
Curriculum Id:
SCC.PBLCT.CA

This Certificate of Achievement in Construction Management is for current, new or future project managers and team members and those who may seek the PMP (Project Management Professional®) designation as part of their future career plan. The content includes project definition, planning, group dynamics, workplace diversity, team roles and communication techniques, problem solving, evaluation and final reporting on results in both a classroom setting and with opportunities for application.

Program Courses
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS090</td>
<td>Principles of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS110</td>
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</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC050</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC061</td>
<td>Plan Interpretation and Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
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</tr>
<tr>
<td>PBLC080</td>
<td>Principles of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC110</td>
<td>Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

Certificate requirements: 21.0 Units

PBLC050 - Fundamentals of Public Works  3.0

AND

PBLC061 - Plan Interpretation and Cost Estimating  3.0

AND

PBLC074 - Contract Administration  3.0

AND

PBLC080 - Principles of Project Management  3.0

OR

BUS090 - Principles of Project Management  3.0

AND

PBLC110 - Introduction to Microsoft Project  3.0

OR
Certificate requirements:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS110 - Introduction to Microsoft Project</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS222 - Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MGMT122 - Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CIS101 - Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units 21.0

Learning Outcomes
Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Management.

Labor Market Data

### Construction Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>79K</td>
<td>23K - 177K AVERAGE</td>
<td>1898 Annual Openings Graduates*</td>
</tr>
<tr>
<td>LOW - HIGH</td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Cost Estimators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td>LOW - HIGH</td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
<td>30K - 121K AVERAGE</td>
<td>3114 Annual Openings Graduates*</td>
</tr>
<tr>
<td>LOW - HIGH</td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Manufactured Building and Mobile Home Installers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>33K</td>
<td>9K - 61K AVERAGE</td>
<td>6 Annual Openings Graduates*</td>
</tr>
<tr>
<td>LOW - HIGH</td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>
Customer Service Representative, CC

Control Number:
24427

Curriculum Id:
OEC.CSTSV.CC

The Certificate of Completion in Customer Service Representative is designed to give students the necessary knowledge and skills to deal directly with customers as the company representative in special problems that may arise. Students will be prepared to work as commercial or residential service representatives in positions in major department stores, collection agencies, credit bureaus, airlines, travel agencies, medical insurance agencies, public utilities, and telephone answering services.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS012</td>
<td>Workforce Readiness</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS119</td>
<td>Introduction to Keyboarding and Basic Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS258</td>
<td>Navigating the Internet</td>
<td>36.0</td>
</tr>
<tr>
<td>VBUS260</td>
<td>Introduction to Word Processing using MS Word</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

Certificate requirements: 216 hours (credit are in hours) 216.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS119</td>
<td>Introduction to Keyboarding and Basic Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VBUS258</td>
<td>Navigating the Internet</td>
<td>36.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VBUS260</td>
<td>Introduction to Word Processing using MS Word</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 216.0

Learning Outcomes

Demonstrate competence in a variety of Windows-based applications.
Work efficiently with Windows-based applications using common, cross-application keyboard shortcuts; e.g., save, open, print, copy, paste, etc.

Labor Market Data
## Customer Service Representatives

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>38K</td>
<td>12189</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>26K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>63K</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

*Annual Openings*  
Graduates*  
*For Program*

---

## First-Line Supervisors of Office and Administrative Support Workers

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>60K</td>
<td>7469</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>37K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>97K</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

*Annual Openings*  
Graduates*  
*For Program*

---

## Order Clerks

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>35K</td>
<td>1893</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>25K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>58K</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

*Annual Openings*  
Graduates*  
*For Program*

---

## Receptionists and Information Clerks

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>33K</td>
<td>6210</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>25K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>49K</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

*Annual Openings*  
Graduates*  
*For Program*

---

## Telephone Operators

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>46K</td>
<td>18</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>27K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>65K</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

*Annual Openings*  
Graduates*  
*For Program*

---

---

**Digital Marketing Specialist, CC**

Certificate of Completion

**Control Number:**

36585

**Curriculum Id:**

OEC.DMS.CC
This program is designed to prepare students to determine potential sales of a product or service by researching and analyzing market conditions in local, regional, or national areas. Students will learn methods of digital marketing and distribution, such as gathering information on competitors, prices, and sales. An emphasis is placed on the use of digital marketing technology to create a marketing campaign.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS014</td>
<td>Introduction to Mobile and Social Media Tools</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS150</td>
<td>Introduction to Digital Marketing</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS152</td>
<td>Introduction to Digital Marketing Analytics</td>
<td>60.0</td>
</tr>
</tbody>
</table>

### Program Requirements

**Certificate of Completion**

Certificate requirements: 180 hours (credits are in hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS014</td>
<td>Introduction to Mobile and Social Media Tools</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>VBUS150</td>
<td>Introduction to Digital Marketing</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>VBUS152</td>
<td>Introduction to Digital Marketing Analytics</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 180.0

### Learning Outcomes

Create a digital marketing campaign.

### Labor Market Data

#### Art Directors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>61K</td>
<td>2038</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>6K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>189K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

#### Computer Occupations, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77K</td>
<td>2491</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>39K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>143K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

#### Desktop Publishers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annual</td>
</tr>
</tbody>
</table>
The Associate of Science degree in Entrepreneurship is designed to assist the student in the development of fundamental skills necessary to open and operate a small business and/or to continue the pursuit of a bachelor’s degree at a four-year college or university. Students intending to obtain a bachelor’s degree in Entrepreneurship should consult the major requirements for upper-division study listed under the Business Administration major.

**Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT035</td>
<td>QuickBooks</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS127</td>
<td>Introduction to E-Commerce</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS170</td>
<td>Principles of Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS171</td>
<td>Business Plan for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS175</td>
<td>Online Entrepreneurship</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MKTG172</td>
<td>Small Business Marketing and Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

**A.S. Degree Major**

**Major requirements:**  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS170</td>
<td>Principles of Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS171</td>
<td>Business Plan for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS175</td>
<td>Online Entrepreneurship</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKTG172</td>
<td>Small Business Marketing and Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Select one (1) course from the following:**  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT035</td>
<td>QuickBooks</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS127</td>
<td>Introduction to E-Commerce</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units**  

17.0 - 19.0

**Learning Outcomes**

Launch a small business or determine that the potential business would not be successful.

**Labor Market Data**

<table>
<thead>
<tr>
<th>Chief Executives</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>141K</td>
<td>2434</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td>20K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>446K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Computer Occupations, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Entrepreneurship, CA

Certificate of Achievement

Control Number:
21635

Curriculum Id:
SCC.BMENT.CA

The Certificate of Achievement in Entrepreneurship is designed to assist the student in the development of fundamental skills necessary to open and operate a small business and/or to continue the pursuit of a bachelor’s degree at a four-year college or university. Students intending to obtain a bachelor's degree in Entrepreneurship should consult the major requirements for upper-division study listed under the Business Administration major.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT035</td>
<td>QuickBooks</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS127</td>
<td>Introduction to E-Commerce</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Apply Now  Request Info

Entrepreneurship, CA

Certificate of Achievement

Control Number:
21635

Curriculum Id:
SCC.BMENT.CA

The Certificate of Achievement in Entrepreneurship is designed to assist the student in the development of fundamental skills necessary to open and operate a small business and/or to continue the pursuit of a bachelor’s degree at a four-year college or university. Students intending to obtain a bachelor's degree in Entrepreneurship should consult the major requirements for upper-division study listed under the Business Administration major.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT035</td>
<td>QuickBooks</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS127</td>
<td>Introduction to E-Commerce</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS170</td>
<td>Principles of Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS171</td>
<td>Business Plan for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS175</td>
<td>Online Entrepreneurship</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG172</td>
<td>Small Business Marketing and Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Achievement

Certificate requirements:  **15.0 - 16.0 Units**

ACCT100 - Accounting for Small Business  3.0

OR

ACCT101 - Financial Accounting  4.0

AND

BUS170 - Principles of Small Business Management  3.0

AND

BUS171 - Business Plan for Small Business  3.0

AND

BUS175 - Online Entrepreneurship  3.0

AND

MKTG172 - Small Business Marketing and Advertising  3.0

Select one (1) course from the following:  **2.0 - 3.0 Units**

ACCT035 - QuickBooks  2.0

AND

BUS127 - Introduction to E-Commerce  3.0

Total Units  **17.0 - 19.0**

**Learning Outcomes**

Create a small business.

**Labor Market Data**

<table>
<thead>
<tr>
<th>Chief Executives</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Environmental Management, AS

A.S. Degree Major

Control Number:
31847

Curriculum Id:
SCC.PBLCE.AS

The Associate of Science degree in Environmental Management is designed for students who have completed either or both of the existing Public Works programs as well as incumbent workers seeking career opportunities. Upon completion of this degree and certificate program students will be eligible for employment as Environmental Compliance Officers, Technicians and Inspectors in city, county and state municipalities.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC050</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC061</td>
<td>Plan Interpretation and Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC067</td>
<td>Environmental Management</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC068</td>
<td>Fundamentals of Storm Water Management</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC069</td>
<td>Green Infrastructure Construction</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.S. Degree Major

Major requirements: 21.0 Units

- PBLC050 - Fundamentals of Public Works 3.0
  AND
- PBLC061 - Plan Interpretation and Cost Estimating 3.0
  AND
- PBLC067 - Environmental Management 3.0
  AND
- PBLC068 - Fundamentals of Storm Water Management 3.0
  AND
- PBLC069 - Green Infrastructure Construction 3.0
  AND
- CIS101 - Introduction to Microsoft Office 3.0
  AND
- BUS222 - Business Writing 3.0
  OR
- MGMT122 - Business Communications 3.0

Total Units: 21.0

Learning Outcomes

Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Environmental Management.
## Labor Market Data

### Detectives and Criminal Investigators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>127K</td>
<td>285</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>80K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>161K</td>
<td></td>
</tr>
</tbody>
</table>

*For Program*

### Firefighters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90K</td>
<td>783</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>58K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>154K</td>
<td></td>
</tr>
</tbody>
</table>

*For Program*

### First-Line Supervisors of Firefighting and Prevention Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>180K</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>113K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>306K</td>
<td></td>
</tr>
</tbody>
</table>

*For Program*

### First-Line Supervisors of Police and Detectives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>161K</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>110K</td>
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<td>HIGH</td>
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*For Program*

### Fish and Game Wardens

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>87K</td>
<td>28</td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td>LOW</td>
<td>59K</td>
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<td>HIGH</td>
<td>105K</td>
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*For Program*

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**Environmental Management, CA**

Certificate of Achievement

**Control Number:**

31848

**Curriculum Id:**

SCC.PBLCE.CA
This Certificate of Achievement in Environmental Management is designed for students who have completed either or both of the existing Public Works programs as well as incumbent workers seeking career opportunities. Upon completion of this degree and certificate program students will be eligible for employment as Environmental Compliance Officers, Technicians and Inspectors in city, county and state municipalities.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC050</td>
<td>Fundamentals of Public Works</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC061</td>
<td>Plan Interpretation and Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC067</td>
<td>Environmental Management</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC068</td>
<td>Fundamentals of Storm Water Management</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC069</td>
<td>Green Infrastructure Construction</td>
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</table>

Program Requirements
Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>21.0 Units</th>
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<tbody>
<tr>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PBLC061 - Plan Interpretation and Cost Estimating</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PBLC067 - Environmental Management</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PBLC068 - Fundamentals of Storm Water Management</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PBLC069 - Green Infrastructure Construction</td>
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<tr>
<td>AND</td>
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<tr>
<td>CIS101 - Introduction to Microsoft Office</td>
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<td>AND</td>
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</tr>
<tr>
<td>BUS222 - Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MGMT122 - Business Communications</td>
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</table>
### Total Units

<table>
<thead>
<tr>
<th>Total Units</th>
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</thead>
<tbody>
<tr>
<td>21.0</td>
</tr>
</tbody>
</table>

### Learning Outcomes

Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Environmental Management.

### Labor Market Data

#### Detectives and Criminal Investigators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>127K AVERAGE</td>
<td>285 Annual Openings</td>
</tr>
<tr>
<td>LOW 80K</td>
<td>161K HIGH</td>
<td>Graduates*</td>
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<tr>
<td></td>
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</table>

#### Firefighters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>90K AVERAGE</td>
<td>783 Annual Openings</td>
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<td>LOW 58K</td>
<td>154K HIGH</td>
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<td></td>
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<td>*For Program</td>
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</table>

#### First-Line Supervisors of Firefighting and Prevention Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>180K AVERAGE</td>
<td>51 Annual Openings</td>
</tr>
<tr>
<td>LOW 113K</td>
<td>306K HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

#### First-Line Supervisors of Police and Detectives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>161K AVERAGE</td>
<td>157 Annual Openings</td>
</tr>
<tr>
<td>LOW 110K</td>
<td>265K HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

#### Fish and Game Wardens

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>87K AVERAGE</td>
<td>28 Annual Openings</td>
</tr>
<tr>
<td>LOW 59K</td>
<td>105K HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Apply Now Request Info

**Executive Secretary/Administrative Assistant, CC**

Certificate of Completion

Control Number:
Curriculum Id: 
OEC.EXSEC.CC

The Certificate of Completion in Executive Secretary/Administrative Assistant is designed to give students the necessary knowledge and skills from diversified training, including technology, and background to hold high-level administrative support positions of responsibility in the workplace. Students will be prepared to conduct research, prepare reports, and perform clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS012</td>
<td>Workforce Readiness</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS013</td>
<td>Introduction to Personal Management using Microsoft Outlook</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS096</td>
<td>Introduction to Use of Digital Cameras</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS102</td>
<td>Introduction to Desktop Publishing using Adobe InDesign</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS117</td>
<td>Introduction to Document Processing using Adobe Acrobat</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS119</td>
<td>Introduction to Keyboarding and Basic Windows</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS258</td>
<td>Navigating the Internet</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS260</td>
<td>Introduction to Word Processing using MS Word</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS261</td>
<td>Introduction to Databases using MS Access</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS262</td>
<td>Introduction to Spreadsheets using MS Excel</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS304</td>
<td>Introduction to Electronic Presentations using MS PowerPoint</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate requirements: 360 hours (credits are in hours) 360.0 Hours

VBUS013 - Introduction to Personal Management using Microsoft Outlook 60.0

AND

WKPR500 - Workforce Readiness 60.0

AND

VBUS260 - Introduction to Word Processing using MS Word 60.0

AND

VBUS261 - Introduction to Databases using MS Access 60.0

AND

VBUS262 - Introduction to Spreadsheets using MS Excel 60.0
Certificate requirements: 360 hours (credits are in hours) 360.0 Hours

AND

VBUS304 - Introduction to Electronic Presentations using MS PowerPoint 60.0

Total Hours 360.0

Learning Outcomes

- Work efficiently with Windows-based applications using common, cross-application keyboard shortcuts; e.g., save, open, print, copy, paste, etc.
- Demonstrate competence in a variety of Windows-based applications.

Labor Market Data

<table>
<thead>
<tr>
<th>Executive Secretaries and Executive Administrative Assistants</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69K</td>
<td>69K</td>
<td>2690 Annual</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>45K</td>
<td>97K</td>
<td>Graduates</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secretaries and Administrative Assistants, Except Legal, Medical, and Executive</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43K</td>
<td>64K</td>
<td>13473 Annual</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>26K</td>
<td>64K</td>
<td>Graduates</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Financial Advisor Preparation, CC

Certificate of Completion

Control Number:
41165

Curriculum Id:
OEC.FAP.CC

This program is designed to prepare students for entry-level employment in the financial services sector, on a pathway to potentially become financial advisors. An emphasis is placed on preparation for the Securities Industry Essentials (SIE) exam, which is the first step in the process of becoming registered to engage in securities business. Topics covered include basic securities industry information, and concepts fundamental to working in the industry, such as types of products and their risks; the structure of the securities industry markets, regulatory agencies and their functions; and prohibited practices. Students will also learn the features of digital assets, such as Bitcoin, and how they can be used in an investment plan.

Learning Outcomes

- Recall concepts fundamental to working in the securities industry, such as types of products and their risks, the structure of the securities industry markets, regulatory agencies, and prohibited practices.

First-Line Supervisor/Manager, Office & Administrative Support Workers, CC

Certificate of Completion
Control Number:
24187

Curriculum Id:
OEC.MGR.CC

The Certificate of Completion in First-Line Supervisor/Manager, Office and Administrative Support Workers is designed for both entry-level and experienced office workers looking for a promotion. Graduates will have expert office skills and in-depth software knowledge. The program provides training in office information systems and communications, work process and organizational performance improvement, business decision-making, project management, and capital and human resource management.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS014</td>
<td>Introduction to Mobile and Social Media Tools</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS097</td>
<td>Introduction to Personal Commerce on the Internet</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS103</td>
<td>Introduction to MS Project</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS118</td>
<td>Introduction to Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS257</td>
<td>Seminar in Business Applications</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS260</td>
<td>Introduction to Word Processing using MS Word</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS262</td>
<td>Introduction to Spreadsheets using MS Excel</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS304</td>
<td>Introduction to Electronic Presentations using MS PowerPoint</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate requirements: 480 hours (credits are in hours) 480.0 Hours

VBUS014 - Introduction to Mobile and Social Media Tools 60.0

AND

VBUS097 - Introduction to Personal Commerce on the Internet 60.0

AND

VBUS103 - Introduction to MS Project 60.0

AND

VBUS118 - Introduction to Windows 60.0

AND

VBUS257 - Seminar in Business Applications 60.0

AND

VBUS260 - Introduction to Word Processing using MS Word 60.0

AND
Certificate requirements: 480 hours (credits are in hours) 480.0 Hours

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
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<tbody>
<tr>
<td>VBUS262 - Introduction to Spreadsheets using MS Excel</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>VBUS304 - Introduction to Electronic Presentations using MS PowerPoint</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 480.0

Learning Outcomes
Demonstrate competence in a variety of Windows-based applications.
Work efficiently with Windows-based applications using common, cross-application keyboard shortcuts; e.g., save, open, print, copy, paste, etc.

Labor Market Data

<table>
<thead>
<tr>
<th>Data Entry Keyers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tr>
<td></td>
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<td>56K</td>
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<table>
<thead>
<tr>
<th>Executive Secretaries and Executive Administrative Assistants</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
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<td>Openings</td>
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<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
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<td></td>
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<td>FOR Program</td>
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<tr>
<td></td>
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<td>45K</td>
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<table>
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<th>File Clerks</th>
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<th>Wages</th>
<th>Competition</th>
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<td>Openings</td>
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<td>Graduates*</td>
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<td>FOR Program</td>
</tr>
<tr>
<td></td>
<td>34K</td>
<td>61K</td>
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</tr>
<tr>
<td></td>
<td>AVERAGE</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>25K</td>
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<td></td>
</tr>
<tr>
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<td>LOW</td>
<td>HIGH</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Office Clerks, General</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<td>25K</td>
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<table>
<thead>
<tr>
<th>Receptionists and Information Clerks</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<tr>
<td></td>
<td>33K</td>
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General Accounting, CERT
Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.ACCTG.CERT

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 14.0 Units

ACCT101 - Financial Accounting 4.0

AND

ACCT102 - Managerial Accounting 4.0

AND

BUS150 - Introduction to Information Systems and Applications 3.0

OR

CIS101 - Introduction to Microsoft Office 3.0

AND

BUS222 - Business Writing 3.0

OR

MGMT122 - Business Communications 3.0

Total Units 14.0

Learning Outcomes

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32baa6e1b8

309/2244
Labor Market Data

**Accountants and Auditors**

<table>
<thead>
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<tr>
<td></td>
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</tr>
<tr>
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**Bookkeeping, Accounting, and Auditing Clerks**

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**Brokerage Clerks**

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**Budget Analysts**

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**Credit Analysts**

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Apply Now Request Info

**General Management, AS**

A.S. Degree Major

**Control Number:**
11861

**Curriculum Id:**
SCC.MGT.AA
The Associate of Science degree in General Management is designed to prepare students for various management positions in business, government, and public organizations; to aid existing managers in upgrading their skills; and to assist employees for promotion to management/supervision positions.

Program Courses

Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
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<tr>
<td>BUS100</td>
<td>Fundamentals of Business</td>
<td>3.0</td>
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<tr>
<td>BUS120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
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Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACCT100</td>
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<td>3.0</td>
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<tr>
<td>ACCT102</td>
<td>Managerial Accounting</td>
<td>4.0</td>
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<tr>
<td>BUS105</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
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Program Requirements

A.S. Degree Major

Major requirements: 13.0 Units

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<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS100 - Fundamentals of Business</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS120 - Principles of Management</td>
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<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT120 - Principles of Management</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
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<tr>
<td>BUS222 - Business Writing</td>
<td>3.0</td>
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## Major requirements:

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<th>Course</th>
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<tbody>
<tr>
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<tr>
<td>MGMT122 - Business Communications</td>
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Select two (2) courses from the following:

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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>AND</td>
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<td>ACCT100 - Accounting for Small Business</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
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<td>ACCT102 - Managerial Accounting</td>
<td>4.0</td>
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<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS105 - Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BUS121 - Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MGMT121 - Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
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<tr>
<td>BUS150 - Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>MKTG113 - Principles of Marketing</td>
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</table>

**Total Units**: 19.0 - 20.0

## Learning Outcomes

Qualify for a management position.

## Labor Market Data

### Computer and Information Systems Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
<td>159K</td>
<td>2061 Annual Openings</td>
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<tr>
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<td>LOW</td>
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### Construction Managers

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>1898 Annual Openings</td>
</tr>
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<td></td>
<td>23K</td>
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<td>LOW</td>
<td>177K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>*For Program</td>
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</table>
First-Line Supervisors of Mechanics, Installers, and Repairers

Job Growth

Wages

84K
AVERAGE
48K 125K
LOW  HIGH

Competition

1469 Annual Openings
Graduates*
*For Program

First-Line Supervisors of Production and Operating Workers

Job Growth

Wages

60K
AVERAGE
34K 106K
LOW  HIGH

Competition

2236 Annual Openings
Graduates*
*For Program

General and Operations Managers

Job Growth

Wages

108K
AVERAGE
51K 269K
LOW  HIGH

Competition

10027 Annual Openings
Graduates*
*For Program

Apply Now Request Info

General Marketing, AS

A.S. Degree Major

Control Number:

11866

Curriculum Id:

SCC.MKTG.AS

The Associate of Science degree in General Marketing is designed to prepare students for various marketing, sales, and retail store management positions; to assist existing marketing managers and sales professionals in upgrading their skills; and to open up new career opportunities within the marketing field. Program content includes selection and buying of merchandise, advertising, sales, product distribution, customer relations, and pricing.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
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<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
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<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
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<tr>
<td>MKTG115</td>
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Available Program Courses

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<tr>
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<tr>
<td>BUS127</td>
<td>Introduction to E-Commerce</td>
<td>3.0</td>
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<tr>
<td>MKTG114</td>
<td>Professional Selling</td>
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<tr>
<td>MKTG135</td>
<td>Web Marketing and Promotion</td>
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Program Requirements

A.S. Degree Major

Major requirements: 15.0 - 16.0 Units

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<td>ACCT101</td>
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<td>AND</td>
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<td>BUS222</td>
<td>Business Writing</td>
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<tr>
<td>OR</td>
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<tr>
<td>MGMT122</td>
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<tr>
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<td></td>
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<tr>
<td>MKTG112</td>
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<td>3.0</td>
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<tr>
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<td>MKTG113</td>
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<td>3.0</td>
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Select one (1) course from the following: 3.0 Units

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<td>BUS127</td>
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<td>3.0</td>
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<td>AND</td>
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<td>MKTG114</td>
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<td>AND</td>
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Select one (1) course from the following:

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</thead>
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Total Units: 18.0 - 19.0

Learning Outcomes

Have the skills for an entry-level marketing position.

Labor Market Data

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising and Promotions Managers</td>
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<td></td>
<td></td>
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<tr>
<td>Job Growth</td>
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<td></td>
<td></td>
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<tr>
<td>Wages</td>
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<tr>
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<tr>
<td>Graduates*</td>
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<tr>
<td>*For Program</td>
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<tr>
<td>Agents and Business Managers of Artists, Performers, and Athletes</td>
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<td></td>
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<td>Job Growth</td>
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<td>Wages</td>
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<tr>
<td>Graduates*</td>
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<tr>
<td>Wages</td>
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<tr>
<td>Wages</td>
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<td>Interviewers, Except Eligibility and Loan</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduates*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*For Program</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Apply Now Request Info
General Marketing, CERT
Certificate of Proficiency

Control Number:
Curriculum Id:
SCC.MKTG.CERT

The Certificate of Proficiency in General Marketing is designed to prepare students for various marketing, sales, and retail store management positions; to assist existing marketing managers and sales professionals in upgrading their skills; and to open up new career opportunities within the marketing field. Program content includes selection and buying of merchandise, advertising, sales, product distribution, customer relations, and pricing. The student will then specialize in one of the option areas: general marketing, professional selling, advertising, or retailing management. The certificate program provides practical skills for the student within specific areas of marketing.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG114</td>
<td>Professional Selling</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG115</td>
<td>Consumer Behavior</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 12.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG112</td>
<td>Principles of Advertising</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKTG114</td>
<td>Professional Selling</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MKTG115</td>
<td>Consumer Behavior</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units 12.0

Learning Outcomes
Have enough knowledge of marketing for an entry-level position.

Labor Market Data

Advertising and Promotions Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>111K</td>
<td>26K</td>
<td>260 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>287K</td>
<td></td>
</tr>
</tbody>
</table>
Agents and Business Managers of Artists, Performers, and Athletes

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80K</td>
<td>1484</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>30K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>203K</td>
<td></td>
</tr>
</tbody>
</table>

Computer Occupations, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77K</td>
<td>2491</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>39K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>143K</td>
<td></td>
</tr>
</tbody>
</table>

Fundraisers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60K</td>
<td>657</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>33K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>115K</td>
<td></td>
</tr>
</tbody>
</table>

Interviewers, Except Eligibility and Loan

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40K</td>
<td>1263</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>28K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>58K</td>
<td></td>
</tr>
</tbody>
</table>

General Office Clerk, CC

Certificate of Completion

Control Number:

24095

Curriculum Id:

OEC.GOC.CC

The Certificate of Completion in General Office Clerk is designed to give students the skills for entry-level positions in the business world. Clerk typist, credit clerk, file clerk, general clerk, receptionist, or data entry clerk positions require limited knowledge of office management systems and procedures. Clerical duties include skills in answering telephones, bookkeeping, typing or word processing, office machine operation, and filing.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS012</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>VBUS118</td>
<td>Introduction to Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS119</td>
<td>Introduction to Keyboarding and Basic Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS140</td>
<td>Introduction to Google Applications for Work</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS258</td>
<td>Navigating the Internet</td>
<td>36.0</td>
</tr>
<tr>
<td>VBUS260</td>
<td>Introduction to Word Processing using MS Word</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS262</td>
<td>Introduction to Spreadsheets using MS Excel</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

Certificate requirements: 396 hours (credits are in hours) 396.0 Hours

VBUS118 - Introduction to Windows 60.0

AND

VBUS119 - Introduction to Keyboarding and Basic Windows 60.0

AND

VBUS140 - Introduction to Google Applications for Work 60.0

AND

VBUS260 - Introduction to Word Processing using MS Word 60.0

AND

VBUS262 - Introduction to Spreadsheets using MS Excel 60.0

AND

WKPR500 - Workforce Readiness 60.0

AND

VBUS258 - Navigating the Internet 36.0

Total Hours 396.0

Learning Outcomes

Demonstrate proficiency in computer equipment office skills used including data entry, word processing, spreadsheets, and machine operation.

Work efficiently with Windows-based applications using common, cross-application keyboard shortcuts; e.g., save, open, print, copy, paste, etc.

Labor Market Data

<table>
<thead>
<tr>
<th>Data Entry Keyers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Home-Based Business, CC
Certificate of Completion

Control Number:
36371

Curriculum Id:
OEC.HMBB.CC

The Certificate of Completion in Home-Based Business is designed to give students the necessary knowledge and skills to plan, develop, and operate a home-based business. The business operator utilizes the understanding of business concepts, strategies, and technology to shape ideas into opportunities supported by research, data, and business models. Effectively utilizing web and business applications is essential to sustaining the long-term growth of the business.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

35K

AVERAGE
23K

LOW

56K

HIGH

Annual Openings
Graduates*

*For Program

Executive Secretaries and Executive Administrative Assistants

Job Growth

Wages

AVERAGE
69K

45K

LOW

97K

HIGH

Annual Openings
Graduates*

*For Program

File Clerks

Job Growth

Wages

AVERAGE
34K

25K

LOW

61K

HIGH

Annual Openings
Graduates*

*For Program

Office Clerks, General

Job Growth

Wages

AVERAGE
36K

25K

LOW

59K

HIGH

Annual Openings
Graduates*

*For Program

Receptionists and Information Clerks

Job Growth

Wages

AVERAGE
33K

25K

LOW

49K

HIGH

Annual Openings
Graduates*

*For Program

https://sccollege.elumenapp.com/catalog/all-pages/4a0d5669-c0e1-4cbe-beed7-a332ca8aieb18
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS014</td>
<td>Introduction to Mobile and Social Media Tools</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS030</td>
<td>How to Build a Home-Based Business</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS040</td>
<td>Accounting for Non-Accountants</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS097</td>
<td>Introduction to Personal Commerce on the Internet</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

Certificate requirements: 240 hours (credits are in hours) 240.0 Hours

AND

VBUS014 - Introduction to Mobile and Social Media Tools 60.0

AND

VBUS030 - How to Build a Home-Based Business 60.0

AND

VBUS040 - Accounting for Non-Accountants 60.0

AND

VBUS097 - Introduction to Personal Commerce on the Internet 60.0

Total Hours 240.0

Learning Outcomes

Develop a home-based business.
Demonstrate proficiency in using business and web applications.

Labor Market Data

Chief Executives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>141K</td>
<td>20K</td>
<td>2434 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>446K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>20K LOW</td>
<td>143K HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Computer Occupations, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>77K</td>
<td>39K LOW</td>
<td>2491 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>143K HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>77K</td>
<td>446K HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

First-Line Supervisors of Office and Administrative Support Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>146K</td>
<td>39K LOW</td>
<td>7469 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>143K HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>7469</td>
<td>446K HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>
Human Resource Management, CERT
Certificate of Proficiency

Control Number:
Curriculum Id:
SCC.MGTHR.CERT

The Certificate of Proficiency in Human Resource Management is designed to prepare students for various management positions in business, government, and public organizations; to aid existing managers in upgrading their skills; and to assist employees for promotion to management/supervision positions.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS105</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT135</td>
<td>Human Resource Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 12.0 Units

MGMT120 - Principles of Management 3.0
Certificate requirements: 12.0 Units

OR

BUS120 - Principles of Management 3.0

AND

MGMT121 - Human Relations and Organizational Behavior 3.0

OR

BUS121 - Human Relations and Organizational Behavior 3.0

AND

MGMT135 - Human Resource Management 3.0

AND

BUS105 - Legal Environment of Business 3.0

Total Units 12.0

Learning Outcomes

Prepare for employment in the human resources field.

Labor Market Data

Administrative Services and Facilities Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>105K</td>
<td>57K - 172K</td>
<td>1658 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1658 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

Compensation and Benefits Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>122K</td>
<td>74K - 206K</td>
<td>52 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

Compensation, Benefits, and Job Analysis Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
<td>45K - 105K</td>
<td>337 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>337 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

Compliance Officers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
Multi-Media Artists and Animators, CC

Certificate of Completion

Control Number:
33161

Curriculum Id:
OEC.MMAA.CC

The Certificate of Completion in Multi-Media Artists and Animators is designed to develop the technical and creative knowledge and skills necessary for employment in the entertainment industry.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS096</td>
<td>Introduction to Use of Digital Cameras</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS101</td>
<td>Introduction to 3D Modeling using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS105</td>
<td>Introduction to 3D Animation using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS109</td>
<td>Introduction to Desktop Video Editing using Adobe Premiere</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS120</td>
<td>Introduction to Animations using Adobe Animate</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

Certificate requirements: 300 hours (credits are in hours) 300.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS096</td>
<td>Introduction to Use of Digital Cameras</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS101</td>
<td>Introduction to 3D Modeling using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS105</td>
<td>Introduction to 3D Animation using Blender</td>
<td>60.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS096</td>
<td>Introduction to Use of Digital Cameras</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS101</td>
<td>Introduction to 3D Modeling using Blender</td>
<td>60.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS105</td>
<td>Introduction to 3D Animation using Blender</td>
<td>60.0</td>
</tr>
<tr>
<td>VBUS101</td>
<td>Introduction to 3D Modeling using Blender</td>
<td>60.0</td>
</tr>
</tbody>
</table>

AND

**Human Resources Assistants, Except Payroll and Timekeeping**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>81K</td>
<td>121K</td>
<td>1571</td>
</tr>
<tr>
<td>46K</td>
<td>65K</td>
<td>569</td>
</tr>
</tbody>
</table>

*For Program

Apply Now Request Info
Certificate requirements: 300 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS109 - Introduction to Desktop Video Editing using Adobe Premiere</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VBUS120 - Introduction to Animations using Adobe Animate</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 300.0

Learning Outcomes
Demonstrate proficiency in Digital Cameras, Video, 2D and 3D Animation applications.
Work efficiently with Windows-based applications that operate in multiple platforms.

Labor Market Data

<table>
<thead>
<tr>
<th>Industry</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising and Promotions Managers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Growth</td>
<td></td>
<td>111K</td>
<td>260</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td>26K</td>
<td>Annual</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>287K</td>
<td>Openings</td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>Job Growth</td>
<td></td>
<td>26K</td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td>144K</td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising Sales Agents</td>
<td></td>
<td>59K</td>
<td>1425</td>
</tr>
<tr>
<td>Job Growth</td>
<td></td>
<td>26K</td>
<td>Annual</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td>144K</td>
<td>Openings</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Growth</td>
<td></td>
<td>61K</td>
<td>2038</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td>6K</td>
<td>Annual</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>189K</td>
<td>Openings</td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>Job Growth</td>
<td></td>
<td>29K</td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td>111K</td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Advertising Sales Agents</td>
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<td>29K</td>
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<td>3K</td>
<td>Annual</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td>111K</td>
<td>Openings</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial and Industrial Designers</td>
<td></td>
<td>68K</td>
<td>253</td>
</tr>
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<td>Job Growth</td>
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<td>33K</td>
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<td></td>
<td>144K</td>
<td>Openings</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
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</table>
Public Administration and Policy, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:

The Certificate of Proficiency in Public Administration and Policy provides students with an achievement and a comprehensive understanding of government, municipality and school districts functions, which include internal, external factors, philosophy and goals of the public servants in today's capacity. Upon completions students will be well equipped with the basic understanding and terminology of key terms used in today's government agencies.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBLC150</td>
<td>Introduction to Public Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC151</td>
<td>Ethics and Professionalism: The High Calling of Public Service</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC152</td>
<td>Preparing for Supervision Public Sector</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC153</td>
<td>Public Sector Budgeting Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PBLC154</td>
<td>Public Sector Human Resources Fundamentals</td>
<td>3.0</td>
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<tr>
<td>PBLC155</td>
<td>The Art of Politics and Policymaking</td>
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Program Requirements

Certificate of Proficiency

<table>
<thead>
<tr>
<th>Certificate Requirements:</th>
<th>12.0 Units</th>
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<tbody>
<tr>
<td>PBLC150 - Introduction to Public Administration</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
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<td>PBLC151 - Ethics and Professionalism: The High Calling of Public Service</td>
<td>3.0</td>
</tr>
<tr>
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<tr>
<td>PBLC152 - Preparing for Supervision Public Sector</td>
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<tr>
<td>PBLC153 - Public Sector Budgeting Fundamentals</td>
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<td>OR</td>
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<tr>
<td>PBLC154 - Public Sector Human Resources Fundamentals</td>
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</tr>
</tbody>
</table>
### Total Units

15.0

### Learning Outcomes

Be eligible for employment in a high-wage, high-growth career in a civil service, government, school district, city, county work position.

Be eligible for civil service promotions due to having a broad understanding of government work and functions in all classifications.

### Labor Market Data

#### Chief Executives

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>141K</td>
<td>2434</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>446K</td>
<td>Annual</td>
</tr>
<tr>
<td>20K</td>
<td>2434</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
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</table>

#### Compliance Officers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81K</td>
<td>1571</td>
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<tr>
<td>AVERAGE</td>
<td>121K</td>
<td>Annual</td>
</tr>
<tr>
<td>46K</td>
<td>121K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
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#### General and Operations Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>108K</td>
<td>10027</td>
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<tr>
<td>AVERAGE</td>
<td>269K</td>
<td>Annual</td>
</tr>
<tr>
<td>51K</td>
<td>269K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
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</table>

#### Legislators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51K</td>
<td>80</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>133K</td>
<td>Annual</td>
</tr>
<tr>
<td>35K</td>
<td>133K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

#### Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63K</td>
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<tr>
<td>AVERAGE</td>
<td>201K</td>
<td>Annual</td>
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<td>13K</td>
<td>201K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

[Apply Now Request Info](https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18)
Real Estate, AS
A.S. Degree Major

Control Number:
11869

Curriculum Id:
SCC.RE.AS

The Associate of Science degree in Real Estate is designed for individuals interested in careers in real estate as salespersons, brokers, and real estate industry professionals including mortgage brokers, property managers, title officers, developers and as government employees. The program is intended to meet the mandatory and elective course requirements students need to sit for the California real estate sales or brokers license exam.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE102</td>
<td>Real Estate Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>RE103</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>RE105</td>
<td>Real Estate Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>RE106</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>RE110</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>RE112</td>
<td>Real Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>RE114</td>
<td>Appraisal Principles and Procedures</td>
<td>3.5</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>RE116</td>
<td>Residential Real Estate Appraisal</td>
<td>3.5</td>
</tr>
<tr>
<td>RE117</td>
<td>Residential Report Writing and Case Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>RE151</td>
<td>Fundamentals of Escrow</td>
<td>3.0</td>
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</tbody>
</table>

Program Requirements
A.S. Degree Major
### Major requirements: 21.5 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>RE102 - Real Estate Principles</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE103 - Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE114 - Appraisal Principles and Procedures</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE112 - Real Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE110 - Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE106 - Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE105 - Real Estate Practice</td>
<td>3.0</td>
</tr>
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</table>

Select one (1) course from the following: 1.0 - 4.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT101 - Financial Accounting</td>
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<tr>
<td>RE116 - Residential Real Estate Appraisal</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE117 - Residential Report Writing and Case Studies</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ACCT100 - Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>RE151 - Fundamentals of Escrow</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 22.5 - 25.5

### Learning Outcomes

Be prepared to pass the California Real Estate Sales Associate Exam.
Be prepared to obtain an entry-level job in a Real Estate field of their choice.
Transfer to a four-year institution.

### Labor Market Data

**Property Appraisers and Assessors**
The Certificate of Achievement in Real Estate is designed for individuals interested in careers in real estate as salespersons, brokers, and real estate industry professionals including mortgage brokers, property managers, title officers, developers and as government employees. The program is intended to meet the mandatory and elective course requirements students need to sit for the California real estate sales or brokers license exam.

### Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE102</td>
<td>Real Estate Principles</td>
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</tr>
<tr>
<td>RE103</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>RE105</td>
<td>Real Estate Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>RE106</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>RE110</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>RE112</td>
<td>Real Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>RE114</td>
<td>Appraisal Principles and Procedures</td>
<td>3.5</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT100</td>
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<td>ACCT101</td>
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<td>4.0</td>
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<tr>
<td>RE116</td>
<td>Residential Real Estate Appraisal</td>
<td>3.5</td>
</tr>
<tr>
<td>RE117</td>
<td>Residential Report Writing and Case Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>RE151</td>
<td>Fundamentals of Escrow</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Achievement

Certificate requirements: 21.5 Units

RE102 - Real Estate Principles 3.0
AND
RE103 - Legal Aspects of Real Estate 3.0
AND
RE105 - Real Estate Practice 3.0
AND
RE106 - Real Estate Finance 3.0
AND
RE110 - Real Estate Economics 3.0
AND
RE112 - Real Property Management 3.0
AND
RE114 - Appraisal Principles and Procedures 3.5
AND
Select one (1) course from the following: 1.0 - 4.0 Units

ACCT101 - Financial Accounting 4.0
Select one (1) course from the following:  
1.0 - 4.0 Units

AND

RE116 - Residential Real Estate Appraisal  
3.5

AND

RE117 - Residential Report Writing and Case Studies  
1.0

AND

ACCT100 - Accounting for Small Business  
3.0

AND

RE151 - Fundamentals of Escrow  
3.0

Total Units  
22.5 - 25.5

Learning Outcomes
Be prepared for the California Real Estate Sales Associate Exam.
Be prepared for an entry-level job into the Real Estate field of their choice.

Labor Market Data

<table>
<thead>
<tr>
<th>Property Appraisers and Assessors</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>57K</td>
<td>1700 Annual</td>
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<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>158K</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property, Real Estate, and Community Association Managers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td>55K</td>
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<td>AVERAGE</td>
<td>Openings</td>
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<tr>
<td></td>
<td></td>
<td>13K</td>
<td>Graduates*</td>
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<tr>
<td></td>
<td></td>
<td>231K</td>
<td>*For Program</td>
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<td></td>
<td>HIGH</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Real Estate Brokers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<td>AVERAGE</td>
<td>Openings</td>
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<tr>
<td></td>
<td></td>
<td>17K</td>
<td>Graduates*</td>
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<tr>
<td></td>
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<td>297K</td>
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<tr>
<td></td>
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<td>LOW</td>
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<tr>
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<td></td>
<td>HIGH</td>
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<table>
<thead>
<tr>
<th>Real Estate Sales Agents</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>53K</td>
<td>21945 Annual</td>
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<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>
Real Estate Appraisal, CERT
Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.REAPP.CERT

The Certificate of Proficiency in Real Estate Appraisal is designed for individuals interested in a career in real estate appraisal of both residential and commercial property. The program is intended to prepare students for the California real estate appraiser license exam, certified residential exam and certified general exam. As well it provides coursework for real estate professionals.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE102</td>
<td>Real Estate Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>RE103</td>
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<td>3.0</td>
</tr>
<tr>
<td>RE110</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>RE114</td>
<td>Appraisal Principles and Procedures</td>
<td>3.5</td>
</tr>
<tr>
<td>RE116</td>
<td>Residential Real Estate Appraisal</td>
<td>3.5</td>
</tr>
<tr>
<td>RE117</td>
<td>Residential Report Writing and Case Studies</td>
<td>1.0</td>
</tr>
</tbody>
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Program Requirements
Certificate of Proficiency

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>14.0 Units</th>
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<tbody>
<tr>
<td>RE102 - Real Estate Principles</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>RE103 - Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>RE110 - Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>RE114 - Appraisal Principles and Procedures</td>
<td>3.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>RE116 - Residential Real Estate Appraisal</td>
<td>3.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>RE117 - Residential Report Writing and Case Studies</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Learning Outcomes

Demonstrate and apply knowledge of methods, concepts and standards according to USPAP (Uniform Standards of Professional Appraisal Practice.)

Labor Market Data

<table>
<thead>
<tr>
<th>Property Appraisers and Assessors</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57K</td>
<td></td>
<td>1700</td>
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<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>158K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property, Real Estate, and Community Association Managers</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55K</td>
<td></td>
<td>8879</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13K</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LOW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>231K</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HIGH</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Real Estate Brokers</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67K</td>
<td></td>
<td>6674</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17K</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LOW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>297K</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HIGH</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Real Estate Sales Agents</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53K</td>
<td></td>
<td>21945</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13K</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LOW</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>238K</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HIGH</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Real Estate Salesperson, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.RESAL.CERT

The Certificate of Proficiency in Real Estate Salesperson provides students with the coursework necessary to meet the state DRE (Department of Real Estate) educational requirements that qualify an individual to sit for the Salesperson's license exam. It also includes the basic information for a successful career in real estate sales.

Program Courses

Available Program Courses

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbb-be67-d32b1e6eb18
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE102</td>
<td>Real Estate Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>RE103</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>RE110</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>RE114</td>
<td>Appraisal Principles and Procedures</td>
<td>3.5</td>
</tr>
<tr>
<td>RE116</td>
<td>Residential Real Estate Appraisal</td>
<td>3.5</td>
</tr>
<tr>
<td>RE117</td>
<td>Residential Report Writing and Case Studies</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 14.0 Units

- RE102 - Real Estate Principles 3.0
  AND
  - RE103 - Legal Aspects of Real Estate 3.0

OR

- RE110 - Real Estate Economics 3.0
  AND
  - RE114 - Appraisal Principles and Procedures 3.5
  AND
  - RE116 - Residential Real Estate Appraisal 3.5
  AND
  - RE117 - Residential Report Writing and Case Studies 1.0

Total Units 14.0

Learning Outcomes
Demonstrate and apply knowledge of principles, procedures and practices of real estate sales according to DRE (Department of Real Estate) standards.

Labor Market Data

<table>
<thead>
<tr>
<th>Property Appraisers and Assessors</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td>1700</td>
</tr>
<tr>
<td></td>
<td>57K</td>
<td>Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>18K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>158K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Property, Real Estate, and Community Association Managers
Receptionist/Information Clerk, CC

Certificate of Completion

Control Number:
30985

Curriculum Id:
OEC.RCPTN.CC

The Certificate of Completion in Receptionist/Information Clerk is designed to give students the skills for entry-level receptionist or information clerk positions. Clerical duties include greeting the public, answering phones, making appointments, and word processing.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS121</td>
<td>Introduction to Computer Software Applications</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

Certificate requirements: 120 hours (credits are in hours) 120.0 Hours

VBUS121 - Introduction to Computer Software Applications 60.0

AND

WKPR500 - Workforce Readiness 60.0

Total Hours 120.0
### Learning Outcomes

Demonstrate competence in a variety of Windows-based applications. Complete job applications and prepare for the interviewing process.

### Labor Market Data

#### Data Entry Keyers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>35K</td>
<td></td>
<td>1350</td>
</tr>
<tr>
<td>23K LOW</td>
<td>56K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

#### Executive Secretaries and Executive Administrative Assistants

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>69K</td>
<td></td>
<td>2690</td>
</tr>
<tr>
<td>45K LOW</td>
<td>97K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

#### File Clerks

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>34K</td>
<td></td>
<td>833</td>
</tr>
<tr>
<td>25K LOW</td>
<td>61K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

#### Office Clerks, General

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>36K</td>
<td></td>
<td>18058</td>
</tr>
<tr>
<td>25K LOW</td>
<td>59K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

#### Receptionists and Information Clerks

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>33K</td>
<td></td>
<td>6210</td>
</tr>
<tr>
<td>25K LOW</td>
<td>49K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

---

**Shelter Dog Training, CC**

Certificate of Completion

**Control Number:**

33561

**Curriculum Id:**

[Apply Now][Request Info]
The Certificate of Completion in Shelter Dog Training provides training and education in dog handling for students while preparing dogs from the animal shelter for placement in a family home. Students will demonstrate mastery of canine handling and training skills. Prepares students for jobs in settings such as kennels, animal shelters, zoos, circuses, and aquariums.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDOG020</td>
<td>Concepts in Dog Training</td>
<td>12.0</td>
</tr>
<tr>
<td>VDOG030</td>
<td>Practical Dog Training</td>
<td>36.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Completion

Certificate requirements: 48 hours (credits are in hours)

- VDOG020 - Concepts in Dog Training 12.0
- AND
- VDOG030 - Practical Dog Training 36.0

Total Hours 48.0

**Learning Outcomes**

Demonstrate mastery of canine handling and training skills.

**Labor Market Data**

**Animal Control Workers**

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>61K</td>
<td>45</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>Annual Opennings</td>
</tr>
<tr>
<td>43K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>81K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**Animal Trainers**

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>32K</td>
<td>820</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>Annual Opennings</td>
</tr>
<tr>
<td>5K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>95K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**First-Line Supervisors of Farming, Fishing, and Forestry Workers**

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>59K</td>
<td>81</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>Annual Opennings</td>
</tr>
<tr>
<td>26K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>107K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>
Supervision, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.MGTSV.CERT

The Certificate of Proficiency in Supervision is designed to prepare students for various management positions in business, government, and public organizations; to aid existing managers in upgrading their skills; and to assist employees for promotion to management/supervision positions.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT123</td>
<td>Supervision</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT135</td>
<td>Human Resource Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Proficiency

Certificate requirements: 12.0 Units

MGMT121 - Human Relations and Organizational Behavior 3.0

OR

BUS121 - Human Relations and Organizational Behavior 3.0

AND

MGMT122 - Business Communications 3.0

OR

BUS222 - Business Writing 3.0

AND

MGMT120 - Principles of Management 3.0

OR

BUS120 - Principles of Management 3.0
Certificate requirements: 12.0 Units

OR

MGMT123 - Supervision 3.0

AND

MGMT135 - Human Resource Management 3.0

Total Units 12.0

Learning Outcomes
Have the background to become a first-level supervisor.

Labor Market Data

Executive Secretaries and Executive Administrative Assistants
Job Growth Wages Competition
69K AVERAGE
45K 97K
LOW HIGH
2690 Annual Openings Graduates*
*For Program

First-Line Supervisors of Office and Administrative Support Workers
Job Growth Wages Competition
60K AVERAGE
37K 97K
LOW HIGH
7469 Annual Openings Graduates*
*For Program

Office Clerks, General
Job Growth Wages Competition
36K AVERAGE
25K 59K
LOW HIGH
18058 Annual Openings Graduates*
*For Program

Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
Job Growth Wages Competition
43K AVERAGE
26K 64K
LOW HIGH
13473 Annual Openings Graduates*
*For Program

Warehousing, CC
Certificate of Completion

Control Number:
The Certificate of Completion in Warehousing provides instruction, demonstration and discussion of topics that are critical for the entry level warehouse worker. Students will apply the concepts and skills needed in receiving, storing, and issuing a variety of supplies in a warehouse and maintain accurate records of the transactions. Prepares students for positions including Central Supply Technicians, Inventory Control Clerks, Inventory Takers, Linen Clerks, Order Pullers, Pickers, Stockers, Storekeepers, Supply Clerks Ticketers, and Tool-Crib Attendants. Specialties within this occupation include: Mailing Clerks, Merchandisers, Sales Floor Stock Clerks, Stockroom, Warehouse or Storage Yard Stock Clerks, and Wholesale and Retail Sales Order Fillers.

### Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS012</td>
<td>Workforce Readiness</td>
<td>0.0</td>
</tr>
<tr>
<td>VWHS010</td>
<td>Warehouse Worker</td>
<td>40.0</td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>0.0</td>
</tr>
</tbody>
</table>

### Program Requirements

**Certificate of Completion**

<table>
<thead>
<tr>
<th>Certificate requirements: 100 hours (credits are in hours)</th>
<th>100.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VWHS010 - Warehouse Worker</td>
<td>40.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR500 - Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

**Total Hours**

100.0

### Learning Outcomes

Apply the concepts and skills needed in receiving, storing, and issuing a variety of supplies in a warehouse and maintaining accurate records of the transactions.

### Labor Market Data

**First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52K</td>
<td>2456 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>33K LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>94K HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Laborers and Freight, Stock, and Material Movers, Hand**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30K</td>
<td>25924 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>25K LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>49K HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>
Logisticians

Job Growth

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>77K</td>
<td>1584 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td>36K LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td>135K HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Operating Engineers and Other Construction Equipment Operators

Job Growth

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>82K</td>
<td>942 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td>48K LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td>110K HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Production, Planning, and Expediting Clerks

Job Growth

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>49K</td>
<td>2861 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td>29K LOW</td>
<td>Graduates*</td>
</tr>
<tr>
<td>79K HIGH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Web Associate, CC

Certificate of Completion

Control Number:

24420

Curriculum Id:

OEC.WEB.CC

The Certificate of Completion in Web Associate is designed to give students the necessary knowledge and skills to support providers and consumers of web services. The web associate utilizes the understanding of distributed web services to support advertising, marketing and sales staff in today’s global economy. Understanding and utilizing developed web applications is critical to finding new business for web design, Internet marketing, hosting, programming, and technology projects.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS010</td>
<td>Introduction to Web Design using Adobe Dreamweaver</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS107</td>
<td>Seminar in Adobe Tools</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS242</td>
<td>Introduction to Vector Graphics using Adobe Illustrator</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS302</td>
<td>Introduction to Web Page Development using HTML</td>
<td>0.0</td>
</tr>
<tr>
<td>VBUS303</td>
<td>Introduction to Electronic Imaging using Adobe Photoshop</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion
Certificate requirements: 300.0 Hours

**VBUS010 - Introduction to Web Design using Adobe Dreamweaver** 0.0

AND

**VBUS107 - Seminar in Adobe Tools** 0.0

AND

**VBUS242 - Introduction to Vector Graphics using Adobe Illustrator** 0.0

AND

**VBUS302 - Introduction to Web Page Development using HTML** 0.0

AND

**VBUS303 - Introduction to Electronic Imaging using Adobe Photoshop** 0.0

Total Hours 300.0

**Learning Outcomes**

Demonstrate proficiency in creating, editing, and managing websites and images using industry standard web applications.

Work efficiently with window-based applications that operate in multiple platforms.

**Labor Market Data**

**Computer Occupations, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td>77K</td>
<td>2491 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>39K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>143K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Computer Programmers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td>89K</td>
<td>718 Annual</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>40K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>142K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Graphic Designers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td>Job Growth</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
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</table>

**Special Effects Artists and Animators**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
<td></td>
<td></td>
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<tr>
<td>AVERAGE</td>
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</tr>
<tr>
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</table>
Web Marketing, CERT
Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.MKTGW.CERT

The Certificate of Proficiency in Web Marketing is designed to prepare students for various marketing, sales, and retail store management positions; to assist existing marketing managers and sales professionals in upgrading their skills; and to open up new career opportunities within the marketing field. Program content includes selection and buying of merchandise, advertising, sales, product distribution, customer relations, and pricing. The student will then specialize in one of the option areas: general marketing, professional selling, advertising, or retailing management. The certificate program provides practical skills for the student within specific areas of marketing.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS127</td>
<td>Introduction to E-Commerce</td>
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</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
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</tr>
<tr>
<td>MKTG135</td>
<td>Web Marketing and Promotion</td>
<td>3.0</td>
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</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 9.0 Units

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<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tr>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>MKTG113 - Principles of Marketing</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>MKTG135 - Web Marketing and Promotion</td>
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</table>

Total Units 9.0

Learning Outcomes
Have the knowledge for an entry-level web marketing position.
Labor Market Data

Computer Occupations, All Other

<table>
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<th>Competition</th>
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<tr>
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Computer User Support Specialists

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<td>425K</td>
<td>39K</td>
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<tr>
<td>LOW</td>
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<td>LOW</td>
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First-Line Supervisors of Office and Administrative Support Workers

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<td>*For Program</td>
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<tr>
<td></td>
<td>425K</td>
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<tr>
<td>LOW</td>
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First-Line Supervisors of Retail Sales Workers

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<td>*For Program</td>
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<td>425K</td>
<td>39K</td>
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<tr>
<td>LOW</td>
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</table>

General and Operations Managers

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<th>Competition</th>
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<tr>
<td>AVERAGE</td>
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<td>*For Program</td>
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<tr>
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<td>425K</td>
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<tr>
<td>LOW</td>
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<tr>
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</tbody>
</table>

Communication, Language & Literature

Are you intrigued by how people interact? Do you enjoy learning about different cultures? The majors in the Interest Area of Language and Communication help students develop their communication skills, and focus on the acquisition of different languages. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

Programs

American College English/ESL, CA

Certificate of Achievement

Control Number:
37478

Curriculum Id:
SCC.ACEESL.CA

The Certificate of Achievement in American College English (ACE), is an intensive academic English as a Second Language program, provides students, prospective employers, and others with documented evidence of persistence and achievement in developing English fluency.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE095</td>
<td>Academic Listening and Speaking 2</td>
<td>2.0</td>
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<tr>
<td>ACE106</td>
<td>Academic Reading and Writing 2</td>
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</tr>
<tr>
<td>ACE116</td>
<td>Introduction to Academic Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>CNSL101</td>
<td>Educational, Personal, Cultural, and Career Exploration</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM120</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM120H</td>
<td>Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>READ101</td>
<td>Introduction to Academic Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>READ128</td>
<td>Expanding ESL Reading Skills</td>
<td>1.0</td>
</tr>
<tr>
<td>READ129</td>
<td>Refining ESL Reading Skills</td>
<td>1.0</td>
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</table>

Program Requirements

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate Requirements:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>ACE102 - Refining Academic Writing and Reading</td>
<td>4.0 Units</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACE116 - Introduction to Academic Composition</td>
<td>4.0 Units</td>
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</tbody>
</table>

Select (3) units from the following (may not select a course that is used to satisfy the unit requirement from the list above)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CNSL101</td>
<td>Educational, Personal, Cultural, and Career Exploration</td>
<td>3.0</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-d837ba68e18
Select (3) units from the following (may not select a course that is used to satisfy the unit requirement from the list above)  

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>COMM100 - Introduction to Interpersonal Communication</td>
</tr>
<tr>
<td>3.0</td>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
</tr>
<tr>
<td>3.0</td>
<td>COMM120 - Intercultural Communication</td>
</tr>
<tr>
<td>3.0</td>
<td>COMM120H - Honors Introduction to Intercultural Communication</td>
</tr>
<tr>
<td>3.0</td>
<td>READ101 - Introduction to Academic Reading</td>
</tr>
</tbody>
</table>

Select nine (9) units from the following (may not select a course that is used to satisfy the unit requirement from the list above)  

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<thead>
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<tbody>
<tr>
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<tr>
<td>4.0</td>
<td>ACE116 - Introduction to Academic Composition</td>
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<tr>
<td>3.0</td>
<td>COMM100 - Introduction to Interpersonal Communication</td>
</tr>
<tr>
<td>3.0</td>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
</tr>
<tr>
<td>3.0</td>
<td>READ101 - Introduction to Academic Reading</td>
</tr>
<tr>
<td>1.0</td>
<td>READ128 - Expanding ESL Reading Skills</td>
</tr>
<tr>
<td>1.0</td>
<td>READ129 - Refining ESL Reading Skills</td>
</tr>
</tbody>
</table>

Total Units: 16.0

**Learning Outcomes**

Communicate effectively in conversations, oral presentations, and written work.
Certificate of Achievement

Control Number:
11905

Curriculum Id:
SCC.ASL.CA

The Certificate of Achievement in American Sign Language (ASL) is offered as preparation for developing linguistic competency in ASL and readiness for entering a formal interpreter training program. The certificate indicates skill in the use of ASL for personal communication and an introductory awareness of Sign Language interpreting and other professions working within the Deaf community.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL110</td>
<td>American Sign Language I</td>
<td>4.0</td>
</tr>
<tr>
<td>ASL111</td>
<td>American Sign Language II</td>
<td>4.0</td>
</tr>
<tr>
<td>ASL113</td>
<td>Introduction to Interpreting for the Deaf</td>
<td>3.0</td>
</tr>
<tr>
<td>ASL114</td>
<td>Classifiers, Fingerspelling, and Numbering</td>
<td>3.0</td>
</tr>
<tr>
<td>ASL116</td>
<td>Introduction to Deaf Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>ASL210</td>
<td>American Sign Language III</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV205</td>
<td>Introduction to Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM120</td>
<td>Intercultural Communication</td>
<td>3.0</td>
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<td>COMM120H</td>
<td>Honors Introduction to Intercultural Communication</td>
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</tr>
<tr>
<td>EDUC209</td>
<td>Roles and Responsibilities of the Special Education Paraprofessional</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC157</td>
<td>Introduction to Child Psychology</td>
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<td>THEA110</td>
<td>Acting Fundamentals</td>
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Program Requirements

Certificate of Achievement

Certificate requirements: 21.0 Units

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<tr>
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<tr>
<td>ASL110</td>
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AND

<table>
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<tbody>
<tr>
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Certificate requirements: 21.0 Units

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<td>ASL116 - Introduction to Deaf Studies</td>
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Select one (1) course from the following: 3.0 Units

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<td>CDEV205 - Introduction to Children with Special Needs</td>
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<tr>
<td>EDUC209 - Roles and Responsibilities of the Special Education Paraprofessional</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC157 - Introduction to Child Psychology</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>THEA110 - Acting Fundamentals</td>
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<tr>
<td>AND</td>
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<tr>
<td>COMM100 - Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
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<td>COMM120 - Intercultural Communication</td>
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Total Units 24.0

Learning Outcomes

Maintain an ongoing dialogue in ASL at an intermediate conversational level.
## Labor Market Data

<table>
<thead>
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<td>*For Program</td>
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<thead>
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<table>
<thead>
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<td>Graduates</td>
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<td>HIGH</td>
<td>*For Program</td>
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<table>
<thead>
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<td></td>
<td>64K</td>
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</tr>
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<td></td>
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<td>*For Program</td>
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<table>
<thead>
<tr>
<th>Special Education Teachers, Secondary School</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>80K</td>
<td>318</td>
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<td></td>
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<td>54K</td>
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<td></td>
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<td>107K</td>
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</tr>
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<td></td>
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<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

---

**Chinese***

**Mission**

The Languages Department at Santiago Canyon College offers quality languages experiences to expand awareness and understanding of cultural diversity, and of other worldviews through languages learning. The department is dedicated to providing timely university transfer courses, associate degree programs, certificates and community services learning activities. The Languages Department directs its efforts to help students become better world citizens.

**Department Chair**

Charlie Malone

---

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32faa6eb18
Course

CHNS101 - Elementary Chinese I
CHNS102 - Elementary Chinese II

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Communication, AA

A.A. Degree Major

Control Number:
11929

Curriculum Id:
SCC.COMM.AA

The associate degree curriculum in communication provides training for communicating and dealing with people. Completion of the associate in arts degree in communication prepares students to: (1) Communicate with clarity and accuracy, and in diverse environments, (2) Act with awareness of self and both the local and global communities of persons, (3) Think critically, creatively and reflectively, and (4) Learn about self and others, academic and professional issues. The associate in arts in communication degree prepares the student to move into a curriculum at a four-year institution leading to a baccalaureate degree, and then into careers in the field of business, industry, government, social service, or education in such areas as teaching, public speaking, consulting, law, announcing, public speaking and public relations.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM100</td>
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<td>3.0</td>
</tr>
<tr>
<td>COMM100H</td>
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<td>3.0</td>
</tr>
<tr>
<td>COMM101</td>
<td>Group Dynamics</td>
<td>3.0</td>
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</table>

Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>COMM130</td>
<td>Forensics Team</td>
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<tr>
<td>COMM134</td>
<td>Oral Interpretation</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM135</td>
<td>Readers’ Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM230</td>
<td>Advanced Forensics Team</td>
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Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tr>
<td>LIBI103</td>
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## Available Program Courses

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## Available Program Courses

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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>COMM110</td>
<td>Public Speaking</td>
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</tr>
<tr>
<td>COMM111</td>
<td>Argumentation and Debate</td>
<td>3.0</td>
</tr>
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</table>

## Program Requirements

### A.A. Degree Major

#### Delivery Emphasis 3.0 Units

- COMM110 - Public Speaking 3.0

#### AND

- COMM111 - Argumentation and Debate 3.0

#### Diversity Emphasis 3.0 Units

- COMM120 - Intercultural Communication 3.0

#### OR

- COMM120H - Honors Introduction to Intercultural Communication 3.0

#### AND

- COMM225 - Gender Communication 3.0

#### OR

- COMM225H - Honors Gender Communication 3.0

#### Performance Emphasis 3.0 Units

- COMM130 - Forensics Team 6.0

#### AND

- COMM134 - Oral Interpretation 3.0

#### AND
### Performance Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM135 - Readers' Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM230 - Advanced Forensics Team</td>
<td>6.0</td>
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### Relationship Emphasis

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<tr>
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<td>3.0</td>
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<tr>
<td><strong>OR</strong></td>
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<tr>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM101 - Group Dynamics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Required Electives

Any of the above courses not already completed, but no more than two (2) additional units of Communication 130 or Communication 230

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>LIBI103 - Advanced Internet Research</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### Total Units

18.0

### Learning Outcomes

- Better manage apprehension in communication settings.
- Present the self appropriately and effectively through verbal and nonverbal communication.

### Labor Market Data

#### Advertising and Promotions Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
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<td>111K</td>
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<td><strong>AVERAGE</strong></td>
<td>26K</td>
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<td>LOW</td>
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<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

#### Agents and Business Managers of Artists, Performers, and Athletes

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td>LOW</td>
<td>203K</td>
<td>Openings</td>
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<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

#### Broadcast Announcers and Radio Disc Jockeys

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For Program
The Associate in Arts in Communication Studies for Transfer degree provides training to build and maintain personal and professional relationships through effective communication. Completion of the transfer degree in Communication prepares students to: (1) Communicate with clarity and accuracy in diverse environments, (2) Act with awareness of self amongst local and global communities, (3) Think critically, creatively and reflectively, and (4) Learn about the self in professional and interpersonal relationships. Successful completion of the transfer degree in Communication guarantees the student acceptance to a local California State University to pursue a baccalaureate degree, in preparation to pursue a career in the field of business, industry, government, social service, and/or education in such areas as teaching, public speaking, consulting, law, announcing, and public relations.

Program Courses

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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</tr>
<tr>
<td>COMM120H</td>
<td>Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM134</td>
<td>Oral Interpretation</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM135</td>
<td>Readers’ Theatre</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
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<tr>
<td>COMM225</td>
<td>Gender Communication</td>
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<tr>
<td>ENGL102H</td>
<td>Honors Literature and Composition</td>
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</tr>
<tr>
<td>ENGL103</td>
<td>Critical Thinking and Writing</td>
<td>4.0</td>
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<tr>
<td>ENGL103H</td>
<td>Honors Critical Thinking and Writing</td>
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Available Program Courses

No value

Available Program Courses

No value

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<thead>
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<td>COMM110</td>
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Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
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<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM101</td>
<td>Group Dynamics</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM111</td>
<td>Argumentation and Debate</td>
<td>3.0</td>
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</table>

Program Requirements

A.A. Degree for Transfer

Major requirements: 3.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMM110</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following (List C): 3.0 - 4.0 Units

An additional course from List A (may not be a course used to satisfy the requirements in List A or B) 3.0

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COMM135</td>
<td>Readers' Theatre</td>
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</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COMM225</td>
<td>Gender Communication</td>
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OR
Select one (1) course from the following (List C): 3.0 - 4.0 Units

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>COMM225H - Honors Gender Communication</td>
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<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL102 - Literature and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL102H - Honors Literature and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL103 - Critical Thinking and Writing</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL103H - Honors Critical Thinking and Writing</td>
<td>4.0</td>
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</table>

Select two (2) courses from the following (List A): 6.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>An additional course from List A (may not be a course used to satisfy the requirements in List A)</td>
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<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM100 - Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM101 - Group Dynamics</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM111 - Argumentation and Debate</td>
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Select two (2) courses from the following (List B): 6.0 Units

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<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM120 - Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>COMM120H - Honors Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM134 - Oral Interpretation</td>
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</table>

Total Units 18.0 - 19.0
Learning Outcomes
Better manage apprehension in communication settings.
Present the self appropriately and effectively through verbal and nonverbal communication.

Labor Market Data

<table>
<thead>
<tr>
<th>Broadcast Announcers and Radio Disc Jockeys</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>53K</td>
<td>19K</td>
<td>601</td>
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<td>HIGH</td>
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<table>
<thead>
<tr>
<th>Legislators</th>
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<th>Competition</th>
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<td>80</td>
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<td></td>
<td>LOW</td>
<td>HIGH</td>
<td></td>
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<table>
<thead>
<tr>
<th>Media and Communication Workers, All Other</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
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<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>News Analysts, Reporters, and Journalists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51K</td>
<td>18K</td>
<td>621</td>
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<td>HIGH</td>
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<table>
<thead>
<tr>
<th>Public Relations and Fundraising Managers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td></td>
<td>133K</td>
<td>77K</td>
<td>307</td>
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</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td></td>
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</tbody>
</table>

Apply Now Request Info

English as a Second Language Program, COM
Certificate of Competency

Control Number: 24285
Curriculum Id:
The Certificate of Competency in ESL Program is designed to develop the reading, writing, speaking, and listening skills of limited-English speaking students, through the continuum of ESL classes, in preparation for enhanced job opportunities and transition to academic studies.

**Program Courses**

**Available Program Courses**

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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<td>Beginning ESL 1</td>
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<td>ESL430</td>
<td>Beginning ESL 3</td>
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<td>ESL460</td>
<td>Intermediate ESL 1</td>
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</tr>
<tr>
<td>ESL470</td>
<td>Intermediate ESL 2</td>
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<tr>
<td>ESL480</td>
<td>Intermediate ESL 3</td>
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</tbody>
</table>

**Program Requirements**

**Certificate of Competency**

Certificate requirements: 1,296 hours (credits in hours)  
1296.0 Units

- ESL410 - Beginning ESL 1  
- ESL420 - Beginning ESL 2  
- ESL430 - Beginning ESL 3  
- ESL460 - Intermediate ESL 1  
- ESL470 - Intermediate ESL 2  
- ESL480 - Intermediate ESL 3

Total Units 1296.0

**Learning Outcomes**

- Demonstrate improved communication skills as they pertain to second language learners.
- Demonstrate the ability to complete everyday written tasks.

**English, AA**

A.A. Degree Major

Control Number:
Curriculum Id:
SCC.ENGL.AA

The Associate of Arts degree in English is designed to develop proficiency in written communication and in the understanding of human nature through the study of language and literature. Completion of the degree program prepares students to pursue a major in English leading to a baccalaureate degree.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL231</td>
<td>Survey of English Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL232</td>
<td>Survey of English Literature II</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL241</td>
<td>Survey of American Literature, 1600-1865</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL242</td>
<td>Survey of American Literature, 1865-Present</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL271</td>
<td>Survey of World Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL272</td>
<td>Survey of World Literature II</td>
<td>3.0</td>
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</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>ENGL101H</td>
<td>Honors Freshman Composition</td>
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</tr>
<tr>
<td>ENGL102</td>
<td>Literature and Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL102H</td>
<td>Honors Literature and Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL103</td>
<td>Critical Thinking and Writing</td>
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<tr>
<td>ENGL103H</td>
<td>Honors Critical Thinking and Writing</td>
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</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL213</td>
<td>Creative Writing</td>
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<tr>
<td>ENGL220</td>
<td>Survey of the Bible As Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL231</td>
<td>Survey of English Literature I</td>
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<td>ENGL232</td>
<td>Survey of English Literature II</td>
<td>3.0</td>
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<tr>
<td>ENGL233A</td>
<td>Shakespeare's Comedies and Romances</td>
<td>3.0</td>
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<tr>
<td>ENGL233B</td>
<td>Shakespeare's Tragedies and History Plays</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL241</td>
<td>Survey of American Literature, 1600-1865</td>
<td>3.0</td>
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<tr>
<td>ENGL242</td>
<td>Survey of American Literature, 1865-Present</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>ENGL246</td>
<td>Survey of Chicano Literature</td>
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<td>ENGL270</td>
<td>Children's Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL271</td>
<td>Survey of World Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL272</td>
<td>Survey of World Literature II</td>
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</tr>
<tr>
<td>ENGL278</td>
<td>Survey of Literature by Women</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.A. Degree Major

**Major requirements:** 12.0 Units

- ENGL101 - Freshman Composition 4.0
  OR
  - ENGL101H - Honors Freshman Composition 4.0
  AND
  - ENGL102 - Literature and Composition 4.0
  OR
  - ENGL102H - Honors Literature and Composition 4.0
  AND
  - ENGL103 - Critical Thinking and Writing 4.0
  OR
  - ENGL103H - Honors Critical Thinking and Writing 4.0

Select four (4) courses from the following: 12.0 Units

- ENGL213 - Creative Writing 3.0
  AND
  - ENGL220 - Survey of the Bible As Literature 3.0
  AND
  - ENGL231 - Survey of English Literature I 3.0
  AND
  - ENGL232 - Survey of English Literature II 3.0
  AND
  - ENGL233A - Shakespeare's Comedies and Romances 3.0

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba66eb18
Select four (4) courses from the following:  

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL233B - Shakespeare's Tragedies and History Plays</td>
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<tr>
<td>ENGL241 - Survey of American Literature, 1600-1865</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL242 - Survey of American Literature, 1865-Present</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL246 - Survey of Chicano Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL270 - Children's Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL271 - Survey of World Literature I</td>
<td>3.0</td>
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<tr>
<td>ENGL272 - Survey of World Literature II</td>
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<tr>
<td>ENGL278 - Survey of Literature by Women</td>
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</table>

Total Units 30.0

Select one (1) sequence from the following:  

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<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td>ENGL232 - Survey of English Literature II</td>
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<tr>
<td>ENGL241 - Survey of American Literature, 1600-1865</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL242 - Survey of American Literature, 1865-Present</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL271 - Survey of World Literature I</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL272 - Survey of World Literature II</td>
<td>3.0</td>
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</table>

Total Units 30.0
Learning Outcomes
Analyze and evaluate texts, written, visual, and oral, for structure, soundness, and creativity. Compose texts that focus on specific purposes for specific audiences and that demonstrate effective organization, development, grammatical precision, clarity, originality, and correct use of sources.

Labor Market Data

### Desktop Publishers
- **Job Growth**: 57K
- **Wages**
  - AVERAGE: 21K - 144K
  - LOW: 14K - HIGH
- **Competition**: 53
- **Annual Openings**:
  - Graduates*: 361
  - *For Program

### Editors
- **Job Growth**: 58K
- **Wages**
  - AVERAGE: 16K - 153K
  - LOW: 14K - HIGH
- **Competition**: 1884
- **Annual Openings**:
  - Graduates*: 2244
  - *For Program

### Elementary School Teachers, Except Special Education
- **Job Growth**: 87K
- **Wages**
  - AVERAGE: 55K - 124K
  - LOW: 14K - HIGH
- **Competition**: 4240
- **Annual Openings**:
  - Graduates*: 361
  - *For Program

### Librarians and Media Collections Specialists
- **Job Growth**: 79K
- **Wages**
  - AVERAGE: 37K - 120K
  - LOW: 14K - HIGH
- **Competition**: 441
- **Annual Openings**:
  - Graduates*: 2244
  - *For Program

### Library Technicians
- **Job Growth**: 45K
- **Wages**
  - AVERAGE: 34K - 60K
  - LOW: 14K - HIGH
- **Competition**: 670
- **Annual Openings**:
  - Graduates*: 2244
  - *For Program

---

**Apply Now**  **Request Info**

**English, AA-T**

A.A. Degree for Transfer

**Control Number:**

31366
Curriculum Id:
SCC.ENGL.AAT

The Associate in Arts in English for Transfer degree enables students to develop proficiency in written communication and in the understanding of human nature through the study of language and literature. Completion of the transfer degree in English prepares students to (1) communicate effectively, (2) exercise critical thinking and reasoning, (3) read and write to express creativity, and (4) explore the history of significant literary works. Successful completion of the transfer degree in English guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in English or a related field.

Program Courses

<table>
<thead>
<tr>
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<th>Units</th>
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<td>Literature and Composition</td>
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<tr>
<td>ENGL102H</td>
<td>Honors Literature and Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL103</td>
<td>Critical Thinking and Writing</td>
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<td>ENGL103H</td>
<td>Honors Critical Thinking and Writing</td>
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Available Program Courses

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<th>Course Code</th>
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<th>Units</th>
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<tr>
<td>ENGL231</td>
<td>Survey of English Literature I</td>
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<td>ENGL232</td>
<td>Survey of English Literature II</td>
<td>3.0</td>
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<tr>
<td>ENGL241</td>
<td>Survey of American Literature, 1600-1865</td>
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<td>Survey of World Literature I</td>
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Available Program Courses

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Available Program Courses

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<th>Course Code</th>
<th>Course Title</th>
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<td>ENGL233A</td>
<td>Shakespeare's Comedies and Romances</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL233B</td>
<td>Shakespeare's Tragedies and History Plays</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL246</td>
<td>Survey of Chicano Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL270</td>
<td>Children's Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL278</td>
<td>Survey of Literature by Women</td>
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<td>Course</td>
<td>Units</td>
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<td>AND</td>
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<td>AND</td>
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<td>AND</td>
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</tr>
<tr>
<td>ENGL233A - Shakespeare's Comedies and Romances</td>
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<td>AND</td>
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<tr>
<td>ENGL233B - Shakespeare's Tragedies and History Plays</td>
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<td>AND</td>
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<td></td>
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<td>ENGL246 - Survey of Chicano Literature</td>
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<td>AND</td>
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<td>ENGL270 - Children's Literature</td>
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<td>AND</td>
<td></td>
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<td>Select two (2) courses from the following (List A):</td>
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<tr>
<td>ENGL231 - Survey of English Literature I</td>
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Select two (2) courses from the following (List A):

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<tbody>
<tr>
<td>AND</td>
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<tr>
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<td>ENGL241 - Survey of American Literature, 1600-1865</td>
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<td>ENGL242 - Survey of American Literature, 1865-Present</td>
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<td>AND</td>
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<td>AND</td>
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<tr>
<td>ENGL272 - Survey of World Literature II</td>
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Total Units: 20.0

Learning Outcomes

Analyze and evaluate texts, written, visual, and oral, for structure, soundness, and creativity. Compose texts that focus on specific purposes for specific audiences and that demonstrate effective organization, development, grammatical precision, clarity, originality, and correct use of sources.

Labor Market Data

**Desktop Publishers**

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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
<td>57K</td>
<td>53</td>
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<tr>
<td><strong>AVERAGE</strong></td>
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<tr>
<td><strong>LOW</strong></td>
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<td><strong>HIGH</strong></td>
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**Editors**

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<th>Competition</th>
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<tr>
<td></td>
<td>58K</td>
<td>1884</td>
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<tr>
<td><strong>AVERAGE</strong></td>
<td>16K</td>
<td></td>
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<tr>
<td><strong>LOW</strong></td>
<td>153K</td>
<td></td>
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<tr>
<td><strong>HIGH</strong></td>
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**Elementary School Teachers, Except Special Education**

<table>
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<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
<td>87K</td>
<td>4240</td>
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<tr>
<td><strong>AVERAGE</strong></td>
<td>55K</td>
<td></td>
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<tr>
<td><strong>LOW</strong></td>
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<tr>
<td><strong>HIGH</strong></td>
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</table>
Enhanced Beginning ESL Skills, COM

Certificate of Competency

Control Number:
30690

Curriculum Id:
OEC.ESLEN.COM

The Certificate of Competency in Enhanced Beginning ESL Skills improves the reading, writing, listening, speaking, and employability skills of Beginning ESL students for better communication and personal growth.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
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<td>ESL250</td>
<td>Seminar for Beginning ESL Students</td>
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<tr>
<td>ESL530</td>
<td>American English Pronunciation</td>
<td>216.0</td>
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</table>

Program Requirements
Certificate of Competency

Certificate requirements: 288 hours (credits are in hours) 288.0 Hours

ESL250 - Seminar for Beginning ESL Students 72.0

AND

ESL530 - American English Pronunciation 216.0

Total Hours 288.0

Learning Outcomes
Demonstrate fundamental reading, writing, listening, and speaking skills with a focus on pronunciation in English.

The Certificate of Competency in Enhanced Intermediate ESL Skills is designed to improve the reading, writing, listening, speaking, employability, and digital literacy skills of Intermediate English as a Second Language students for better communication and personal growth.

Program Courses

Available Program Courses

<table>
<thead>
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<th>Course Title</th>
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<td>ESL010</td>
<td>ESL Writing</td>
<td>72.0</td>
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<tr>
<td>ESL260</td>
<td>Seminar for Intermediate ESL Students</td>
<td>72.0</td>
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Program Requirements

Certificate of Competency

<table>
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<tr>
<th>Certificate requirements: 144 hours (credits are in hours)</th>
<th>144.0 Hours</th>
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</thead>
<tbody>
<tr>
<td>ESL010 - ESL Writing</td>
<td>72.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ESL260 - Seminar for Intermediate ESL Students</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Total Hours 144.0

Learning Outcomes

Demonstrate essential reading, writing, listening, and speaking skills with a focus on writing in English.

ESL Advanced, COM

Certificate of Competency

Control Number: 33137

Curriculum Id: OEC.ESLAD.COM

The Certificate of Competency in ESL Advanced improves limited-English speaking students' communication skills in English with an emphasis on grammar and writing in preparation for enhanced job opportunities and the transition to academic studies.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
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<td>ESL305</td>
<td>Advanced Low</td>
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<tr>
<td>ESL306</td>
<td>Advanced High</td>
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Program Requirements

Certificate of Competency
Certificate requirements: 432 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ESL305</td>
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<tr>
<td>AND</td>
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<tr>
<td>ESL306</td>
<td>Advanced High</td>
<td>216.0</td>
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</tbody>
</table>

Total Hours 432.0

Learning Outcomes
Demonstrate advanced written communication skills in English.

ESL Beginning, COM
Certificate of Competency

Control Number: 30644
Curriculum Id: OEC.ESLBG.COM

The Certificate of Competency in ESL Beginning is designed to give fundamental reading, writing, listening, speaking, and digital literacy skills to limited-English speaking students, preparing them for enhanced job opportunities and academic studies, and increased community participation.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
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<tbody>
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<tr>
<td>ESL302</td>
<td>Beginning High</td>
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Program Requirements
Certificate of Competency

Certificate requirements: 432 hours (credits are in hours) 432.0 Hours

<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ESL301</td>
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<td>216.0</td>
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<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESL302</td>
<td>Beginning High</td>
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</tr>
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</table>

Total Hours 432.0

Learning Outcomes
Demonstrate fundamental reading, writing, listening, and speaking skills in English.

ESL Beginning Multilevel, COM
Certificate of Competency

Control Number: 24233
The Certificate of Competency in ESL Beginning Multilevel is designed to give fundamental reading, writing, listening, speaking, and digital literacy skills to limited-English speaking students, preparing them for enhanced job opportunities, academic studies, and increased community participation.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>Literacy</td>
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</tr>
<tr>
<td>ESL440</td>
<td>Beginning Multilevel</td>
<td>216.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Competency

Certificate requirements: 432 hours (credits are in hours) 432.0 Hours

ESL300 - Literacy 216.0 AND

ESL440 - Beginning Multilevel 216.0

Total Hours 432.0

Learning Outcomes
Demonstrate fundamental, reading, writing, listening, and speaking skills in English.

Apply Now Request Info

ESL Civics, COM
Certificate of Competency

Control Number:
24191

Curriculum Id:
OEC.ESLCIV.COM

The Certificate of Competency in ESL Civics enhances the English language skills of limited-English speaking students while preparing them for the United States Citizenship Exam and civic preparation.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL120</td>
<td>ESL Civics</td>
<td>144.0</td>
</tr>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
<td>216.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Competency

Certificate requirements: 360 hours (credits are in hours) 360.0 Hours

ESL120 - ESL Civics 144.0
Certificate requirements: 360 hours (credits are in hours)  360.0 Hours

AND

ESL303 - Intermediate Low  216.0

Total Hours  360.0

Learning Outcomes

Demonstrate knowledge of citizenship and civic-related issues.

Apply Now Request Info

ESL Communication, COM

Certificate of Competency

Control Number: 36665

Curriculum Id: OEC.ESLCO.COM

The certificate of competency in ESL Communication improves the English language skills of limited-English speaking students with an emphasis on speaking and pronunciation.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
<td>216.0</td>
</tr>
<tr>
<td>ESL530</td>
<td>American English Pronunciation</td>
<td>216.0</td>
</tr>
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</table>

Program Requirements

Certificate of Competency

Certificate requirements: 432 hours (credits are in hours)  432.0 Hours

ESL303 - Intermediate Low  216.0

AND

ESL530 - American English Pronunciation  216.0

Total Hours  432.0

Learning Outcomes

Demonstrate fundamental communication skills with a focus on pronunciation in English.

Apply Now Request Info

ESL Intermediate, COM

Certificate of Competency

Control Number: 30646

Curriculum Id: OEC.ESLIN.COM
The Certificate of Competency in ESL Intermediate is designed to give essential reading, writing, listening, speaking, and digital literacy skills to limited-English speaking students in preparation for enhanced job opportunities, the transition to academic studies, and increased community participation.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
<td>216.0</td>
</tr>
<tr>
<td>ESL304</td>
<td>Intermediate High</td>
<td>216.0</td>
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</table>

Program Requirements
Certificate of Competency

<table>
<thead>
<tr>
<th>Certificate requirements: 432 hours (credits are in hours)</th>
<th>432.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL303 - Intermediate Low</td>
<td>216.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ESL304 - Intermediate High</td>
<td>216.0</td>
</tr>
</tbody>
</table>

Total Hours 432.0

Learning Outcomes
Demonstrate essential reading, writing, listening, and speaking skills in English.

ESL Intermediate Communication, COM
Certificate of Competency

Control Number: 24195
Curriculum Id: OEC.ESLIC.COM

The Certificate of Competency in ESL Intermediate Communication develops the ability of limited-English speaking students in non-verbal communication skills and the use of formal and colloquial language in preparation for enhanced job opportunities, the transition to academic studies, and increased community participation.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL570</td>
<td>Conversation 1</td>
<td>72.0</td>
</tr>
<tr>
<td>ESL580</td>
<td>Conversation 2</td>
<td>72.0</td>
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Program Requirements
Certificate of Competency

<table>
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<th>144.0 Hours</th>
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</thead>
<tbody>
<tr>
<td>ESL570 - Conversation 1</td>
<td>72.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
</tbody>
</table>
Certificate requirements: 144 hours (credits are in hours)  144.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL580</td>
<td>Conversation 2</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Total Hours  144.0

Learning Outcomes
Demonstrate essential oral communication skills in English.

Apply Now Request Info

ESL Intermediate Multilevel, COM
Certificate of Competency

Control Number:  24234
Curriculum Id: OEC.ESLIM.COM

The Certificate of Competency in ESL Intermediate Multilevel develops the ability of limited-English speaking students in a variety of advanced written, interpersonal and academic communication tasks in preparation for enhanced job opportunities and the transition to academic studies.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
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<tr>
<td>ESL500</td>
<td>Intermediate Multilevel</td>
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</tbody>
</table>

Program Requirements
Certificate of Competency

Certificate requirements: 432 hours (credits are in hours)  432.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
<td>216.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL500</td>
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<td>216.0</td>
</tr>
</tbody>
</table>

Total Hours  432.0

Learning Outcomes
Demonstrate essential reading, writing, listening, and speaking skills in English.

Apply Now Request Info

ESL Intermediate Writing, COM
Certificate of Competency

Control Number:  24196
Curriculum Id: OEC.ESLIW.COM
The Certificate of Competency in ESL Intermediate Writing develops the ability of limited-English speaking students in composition and other essential written communication skills in preparation for enhanced job opportunities and the transition to academic studies.

### Program Courses

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL010</td>
<td>ESL Writing</td>
<td>72.0</td>
</tr>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
<td>216.0</td>
</tr>
</tbody>
</table>

### Program Requirements

#### Certificate of Competency

**Certificate requirements:** 288 hours (credits are in hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL010</td>
<td>ESL Writing</td>
<td>72.0</td>
</tr>
<tr>
<td>ESL303</td>
<td>Intermediate Low</td>
<td>216.0</td>
</tr>
</tbody>
</table>

**Total Hours**

288.0

### Learning Outcomes

Demonstrate essential written communication skills in English.

ESL Literacy, COM

#### Certificate of Competency

**Control Number:**

24230

**Curriculum Id:**

OEC.ESLLI.COM

The Certificate of Competency in ESL Literacy develops the ability of non-English speaking students in basic literacy skills, including letter and number recognition/production, simple personal information, and basic oral communication in preparation for enhanced job opportunities.

### Program Courses

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE011</td>
<td>Native Language Basic Skills for Adults</td>
<td>216.0</td>
</tr>
<tr>
<td>ESL300</td>
<td>Literacy</td>
<td>216.0</td>
</tr>
</tbody>
</table>

### Program Requirements

#### Certificate of Competency

**Certificate requirements:** 432 hours (credits are in hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE011</td>
<td>Native Language Basic Skills for Adults</td>
<td>216.0</td>
</tr>
</tbody>
</table>

AND
Certificate requirements: 432 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL300 - Literacy</td>
<td>216.0</td>
</tr>
</tbody>
</table>

Total Hours 432.0

Learning Outcomes
Demonstrate basic oral communication and literacy skills in English.

French*

Mission
The Languages Department at Santiago Canyon College offers quality languages experiences to expand awareness and understanding of cultural diversity, and of other worldviews through languages learning. The department is dedicated to providing timely university transfer courses, associate degree programs, certificates and community services learning activities. The Languages Department directs its efforts to help students be better world citizens.

Department Chair
Charlie Malone
(714) 628-5068
Malone_Charlie@sccollege.edu

Course
- FREN101 - Elementary French 1
- FREN102 - Elementary French II
- FREN194 - Conversation and Composition I
- FREN201 - Intermediate French I
- FREN202 - Intermediate French II

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Italian*

Mission
The Languages Department at Santiago Canyon College offers quality languages experiences to expand awareness and understanding of cultural diversity, and of other worldviews through languages learning. The department is dedicated to providing timely university transfer courses, associate degree programs, certificates and community services learning activities. The Languages Department directs its efforts to help students be better world citizens.

Department Chair
Charlie Malone
(714) 628-5068
Malone_Charlie@sccollege.edu

Course
- ITAL101 - Elementary Italian I
ITAL102 - Elementary Italian II
ITAL194 - Conversation and Composition
ITAL195 - Advanced Conversational Italian
ITAL201 - Intermediate Italian I
ITAL202 - Intermediate Italian II

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Modern Languages, AA
A.A. Degree Major

Control Number:
11925

Curriculum Id:
SCC.MOLA.AA

The Associate of Arts degree in Modern Languages is designed to meet the needs of both the student who wishes to transfer to a four-year institution and the student who wishes to achieve basic conversational ability in the language. Completion of the associate in arts degree prepares students to transfer to a four-year institution leading to a baccalaureate degree and to possible careers requiring proficiency in multiple languages. The associate degree in modern languages requires the following: Completion of a minimum of 21 units total. Completion of a minimum of 13 units in any one language including courses numbered 201 and 202. Completion of 5 units in a second language. Completion of a minimum of 3 units of restricted electives.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN101</td>
<td>Elementary French 1</td>
<td>5.0</td>
</tr>
<tr>
<td>FREN102</td>
<td>Elementary French II</td>
<td>5.0</td>
</tr>
<tr>
<td>FREN194</td>
<td>Conversation and Composition I</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN201</td>
<td>Intermediate French I</td>
<td>5.0</td>
</tr>
<tr>
<td>FREN202</td>
<td>Intermediate French II</td>
<td>5.0</td>
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</table>

Available Program Courses

No value

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>0.0</td>
</tr>
<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>0.0</td>
</tr>
<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
</tr>
<tr>
<td>ART102</td>
<td>Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>CHNS101</td>
<td>Elementary Chinese I</td>
<td>3.0</td>
</tr>
<tr>
<td>CHNS102</td>
<td>Elementary Chinese II</td>
<td>5.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>5.0</td>
</tr>
<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>5.0</td>
</tr>
<tr>
<td>ENGL102</td>
<td>Literature and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL102H</td>
<td>Honors Literature and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL271</td>
<td>Survey of World Literature I</td>
<td>4.0</td>
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<tr>
<td>ENGL272</td>
<td>Survey of World Literature II</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG100</td>
<td>World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG100H</td>
<td>Honors World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST101</td>
<td>World Civilizations to the 16th Century</td>
<td>3.0</td>
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<tr>
<td>HIST101H</td>
<td>Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
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<tr>
<td>HIST102</td>
<td>World Civilizations Since the 16th Century</td>
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<tr>
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<td>Honors World Civilizations Since the 16th Century</td>
<td>3.0</td>
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<td>HIST124</td>
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<tr>
<td>POLT101</td>
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<td>International Politics</td>
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Available Program Courses

No value

Available Program Courses

No value

Available Program Courses

No value

Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ITAL101</td>
<td>Elementary Italian I</td>
<td>5.0</td>
</tr>
<tr>
<td>ITAL102</td>
<td>Elementary Italian II</td>
<td>5.0</td>
</tr>
<tr>
<td>ITAL194</td>
<td>Conversation and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ITAL195</td>
<td>Advanced Conversational Italian</td>
<td>3.0</td>
</tr>
<tr>
<td>ITAL201</td>
<td>Intermediate Italian I</td>
<td>5.0</td>
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### Available Program Courses

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<td>SPAN101B</td>
<td>Elementary Spanish IB</td>
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<td>Honors Elementary Spanish I</td>
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<tr>
<td>SPAN102</td>
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<td>5.0</td>
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<td>SPAN111</td>
<td>Spanish for Spanish Speakers 2</td>
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<td>SPAN194</td>
<td>Beginning Conversational Spanish</td>
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<td>SPAN195A</td>
<td>Advanced Conversational Spanish</td>
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<td>SPAN195B</td>
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<tr>
<td>SPAN201</td>
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### Program Requirements

**A.A. Degree Major**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>FREN101 - Elementary French 1</td>
<td>5.0</td>
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</tbody>
</table>

**AND**

| FREN102 - Elementary French II                      | 5.0       |

**AND**

| FREN194 - Conversation and Composition I            | 3.0       |

**AND**

| FREN201 - Intermediate French I                     | 5.0       |

**AND**

| FREN202 - Intermediate French II                    | 5.0       |

<table>
<thead>
<tr>
<th>Italian Courses</th>
<th>0.0 Units</th>
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<tbody>
<tr>
<td>ITAL101 - Elementary Italian I</td>
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<tr>
<td>Course Description</td>
<td>Units</td>
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<tr>
<td>---------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ITAL102 - Elementary Italian II</td>
<td>5.0</td>
</tr>
<tr>
<td>ITAL194 - Conversation and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ITAL195 - Advanced Conversational Italian</td>
<td>3.0</td>
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<tr>
<td>ITAL201 - Intermediate Italian I</td>
<td>5.0</td>
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<tr>
<td>ITAL202 - Intermediate Italian II</td>
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</table>

**Major Requirements:**

<table>
<thead>
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<th>Requirement</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Courses in one of the languages listed below</td>
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</tr>
<tr>
<td>Course(s) in a second language from the list below</td>
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<tr>
<td>Restricted Electives</td>
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</table>

**Restricted Electives:**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any course listed above in a third language</td>
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</tr>
<tr>
<td>ANTH100 - Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH100H - Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ART101 - Survey of Western Art History I: Prehistory Through the Middle Ages</td>
<td>3.0</td>
</tr>
<tr>
<td>ART102 - Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
</tr>
<tr>
<td>CHNS101 - Elementary Chinese I</td>
<td>3.0</td>
</tr>
<tr>
<td>Restricted Electives</td>
<td>Units</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CHNS102 - Elementary Chinese II</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>COMM100 - Introduction to Interpersonal Communication</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ENGL102 - Literature and Composition</td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ENGL102H - Honors Literature and Composition</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ENGL271 - Survey of World Literature I</td>
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<tr>
<td>AND</td>
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<tr>
<td>ENGL272 - Survey of World Literature II</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>GEOG100 - World Regional Geography</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>GEOG100H - Honors World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>HIST101 - World Civilizations to the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>HIST101H - Honors World Civilizations to the 16th Century</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>HIST102 - World Civilizations Since the 16th Century</td>
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<tr>
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### Restricted Electives

**0.0 Units**

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<tr>
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<tbody>
<tr>
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**AND**

<table>
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<tbody>
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### Spanish Courses

**0.0 Units**

**OR**

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<tbody>
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<th>Units</th>
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**AND**

<table>
<thead>
<tr>
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</thead>
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**AND**

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**AND**

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<tbody>
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**AND**

<table>
<thead>
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**AND**

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<tbody>
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**AND**

<table>
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**AND**

<table>
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<th>Units</th>
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**AND**
Spanish Courses  

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Total Units  

21.0 - 23.0

Learning Outcomes

Comprehension and application of grammatical structures, appropriate vocabulary, idiomatic expressions, cultural perspectives and mores of the target language to communicate orally and in writing in the target language in culturally appropriate ways. Synthesize, analyze and evaluate target language to derive meaning of implicit and explicit written material and spoken messages in authentic cultural context.

Labor Market Data

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td>Elementary School Teachers, Except Special Education</td>
<td>87K</td>
<td>55K - 124K</td>
<td>4240 Annual Openings Graduates*</td>
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<tr>
<td></td>
<td>62K</td>
<td>18K - 203K</td>
<td>2413 Annual Openings Graduates*</td>
</tr>
<tr>
<td>Interpreters and Translators</td>
<td>87K</td>
<td>56K - 116K</td>
<td>1143 Annual Openings Graduates*</td>
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<tr>
<td>Middle School Teachers, Except Special and Career/Technical Education</td>
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<td>18K - 114K</td>
<td>896 Annual Openings Graduates*</td>
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<tr>
<td>Tour and Travel Guides</td>
<td>36K</td>
<td>18K - 114K</td>
<td>896 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

*For Program
Reading*

Mission

The Reading Department at Santiago Canyon College helps students develop reading fluency and strategies necessary for success in their pursuit of personal, academic and career goals. The curriculum, instructional methodologies and campus interactions support students and faculty across disciplines and programs and serve the needs of the community.

Department Chair
Amy Freese
(714) 628-4824
Freese_Amy@sccollege.edu

Course

- READ101 - Introduction to Academic Reading
- READ102 - Academic Reading
- READ128 - Expanding ESL Reading Skills
- READ129 - Refining ESL Reading Skills
- READ130 - Reading Strategies for Across the Curriculum
- READ131 - Reading in Apprenticeship
- READ132 - Reading in Career Education
- READ134 - Reading in the Social Sciences
- READ136 - Reading in STEM
- READ138 - Reading in the Humanities
- READ150 - Critical Reading
- READ151 - Critical Reading and Analysis

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Spanish, AA-T

A.A. Degree for Transfer

Control Number:
32045

Curriculum Id:
SCC.SPAN.AAT

The Associate in Arts in Spanish for Transfer degree is designed for students who wish to transfer to the California State University system. Successful completion of the transfer degree in Spanish guarantees the student acceptance to the California State University campus leading to a baccalaureate degree in Spanish or similar major. The Associate in Arts in Spanish for Transfer Degree develops competence in the ability to understand, read, write and speak Spanish. In addition, it provides the foundation for student to acquire a better understanding and appreciation of the Spanish language and cultures of all Spanish speaking countries. Upon successful completion of the degree, student is also prepared to pursue a career in healthcare, law enforcement, public safety, public service, education, U.S. government, translation and/or interpreting, business, international relations, food services, teaching English in Spanish speaking countries, hospitality, travel industry, and other related fields.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0699-c6e1-4cbe-bed7-d532fa6eb18

381/2244
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<th>Course Title</th>
<th>Units</th>
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<tr>
<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
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<tr>
<td>CHST101</td>
<td>Introduction to Chicano Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM120</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM120H</td>
<td>Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL246</td>
<td>Survey of Chicano Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN101</td>
<td>Elementary French 1</td>
<td>5.0</td>
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<td>GEOG100</td>
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<td>Honors World Regional Geography</td>
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<td>Mexican-American History in the United States</td>
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<td>Elementary Italian I</td>
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<td>SOC100</td>
<td>Introduction to Sociology</td>
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<td>SOC100H</td>
<td>Honors Introduction to Sociology</td>
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<td>SOC220</td>
<td>Introduction to Gender and Sexualities</td>
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<tr>
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<td>Advanced Conversational Spanish</td>
<td>3.0</td>
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<tr>
<td>SPAN195B</td>
<td>Advanced Conversational Spanish</td>
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</tr>
<tr>
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Available Program Courses

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<th>Course Title</th>
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<td>SPAN101B</td>
<td>Elementary Spanish IB</td>
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</tr>
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<td>Honors Elementary Spanish I</td>
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<td>Elementary Spanish II</td>
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<td>Spanish for Spanish Speakers 1</td>
<td>5.0</td>
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<tr>
<td>SPAN111</td>
<td>Spanish for Spanish Speakers 2</td>
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<td>SPAN201</td>
<td>Intermediate Spanish I</td>
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<tr>
<td>SPAN202</td>
<td>Intermediate Spanish II</td>
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Program Requirements
# A.A. Degree for Transfer

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<tr>
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<th>Units</th>
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<tbody>
<tr>
<td>List A (Option 1, select one (1) course from List A. Option 2, select course(s) to fulfill the 23-25 unit requirement.)</td>
<td>3.0 - 5.0</td>
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<tr>
<td><strong>ANTH100 - Introduction to Cultural Anthropology</strong></td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td><strong>ANTH100H - Honors Introduction to Cultural Anthropology</strong></td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CHST101 - Introduction to Chicano Studies</strong></td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>COMM120H - Honors Introduction to Intercultural Communication</strong></td>
<td>3.0</td>
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<tr>
<td>OR</td>
<td></td>
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<td><strong>COMM120 - Intercultural Communication</strong></td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
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</tr>
<tr>
<td><strong>ENGL246 - Survey of Chicano Literature</strong></td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ETHN101 - Introduction to Ethnic Studies</strong></td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GEOG100 - World Regional Geography</strong></td>
<td>3.0</td>
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<tr>
<td>OR</td>
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</tr>
<tr>
<td><strong>GEOG100H - Honors World Regional Geography</strong></td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
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</tr>
<tr>
<td><strong>HIST124 - Mexican-American History in the United States</strong></td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
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<tr>
<td><strong>ITAL101 - Elementary Italian I</strong></td>
<td>5.0</td>
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<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FREN101 - Elementary French I</strong></td>
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<tr>
<td><strong>AND</strong></td>
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<tr>
<td><strong>SOC100H - Honors Introduction to Sociology</strong></td>
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<td><strong>AND</strong></td>
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</table>
List A (Option 1, select one (1) course from List A. Option 2, select course(s) to fulfill the 23-25 unit requirement.)

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>SPAN195A - Advanced Conversational Spanish</td>
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<tr>
<td>AND</td>
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<td>AND</td>
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<td>SPAN213 - College Spanish Composition</td>
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Major requirements (Option 1) continued:

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<tr>
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Major requirements (Option 1):

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<tbody>
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<tr>
<td>OR</td>
<td></td>
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<td>AND</td>
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Major requirements (Option 2- Native Speaker): 10 units

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<tr>
<td>SPAN111 - Spanish for Spanish Speakers 2</td>
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</table>
Learning Outcomes

Demonstrate understanding of the cultural perspectives and mores of Spanish speakers in Latin America and Spain.
Demonstrate understanding of the Spanish language through the synthesis, analysis and evaluation of the target language to derive meaning of implicit and explicit written material and spoken messages in authentic cultural context.

Labor Market Data

<table>
<thead>
<tr>
<th>Program</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<td>160K HIGH</td>
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</tr>
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<td></td>
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<td></td>
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<td>160K HIGH</td>
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<tr>
<td>Detectives and Criminal Investigators</td>
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<td>127K AVERAGE</td>
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<td></td>
<td></td>
<td>80K LOW</td>
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<td></td>
<td></td>
<td>161K HIGH</td>
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<td></td>
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<td></td>
<td>161K HIGH</td>
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<td>Elementary School Teachers, Except Special Education</td>
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<td>87K AVERAGE</td>
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<td>124K HIGH</td>
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<tr>
<td>Interpreters and Translators</td>
<td></td>
<td>62K AVERAGE</td>
<td>2413 Annual Openings Graduates*</td>
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<td></td>
<td>18K LOW</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>203K HIGH</td>
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<tr>
<td></td>
<td></td>
<td>30K LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>203K HIGH</td>
<td></td>
</tr>
<tr>
<td>Middle School Teachers, Except Special and Career/Technical Education</td>
<td></td>
<td>87K AVERAGE</td>
<td>1143 Annual Openings Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>56K LOW</td>
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<td>116K HIGH</td>
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<tr>
<td></td>
<td></td>
<td>30K LOW</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>116K HIGH</td>
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</tbody>
</table>

Vocational ESL, COM
Certificate of Competency
The Certificate of Competency in Vocational ESL develops the English language and workplace skills of limited-English speaking students.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
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</table>

**Program Requirements**

Certificate of Competency

Certificate requirements: 432 hours (credits are in hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL510</td>
<td>English for Work 1</td>
<td>216.0</td>
</tr>
<tr>
<td>ESL520</td>
<td>English for Work 2</td>
<td>216.0</td>
</tr>
</tbody>
</table>

Total Hours: 432.0

**Learning Outcomes**

Demonstrate essential workplace communication skills.

**Education & Human Services**

Do you enjoy helping people? Could you see yourself being a teacher? The majors in the Interest Area of Education and Human Services prepare students for careers serving the public. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

**Programs**

- After School Program Assistant, CA
- After School Program Associate Teacher, CA
- Bilingual Instructional Aide: Spanish, CA
- Child and Adolescent Development, AA-T
- Early Childhood Education, AS-T
- Early Childhood Leadership and Administration, CERT
- Elementary Education, AA
- Elementary Teacher Education, AA-T
- Infant/Toddler, CERT
- Information Studies, Level I - Early Childhood Exceptional Needs, CERT
- Level II - Early Childhood Exceptional Needs, CERT
- Preschool, CERT
- Social Work and Human Services, AA-T
- Special Education Paraprofessional, CA
- The School-Age Child, CERT

**After School Program Assistant, CA**

Certificate of Achievement

Control Number: 38157

Curriculum Id: SCC.EDUCA.CA

The Certificate of Achievement in After School Program Assistant is intended to prepare a student for an entry-level position requiring practical skills and knowledge to work with children in an after-school care, tutoring, or mentoring program. Completion of this certificate leads to state certification for a School Age Assistant Permit.
Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV120A</td>
<td>Development of the School-Age Child (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV120B</td>
<td>School-Age Child Care and Recreation Activities (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>CNSL118</td>
<td>Self Exploration and the Teaching Profession</td>
<td>2.0</td>
</tr>
<tr>
<td>EDUC110</td>
<td>The Teaching Experience: Exploration</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC113</td>
<td>Educational Strategies for Tutors and Instructional Aides</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

Certificate requirements: 9.0 - 10.0 Units

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV120A - Development of the School-Age Child (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CDEV120B - School-Age Child Care and Recreation Activities (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>EDUC113 - Educational Strategies for Tutors and Instructional Aides</td>
<td>1.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CNSL118 - Self Exploration and the Teaching Profession</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>EDUC110 - The Teaching Experience: Exploration</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units 9.0 - 10.0

Learning Outcomes
Demonstrate knowledge of the practical skills and requirements to work at an entry-level with children, assisting a teacher, in an after-school care, tutoring, or mentoring program.

Labor Market Data

Teaching Assistants, Except Postsecondary

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37K</td>
<td>6296</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>27K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>49K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tutors and Teachers and Instructors, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40K</td>
<td>5372</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For Program
After School Program Associate Teacher, CA
Certificate of Achievement

Control Number:
37911

Curriculum Id:
SCC.EDUCT.CA

The Certificate of Achievement in After School Program Associate Teacher is intended to provide students with advanced skills necessary to work with K-12 students in an after-school setting, provide tutoring / homework assistance, and assist in academic enrichment programs. In combination with the completion of the SCC After School Program Assistant Certificate, this certificate of completion leads to state certification for the School Age Associate Teacher Permit.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV120B</td>
<td>School-Age Child Care and Recreation Activities (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>CNSL118</td>
<td>Self Exploration and the Teaching Profession</td>
<td>2.0</td>
</tr>
<tr>
<td>COMM110</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC110</td>
<td>The Teaching Experience: Exploration</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC113</td>
<td>Educational Strategies for Tutors and Instructional Aides</td>
<td>1.0</td>
</tr>
<tr>
<td>EDUC211</td>
<td>Classroom Practices for Diverse Learners</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC157</td>
<td>Introduction to Child Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

Certificate requirements: 15.0 - 16.0 Units

- CNSL118 - Self Exploration and the Teaching Profession 2.0
  OR
  - EDUC110 - The Teaching Experience: Exploration 3.0

AND

- CDEV107 - Child Growth and Development (DS1) 3.0
  OR
  - PSYC157 - Introduction to Child Psychology 3.0
Certificate requirements: 15.0 - 16.0 Units

AND

COMM110 - Public Speaking 3.0

AND

EDUC211 - Classroom Practices for Diverse Learners 3.0

AND

EDUC113 - Educational Strategies for Tutors and Instructional Aides 1.0

AND

CDEV120B - School-Age Child Care and Recreation Activities (DSS) 3.0

Total Units 15.0 - 16.0

Learning Outcomes

Demonstrate the advanced skills necessary to work with students in an after school program setting that includes knowledge of academic support/enrichment and activity programming.

Labor Market Data

<table>
<thead>
<tr>
<th>Teaching Assistants, Except Postsecondary</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>37K</td>
<td>6296</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>49K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tutors and Teachers and Instructors, All Other</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>40K</td>
<td>5372</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25K</td>
<td>Graduates*</td>
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<tr>
<td></td>
<td></td>
<td>108K</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Bilingual Instructional Aide: Spanish, CA

Certificate of Achievement

Control Number:
37913

Curriculum Id:
SCC.EDUCB.CA

The Certificate of Achievement in Bilingual Instructional Aide is designed to prepare a student for an entry-level position requiring bilingual ability, practical skills, and knowledge to work with teachers to support students/individuals in K-12 or adult education settings. This certificate program supports the requirements of federal legislation for Title I schools that all paraprofessionals/instructional aides be “highly qualified.” In addition, the courses introduce the student to career opportunities such as Bilingual Teacher and in other educational settings requiring bilingual abilities.
Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC110</td>
<td>The Teaching Experience: Exploration</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC113</td>
<td>Educational Strategies for Tutors and Instructional Aides</td>
<td>1.0</td>
</tr>
<tr>
<td>SPAN102</td>
<td>Elementary Spanish II</td>
<td>5.0</td>
</tr>
<tr>
<td>SPAN111</td>
<td>Spanish for Spanish Speakers 2</td>
<td>5.0</td>
</tr>
<tr>
<td>SPAN115</td>
<td>Practical Communication in Spanish for Teachers</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Achievement

Certificate Requirements: 6.0 - 11.0 Units

EDUC110 - The Teaching Experience: Exploration 3.0

AND

EDUC113 - Educational Strategies for Tutors and Instructional Aides 1.0

AND

SPAN115 - Practical Communication in Spanish for Teachers 2.0

AND

SPAN102 - Elementary Spanish II 5.0

OR

SPAN111 - Spanish for Spanish Speakers 2 5.0

OR

Seal of Biliteracy in Spanish Language 0.0

Total Units 6.0 - 11.0

Learning Outcomes

Demonstrate knowledge of the practical skills and knowledge required to work in an educational setting requiring bilingual abilities.

Labor Market Data

<table>
<thead>
<tr>
<th>Teaching Assistants, Except Postsecondary</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37K</td>
<td>27K</td>
<td>6296 Annual Opening</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>49K</td>
<td></td>
</tr>
</tbody>
</table>
Child and Adolescent Development, AA-T

A.A. Degree for Transfer

Control Number:
35593

Curriculum Id:
SCC.CHAD.AAT

The Associate in Arts in Child and Adolescent Development for Transfer (AA-T) prepares a student to enter a California State University (CSU) as a junior to complete a baccalaureate degree in Child Development, Human Development, Child and Adolescent Studies, or Early Childhood Education. Upon completion of the AA-T in Child and Adolescent Development, students will have a general understanding of developmental theories as they pertain to the development, care, and education of young children. Students will demonstrate skill and knowledge in preparing developmentally-appropriate environments, curriculum, and assessments as they work professionally with families and team members and qualify for a Children’s Center Permit.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC100</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV108</td>
<td>Observation and Assessment for Early Learning and Development (DS3)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV112</td>
<td>Health, Safety and Nutrition for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV116A</td>
<td>Infant/Toddler Growth and Development (DS4)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV221</td>
<td>Living and Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Program Requirements
A.A. Degree for Transfer

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>13.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDEV107</strong> - Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CDEV110</strong> - Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MATH219</strong> - Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MATH219H</strong> - Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MATH220</strong> - Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PSYC100</strong> - Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PSYC100H</strong> - Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Select two (2) courses from the following (List A):</strong></td>
<td><strong>6.0 Units</strong></td>
</tr>
<tr>
<td><strong>CDEV108</strong> - Observation and Assessment for Early Learning and Development (DS3)</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CDEV112</strong> - Health, Safety and Nutrition for Children</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CDEV116A</strong> - Infant/Toddler Growth and Development (DS4)</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CDEV221</strong> - Living and Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>19.0</strong></td>
</tr>
</tbody>
</table>

Learning Outcomes
Demonstrate skill and knowledge in child observation, documentation, and effective assessment strategies that positively influence the development of children.

Labor Market Data

<table>
<thead>
<tr>
<th>Child, Family, and School Social Workers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>60K</td>
<td>1879</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Annual</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32baa6eb18
Early Childhood Education, AS-T

A.S. Degree for Transfer

Control Number:
35614

Curriculum Id:
SCC.ECED.AST

The Associate Degree in Science in Early Childhood Education prepares students to transfer into a baccalaureate degree program in Child Development or a related field of study. Students will gain general knowledge and experience in early childhood education topics enabling them to obtain a Child Development Center Permit and meet the standards set forth by the National Association for the Education of Young Children for appropriate teaching practices in early learning settings.

Program Courses

Available Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV108</td>
<td>Observation and Assessment for Early Learning and Development (DS3)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV111A</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV111B</td>
<td>Introduction to Curriculum for Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV112</td>
<td>Health, Safety and Nutrition for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV221</td>
<td>Living and Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV298A</td>
<td>Practicum in Early Childhood Programs</td>
<td>3.5</td>
</tr>
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</table>

**Program Requirements**

A.S. Degree for Transfer

**Major requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV108</td>
<td>Observation and Assessment for Early Learning and Development (DS3)</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV111A</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV111B</td>
<td>Introduction to Curriculum for Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV112</td>
<td>Health, Safety and Nutrition for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV221</td>
<td>Living and Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDEV298A</td>
<td>Practicum in Early Childhood Programs</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Total Units**

24.5

**Learning Outcomes**

Demonstrate a knowledge of early childhood curriculum, program practices, and the development of young children.

Apply for and receive a Child Development Center permit
# Labor Market Data

## Child, Family, and School Social Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
<th>Graduates*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60K AVERAGE</td>
<td>1879 Annual Openings</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>35K 100K LOW HIGH</td>
<td></td>
<td></td>
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</tbody>
</table>

## Childcare Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
<th>Graduates*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26K AVERAGE</td>
<td>10324 Annual Openings</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>7K 44K LOW HIGH</td>
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<td></td>
</tr>
</tbody>
</table>

## Clinical, Counseling, and School Psychologists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
<th>Graduates*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96K AVERAGE</td>
<td>851 Annual Openings</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>44K 213K LOW HIGH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Education Administrators, Kindergarten through Secondary

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
<th>Graduates*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>134K AVERAGE</td>
<td>825 Annual Openings</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>95K 171K LOW HIGH</td>
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</table>

## Education and Childcare Administrators, Preschool and Daycare

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
<th>Graduates*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>45K AVERAGE</td>
<td>285 Annual Openings</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>18K 82K LOW HIGH</td>
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</tbody>
</table>

---

**Early Childhood Leadership and Administration, CERT**

Certificate of Proficiency

**Control Number:**

**Curriculum Id:**

SCC.CDEVECLA.CERT

The Early Childhood Administrative Certificate provides the educational coursework that prepares directors, supervisors, and managers for early childhood work settings serving children from infancy through age 8. Topics include: communication, curriculum, documentation and interpretation, culturally relevant approaches to teaching and learning that include developmentally appropriate,
respectful, supportive relationships with children and families, administration, marketing, and management issues, and self-care and work-life balance related to the operation of center-based early childhood education programs. Fieldwork or field-based assignments may be required. Updated immunizations per state regulations are required. A negative TB test result and state-mandated immunizations are required for certificate completion.

### Program Courses

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV215</td>
<td>Administration I: Programs in Early Childhood Education (DS6)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV216</td>
<td>Administration II: Personnel and Leadership in Early Childhood Education (DS6)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV250</td>
<td>Adult Supervision and Mentoring in Early Care and Education</td>
<td>2.0</td>
</tr>
<tr>
<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COMM101</td>
<td>Group Dynamics</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG172</td>
<td>Small Business Marketing and Advertising</td>
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#### Available Program Courses

No value

#### Available Program Courses

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<tr>
<td>CDEV230</td>
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<td>COMM100</td>
<td>Introduction to Interpersonal Communication</td>
<td>2.0</td>
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<tr>
<td>COMM100H</td>
<td>Honors Introduction to Interpersonal Communication</td>
<td>2.0</td>
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<tr>
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<td>MKTG113</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MKTG172</td>
<td>Small Business Marketing and Advertising</td>
<td>3.0</td>
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</table>

### Program Requirements

#### Certificate of Proficiency

Certificate requirements: 14.0 Units

- CDEV215 - Administration I: Programs in Early Childhood Education (DS6) 3.0
  
  AND

- CDEV216 - Administration II: Personnel and Leadership in Early Childhood Education (DS6) 3.0
  
  AND

- CDEV250 - Adult Supervision and Mentoring in Early Care and Education 2.0
Certificate requirements: 14.0 Units

AND

**COMM100 - Introduction to Interpersonal Communication** 3.0

OR

**COMM100H - Honors Introduction to Interpersonal Communication** 3.0

OR

**COMM101 - Group Dynamics** 3.0

AND

**MKTG113 - Principles of Marketing** 3.0

OR

**MKTG172 - Small Business Marketing and Advertising** 3.0

Certificate requirements: 2.0 - 3.0 Units

An additional course not used above (may not be a course used to satisfy the requirements from above) 3.0

AND

**CDEV221 - Living and Teaching in a Diverse Society** 3.0

AND

**CDEV230 - Child Guidance and Classroom Management** 3.0

AND

**COMM100 - Introduction to Interpersonal Communication** 2.0

OR

**COMM100H - Honors Introduction to Interpersonal Communication** 2.0

AND

**COMM101 - Group Dynamics** 3.0

AND

**MKTG113 - Principles of Marketing** 3.0

AND

**MKTG172 - Small Business Marketing and Advertising** 3.0

Total Units 16.0 - 17.0

**Learning Outcomes**

Demonstrate knowledge of developmentally appropriate curriculum planning, environments, observation and guidance to assess one’s own strengths in working with young children in order to implement quality care for young children in group setting.
Demonstrate basic knowledge of staffing, budgets, enrollment, professional development, and program planning for privately and publicly funded early childhood education programs.

### Labor Market Data

#### Child, Family, and School Social Workers

<table>
<thead>
<tr>
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<th>Wages</th>
<th>Competition</th>
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#### Childcare Workers

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<td></td>
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#### Clinical, Counseling, and School Psychologists

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#### Education Administrators, Kindergarten through Secondary

<table>
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<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td></td>
<td>134K</td>
<td>825 Annual Openings</td>
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<td></td>
<td>AVERAGE</td>
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</tr>
<tr>
<td></td>
<td>95K</td>
<td>Graduates*</td>
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<tr>
<td></td>
<td>171K</td>
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<td>LOW</td>
<td></td>
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<tr>
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#### Education and Childcare Administrators, Preschool and Daycare

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>45K</td>
<td>285 Annual Openings</td>
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<tr>
<td></td>
<td>AVERAGE</td>
<td></td>
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<tr>
<td></td>
<td>18K</td>
<td>Graduates*</td>
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<td>82K</td>
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<tr>
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</tbody>
</table>

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**Apply Now**  **Request Info**

### Elementary Education, AA

**A.A. Degree Major**

**Control Number:**

17759

**Curriculum Id:**

SCC.EDUEE.AA
The Associate of Arts degree in Elementary Education is designed to prepare students for transfer to a four-year university traditional or integrated elementary teacher education program. It incorporates elementary teaching subject matter requirements for preparation in subject matter competency as established by the California Teacher Credentialing Commission. The degree program requirements, and the general education recommended electives below, prepare students in content areas for the California Subject Examinations for Teachers (CSET) of Multiple Subjects. Additionally, the degree curriculum may also serve as preparation for paraprofessional positions in the K-12 classroom meeting unit requirements for paraprofessionals as established by the No Child Left Behind Act.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL115</td>
<td>Concepts in Biology for Educators</td>
<td>4.0</td>
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<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>CNSL118</td>
<td>Self Exploration and the Teaching Profession</td>
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<tr>
<td>EDUC101</td>
<td>American Schools and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC110</td>
<td>The Teaching Experience: Exploration</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC200</td>
<td>Introduction to Elementary Classroom Teaching</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL270</td>
<td>Children's Literature</td>
<td>3.0</td>
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<tr>
<td>ERTH121</td>
<td>Earth Sciences for Educators</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH105</td>
<td>Mathematics for Liberal Arts Students</td>
<td>3.0</td>
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<tr>
<td>MATH203</td>
<td>Fundamental Concepts of Elementary Mathematics</td>
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<tr>
<td>PSC100</td>
<td>Survey of Chemistry and Physics</td>
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Program Requirements
A.A. Degree Major

**Major requirements:**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNSL118 - Self Exploration and the Teaching Profession</td>
<td>2.0</td>
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</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EDUC110 - The Teaching Experience: Exploration</td>
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**AND**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>EDUC101 - American Schools and Society</td>
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**AND**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EDUC200 - Introduction to Elementary Classroom Teaching</td>
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**AND**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL115 - Concepts in Biology for Educators</td>
<td>4.0</td>
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**AND**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL270 - Children's Literature</td>
<td>3.0</td>
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</tbody>
</table>
Major requirements: 25.0 - 27.0 Units

AND

CDEV107 - Child Growth and Development (DS1) 3.0

AND

ERTH121 - Earth Sciences for Educators 4.0

OR

PSC100 - Survey of Chemistry and Physics 4.0

AND

MATH105 - Mathematics for Liberal Arts Students 3.0

OR

MATH203 - Fundamental Concepts of Elementary Mathematics 4.0

Total Units 25.0 - 27.0

Learning Outcomes

Identify elements of diversity and diverse learning styles in student populations and discover how teachers and schools can promote learning for all students.

Demonstrate proficiency in academic content areas required for subject matter competency for elementary teachers.

Labor Market Data

**Education Administrators, Kindergarten through Secondary**

<table>
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<tr>
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<th>Wages</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>134K</td>
<td>825</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong> 95K 171K</td>
<td>Annual Openings Graduates*</td>
</tr>
<tr>
<td></td>
<td>LOW HIGH</td>
<td>*For Program</td>
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</table>

**Elementary School Teachers, Except Special Education**

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<th>Job Growth</th>
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<tr>
<td></td>
<td>LOW HIGH</td>
<td>*For Program</td>
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</tbody>
</table>

Apply Now Request Info

Elementary Teacher Education, AA-T

A.A. Degree for Transfer

Control Number: 31735

Curriculum Id: SCC.EDUET.AAT
The Associate in Arts in Elementary Teacher Education for Transfer degree is designed to prepare students for seamless transfer to a California State University traditional or integrated teacher preparation program, most commonly found in the Liberal Studies major. It incorporates the elementary subject matter competence requirements as established by the California Teacher Credentialing Commission. The AA-T degree program requirements and the recommended electives prepare students in content areas for the California Subject Examinations for Teachers (CSET) of Multiple Subjects. Additionally, the degree curriculum may also serve as preparation for paraprofessional positions in the K-12 classroom, meeting unit requirements for paraprofessionals as established by the No Child Left Behind Act.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART100</td>
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<tr>
<td>ART100H</td>
<td>Honors Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>DNCE100</td>
<td>Dance History and Appreciation</td>
<td>3.0</td>
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<td>MUS101</td>
<td>Music Appreciation</td>
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<td>Honors Music Appreciation</td>
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<td>THEA100</td>
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Available Program Courses

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ANTH104</td>
<td>Language and Culture</td>
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<tr>
<td>EDUC101</td>
<td>American Schools and Society</td>
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<td>EDUC110</td>
<td>The Teaching Experience: Exploration</td>
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<td>EDUC204</td>
<td>Proficiency in Educational Technologies for Teachers</td>
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<td>ENGL271</td>
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### Available Program Courses

<table>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL115</td>
<td>Concepts in Biology for Educators</td>
<td>4.0</td>
</tr>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
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<tr>
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<tr>
<td>POLT101H</td>
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<tr>
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Program Requirements
A.A. Degree for Transfer

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EDUC200 - Introduction to Elementary Classroom Teaching</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL115 - Concepts in Biology for Educators</td>
<td>4.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>COMM110 - Public Speaking</td>
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<td>AND</td>
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</tr>
<tr>
<td>ERTH121 - Earth Sciences for Educators</td>
<td>4.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CDEV107 - Child Growth and Development (DS1)</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<tr>
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<td>GEOG100H - Honors World Regional Geography</td>
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### Major requirements:

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<tr>
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Select one (1) course from the following (List B):

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<tr>
<td>THEA100 - Introduction to Theatre</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ART100 - Introduction to Art Concepts</td>
<td>3.0</td>
</tr>
<tr>
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<tr>
<td>ART100H - Honors Introduction to Art Concepts</td>
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<tr>
<td>AND</td>
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<tr>
<td>MUS101 - Music Appreciation</td>
<td>3.0</td>
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<td>MUS101H - Honors Music Appreciation</td>
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Select one (1) course from the following (List A):

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<td>ENGL103H - Honors Critical Thinking and Writing</td>
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AND
<table>
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<tbody>
<tr>
<td>PHIL110 - Critical Thinking</td>
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Select one (1) course from the following (List A):

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<th>Course Name</th>
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<tbody>
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<tr>
<td>EDUC110 - The Teaching Experience: Exploration</td>
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<td>EDUC204 - Proficiency in Educational Technologies for Teachers</td>
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<td>ANTH104 - Language and Culture</td>
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<td>ENGL231 - Survey of English Literature I</td>
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<td>ENGL232 - Survey of English Literature II</td>
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<td>ENGL241 - Survey of American Literature, 1600-1865</td>
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<tr>
<td>ENGL242 - Survey of American Literature, 1865-Present</td>
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<td>ENGL270 - Children's Literature</td>
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<tr>
<td>ENGL271 - Survey of World Literature I</td>
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<td>ENGL272 - Survey of World Literature II</td>
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<td>ETHN101 - Introduction to Ethnic Studies</td>
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<td>FREN102 - Elementary French II</td>
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<td>HIST133 - History of California</td>
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Up to eight (8) units from the following (List C):

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<tr>
<th>Course Name</th>
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<tbody>
<tr>
<td>HIST133 - History of California</td>
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</table>
Up to eight (8) units from the following (List C):

AND

MATH105 - Mathematics for Liberal Arts Students 3.0

AND

PHIL108 - Ethics 3.0

AND

PHIL112 - World Religions 3.0

AND

SPAN102 - Elementary Spanish II 5.0

AND

MATH219 - Statistics and Probability 4.0

OR

MATH219H - Honors Statistics and Probability 4.0

OR

MATH220 - Statistics and Probability with Integrated Review 4.0

AND

PHIL106 - Introduction to Philosophy 3.0

OR

PHIL106H - Honors Introduction to Philosophy 3.0

Total Units 52.0 - 60.0

Learning Outcomes

Identify elements of diversity and diverse learning styles in student populations and discover how teachers and schools can promote learning for all students.

Demonstrate proficiency in 14 content areas required for subject matter competency for elementary teachers.

Labor Market Data

Education Administrators, Kindergarten through Secondary

Job Growth 825
Wages 134K
AVERAGE 95K 171K
LOW HIGH
Competition

Elementary School Teachers, Except Special Education

Job Growth
Wages
Competition

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406/2244
Apply Now Request Info

Information Studies*

Department Chair

Seth Daugherty

(714) 628-5015

Daugherty_Seth@sccollege.edu

Course

INFO100 - Library Research Fundamentals
INFO100H - Honors Library Research Fundamentals
INFO103 - Researching in the Digital Age

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Infant/Toddler, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:

SCC.HDBEI.CERT

The Certificate of Proficiency in Infant/Toddler meets the minimum requirements for beginning early learning professionals employed or seeking employment as teachers and/or aides in privately owned and church affiliated (Title 22) or publicly funded (Title 5) programs serving infants and toddlers. This certificate is also recommended for licensed Family Day Care Providers or Nannies.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
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<td>CDEV108</td>
<td>Observation and Assessment for Early Learning and Development (DS3)</td>
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<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
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<td>CDEV116A</td>
<td>Infant/Toddler Growth and Development (DS4)</td>
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<td>CDEV116B</td>
<td>Care and Education for Infants and Toddlers (DS3)</td>
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Program Requirements

Certificate of Proficiency

Certificate requirements: 15.0 Units

CDEV107 - Child Growth and Development (DS1) 3.0
Certificate requirements: 15.0 Units

AND

CDEV108 - Observation and Assessment for Early Learning and Development (DS3) 3.0

AND

CDEV110 - Child, Family and Community (DS2) 3.0

AND

CDEV116A - Infant/Toddler Growth and Development (DS4) 3.0

AND

CDEV116B - Care and Education for Infants and Toddlers (DS3) 3.0

Total Units 15.0

Learning Outcomes

Demonstrate skill and mastery of child development theories and proficiency in application in a simulated/real infant/toddler setting or scenario.

Develop a portfolio of developmentally appropriate activities, programming, and assessment strategies for infants and toddlers in the cognitive, psychosocial, and biosocial domains.

Labor Market Data

Child, Family, and School Social Workers

Job Growth Wages Competition

60K AVERAGE 1879
35K LOW 100K HIGH

Childcare Workers

Job Growth Wages Competition

26K AVERAGE 10324
7K LOW 44K HIGH

Social and Human Service Assistants

Job Growth Wages Competition

40K AVERAGE 3525
28K LOW 62K HIGH

Teaching Assistants, Except Postsecondary

Job Growth Wages Competition

---
Level I - Early Childhood Exceptional Needs, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.CDEVE.CERT

The Level I - Early Childhood Exceptional Needs Certificate of Proficiency is an introductory professional development certificate for students working with children with disabilities and exceptional needs in public (Title.5) and private (Title.22) early intervention, special education, and educational settings that serve children with typical and atypical development and their families. This certificate will focus on defining typical and atypical development, the historical and societal influences, regulations, and the identification and referral processes leading to appropriate intervention. Field trips may be required. All state-mandated vaccinations must be completed.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
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<td>CDEV205</td>
<td>Introduction to Children with Special Needs</td>
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<tr>
<td>CDEV299</td>
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Program Requirements

Certificate of Proficiency

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<th>7.0 - 10.0 Units</th>
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<td>CDEV205 - Introduction to Children with Special Needs</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>CDEV299 - Cooperative Work Experience Education</td>
<td>1.0 - 4.0</td>
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</table>

Total Units

7.0 - 10.0

Learning Outcomes

Examine the field of special education, relevant philosophies, principles and theories, laws, and policies as they relate to educating learners with exceptional needs.

Explore the exceptional learning conditions and their effects on an individual's learning in school and life to establish the foundation for designing empathetic individualized and meaningful learning environments.
## Labor Market Data

### Interpreters and Translators

<table>
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### Special Education Teachers, All Other

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<td><strong>Graduates</strong></td>
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### Special Education Teachers, Kindergarten and Elementary School

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### Special Education Teachers, Preschool

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**Level II - Early Childhood Exceptional Needs, CERT**

Certificate of Proficiency

**Control Number:**

**Curriculum Id:**

SCC.CDEVEC.CERT

The Level II - Early Childhood Exceptional Needs Certificate of Proficiency is an intermediate professional development certificate for students working with children with disabilities and special needs in public and private early intervention, special education, and educational settings that serve children with typical and atypical development and their families. This certificate will focus on the role of...
the teacher in designing and implementing curriculum and strategies that support young children’s development. Typical and atypical development, the historical and societal influences, regulations, and the identification and referral processes leading to appropriate intervention and strategies will be addressed. Field trips may be required. All state-mandated vaccinations must be completed.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
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<td>Introduction to Children with Special Needs</td>
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<td>CDEV206</td>
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<td>CDEV299</td>
<td>Cooperative Work Experience Education</td>
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Program Requirements
Certificate of Proficiency

**Certificate Requirements:** 10.0 - 13.0 Units

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<tr>
<td></td>
<td>CDEV299 - Cooperative Work Experience Education</td>
<td>1.0 - 4.0</td>
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</table>

Total Units 10.0 - 13.0

Learning Outcomes
Examine the learning environment of children with special needs that support emotional well-being limiting classroom induced trauma and promoting positive and prosocial interactions. Students will examine research-based strategies to create motivational and instructional interventions for exceptional learners augmenting their efforts to learn and respond effectively.

Examine the role that effective and culturally responsive collaboration with families, other educators and providers, ancillary services, and personnel from community agencies have on families and children with exceptional learning abilities.

Labor Market Data

<table>
<thead>
<tr>
<th>Interpreters and Translators</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<thead>
<tr>
<th>Special Education Teachers, All Other</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
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404

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Preschool, CERT
Certificate of Proficiency

Control Number:
Curriculum Id:
SCC.HDBEP.CERT

The Certificate of Proficiency in Preschool meets the minimum California Community Care Licensing requirements for beginning early learning professionals employed or seeking employment as teachers and/or aides in privately owned or religious affiliated (Title 22) or publically funded (Title 5) programs serving preschoolers 2-5. This certificate is also recommended for licensed family child care providers, nannies, or early childhood recreation workers. Completion of this award leads to the Preschool Children's Center Permit.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV108</td>
<td>Observation and Assessment for Early Learning and Development (DS3)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV111A</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV111B</td>
<td>Introduction to Curriculum for Young Children</td>
<td>3.0</td>
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</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements: 15.0 Units

CDEV107 - Child Growth and Development (DS1) 3.0

AND

CDEV108 - Observation and Assessment for Early Learning and Development (DS3) 3.0

AND

CDEV110 - Child, Family and Community (DS2) 3.0

AND

CDEV111A - Principles and Practices of Teaching Young Children 3.0

AND

CDEV111B - Introduction to Curriculum for Young Children 3.0

Total Units 15.0

Learning Outcomes

Demonstrate skill and mastery of child development themes, theories, curriculum, and assessment strategies by applying knowledge and skills in a simulated/real preschool setting or scenarios.

Develop a portfolio of developmentally appropriate curriculum, programming, and assessment strategies for preschoolers in the cognitive, psychosocial, and biosocial domains.

Labor Market Data

**Kindergarten Teachers, Except Special Education**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>84K</td>
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<td>Annual Openings</td>
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<td></td>
<td>53K</td>
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<tr>
<td></td>
<td>113K</td>
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<tr>
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**Preschool Teachers, Except Special Education**

<table>
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<th>Job Growth</th>
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</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
Social Work and Human Services, AA-T

A.A. Degree for Transfer

Control Number:
37164

Curriculum Id:
SCC.CSWHS.AAT

The Social Work and Human Services Associate in Arts Degree for Transfer provides an interdisciplinary exploration of courses and content that prepares students to transfer to a four-year university as either Social Work or Human Services majors. This program allows students to blend theory with fieldwork experience while incorporating critical thinking and self-exploration. Successful completion of this degree will guarantee admission to a California State University that has a similar degree program, but not to a particular campus, and allow students to complete a bachelors degree. Students are strongly encouraged to meet with a counselor to discuss transfer options.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109HL</td>
<td>Honors Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL109L</td>
<td>Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL149</td>
<td>Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
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<tr>
<td>CNSL150</td>
<td>Introduction to Human Services</td>
<td>3.0</td>
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<tr>
<td>CNSL160</td>
<td>Fieldwork Experience for the Helping Professions</td>
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<tr>
<td>ECON101</td>
<td>Principles/Micro</td>
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<tr>
<td>ECON102</td>
<td>Principles/Macro</td>
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</tr>
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<td>Course Title</td>
<td>Units</td>
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<td>Honors Statistics and Probability</td>
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<td>Statistics and Probability with Integrated Review</td>
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<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
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<tr>
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<td>Introduction to Sociology</td>
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<tr>
<td>SOC100H</td>
<td>Honors Introduction to Sociology</td>
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Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
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<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
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<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
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<td>CJ101</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
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<td>Intercultural Communication</td>
<td>3.0</td>
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<tr>
<td>COMM120H</td>
<td>Honors Introduction to Intercultural Communication</td>
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<td>Critical Thinking and Writing</td>
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<td>Honors the United States Since 1877</td>
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<td>PSYC157</td>
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<tr>
<td>PSYC160</td>
<td>Introduction to Lifespan Psychology</td>
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<tr>
<td>PSYC230</td>
<td>Psychology and Effective Behavior</td>
<td>3.0</td>
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<tr>
<td>PSYC250</td>
<td>Introduction to Abnormal Psychology</td>
<td>3.0</td>
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<tr>
<td>SOC116</td>
<td>Social Problems</td>
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Program Requirements
A.A. Degree for Transfer

**Required Core:** 4.0 Units
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<tr>
<th>Course</th>
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<tr>
<td>BIOL109 - Fundamentals of Biology</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL109H - Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL109HL - Honors Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL109L - Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL149 - Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
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</tr>
<tr>
<td>BIOL239 - General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
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<tr>
<td>BIOL249 - Human Physiology</td>
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<tr>
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<td>CNSL160 - Fieldwork Experience for the Helping Professions</td>
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<td>AND</td>
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<tr>
<td>ECON101 - Principles/Micro</td>
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<tr>
<td>OR</td>
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<tr>
<td>ECON102 - Principles/Macro</td>
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<td>MATH219 - Statistics and Probability</td>
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<td>OR</td>
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<td>MATH219H - Honors Statistics and Probability</td>
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</tr>
<tr>
<td>OR</td>
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<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
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<td>AND</td>
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<tr>
<td>PSYC100 - Introduction to Psychology</td>
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</table>
## Required core continued: 19.0 Units

**OR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td><strong>AND</strong></td>
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<tr>
<td>SOC100 - Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
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</tr>
<tr>
<td>SOC100H - Honors Introduction to Sociology</td>
<td>3.0</td>
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</table>

Select (2) two courses from the following (List A): 6.0 - 7.0 Units

**OR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ANTH100 - Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ANTH100H - Honors Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CDEV107 - Child Growth and Development (DS1)</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>PSYC157 - Introduction to Child Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CDEV110 - Child, Family and Community (DS2)</td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
<td></td>
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<tr>
<td>CJ101 - Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>COMM120 - Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>COMM120H - Honors Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL103 - Critical Thinking and Writing</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>OR</strong></td>
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</tr>
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<td>ENGL103H - Honors Critical Thinking and Writing</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
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<td>HIST120 - The United States to 1877</td>
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</table>
Select (2) two courses from the following (List A): 6.0 - 7.0 Units

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<td>HIST121 - The United States Since 1877</td>
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<td>OR</td>
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<tr>
<td>HIST121H - Honors the United States Since 1877</td>
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<td>PSYC160 - Introduction to Lifespan Psychology</td>
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<tr>
<td>AND</td>
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<tr>
<td>PSYC230 - Psychology and Effective Behavior</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC250 - Introduction to Abnormal Psychology</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SOC116 - Social Problems</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units 29.0 - 30.0

Learning Outcomes
Demonstrate knowledge and understanding of theoretical perspectives, legal and ethical principles and social issues related to Social Work and Human Services fields.
Develop communication skills and cultural competencies as a foundation to success in the fields of Social Work and Human Services.

Labor Market Data

Child, Family, and School Social Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<tr>
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<td>Graduates*</td>
</tr>
<tr>
<td>*For Program</td>
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</table>

Clergy

<table>
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<tr>
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<th>Wages</th>
<th>Competition</th>
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<td>Annual Openings</td>
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<tr>
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<td>Graduates*</td>
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<td>*For Program</td>
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Counselors, All Other

<table>
<thead>
<tr>
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<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>
The Certificate of Achievement in Special Education Paraprofessional will prepare the student for an entry-level position requiring practical skills and knowledge to work with persons with disabilities in a variety of educational settings. This certificate program also supports the requirements of federal legislation that all paraprofessionals/instructional assistants/aides in Title schools be “highly qualified.” In addition, the courses introduce the student to career opportunities in special education or other disability-related fields and/or provide major preparation for transfer to four-year institutions to continue a course of study in special education.

**Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV107</td>
<td>Child Growth and Development (DS1)</td>
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</tr>
<tr>
<td>CDEV205</td>
<td>Introduction to Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV206</td>
<td>Curriculum and Intervention Strategies for Children with Special Needs</td>
<td>3.0</td>
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<tr>
<td>CNSL118</td>
<td>Self Exploration and the Teaching Profession</td>
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</tr>
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<td>EDUC110</td>
<td>The Teaching Experience: Exploration</td>
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<tr>
<td>EDUC209</td>
<td>Roles and Responsibilities of the Special Education Paraprofessional</td>
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<tr>
<td>EDUC211</td>
<td>Classroom Practices for Diverse Learners</td>
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<tr>
<td>PSYC157</td>
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</table>
Program Requirements

Certificate of Achievement

Certificate requirements: 14.0 - 15.0 Units

<table>
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<tr>
<td>EDUC209 - Roles and Responsibilities of the Special Education Paraprofessional</td>
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<tr>
<td>EDUC211 - Classroom Practices for Diverse Learners</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<td>CDEV107 - Child Growth and Development (DS1)</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>PSYC157 - Introduction to Child Psychology</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>CDEV205 - Introduction to Children with Special Needs</td>
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</tbody>
</table>

Total Units 14.0 - 15.0

Learning Outcomes
Demonstrate analysis and knowledge of the personal and team roles and responsibilities of the Special Education Paraeducator in the public school which includes diagnosis and implementation strategies for students with special needs.

Labor Market Data

### Teaching Assistants, Except Postsecondary

<table>
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<td>Graduates*</td>
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<td>*For Program</td>
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### Tutors and Teachers and Instructors, All Other

<table>
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</thead>
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<td></td>
<td></td>
<td>*For Program</td>
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</tbody>
</table>

*For Program
Certificate of Proficiency

Control Number:
Curriculum Id:
SCC.HUDSA.CERT

The Certificate of Proficiency in the School-Age Child is intended to prepare students to meet California Community Care Licensing requirements for positions requiring practical skills and knowledge to work with school-age children (PreK-Grade 3) in Title 22 (privately owned), Title 5 (publically funded) or religious affiliated after-school programs, family child care homes, cruise or camp settings, or nannies. Completion of this certificate leads to a School-Age Children’s Center Permit.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV110</td>
<td>Child, Family and Community (DS2)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV112</td>
<td>Health, Safety and Nutrition for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV120A</td>
<td>Development of the School-Age Child (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV120B</td>
<td>School-Age Child Care and Recreation Activities (DS5)</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV221</td>
<td>Living and Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Proficiency

Certificate requirements:                                           15.0 Units

CDEV110 - Child, Family and Community (DS2)                       | 3.0   |
AND
CDEV112 - Health, Safety and Nutrition for Children              | 3.0   |
AND
CDEV120A - Development of the School-Age Child (DS5)              | 3.0   |
AND
CDEV120B - School-Age Child Care and Recreation Activities (DS5) | 3.0   |
AND
CDEV221 - Living and Teaching in a Diverse Society               | 3.0   |

Total Units                                                      15.0

Learning Outcomes
Demonstrate skill and mastery in applying school-age child development themes, theories, and concepts in real/simulated school-age settings or scenarios.
Develop a portfolio of developmentally appropriate school-age activities and programming including discipline strategies, health and safety, social interaction, parent communication, media influences and assessment strategies for the cognitive, psychosoci

Labor Market Data

Child, Family, and School Social Workers
### Apply Now Request Info

## Health Sciences

Do you want to make a difference in someone else life? The majors in the Interest Area of Health Sciences prepare students for careers that can change and save lives. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

### Programs

- Behavior Technician, CC
- Caregiver / Personal Care Aide, CC
- Healthcare Support Worker, CC
- Home Health Aide, CC
- Kinesiology, AA-T
- Kinesiology – Fitness and Active Lifestyle, AS
- Kinesiology – Fitness and Active Lifestyle, CA
- Kinesiology – Health Promotion, AS
Behavior Technician, CC

Certificate of Completion

Control Number:
38398

Curriculum Id:
OEC.BT.CC

The Behavior Technician Program prepares individuals for a certification exam and frontline work in the field of applied behavior analysis. This is an entry-level program designed to meet training national requirements for certification as a behavior technician. Classes in this certificate will cover defining behavior, teaching methodologies based on Applied Behavior Analysis (ABA), prompting, generalization and maintenance, data collection for skill acquisition, Functional Behavior Assessment, Antecedent and Consequence Interventions, measurement, community and social skills, ethics and professionalism. Students who complete the program will learn the skills required to sit for any of the three nationally accredited behavior technician exams, such as Applied Behavior Analysis Technician (ABAT), Board Certified Autism Technician (BCAT), and Registered Behavior Technician (RBT).

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED080</td>
<td>Introduction to the Behavior Technician Program</td>
<td>24.0</td>
</tr>
<tr>
<td>VMED081</td>
<td>Behavior Technician Certification Training</td>
<td>24.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirements: 48 hours (credits are in hours) 48.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED080</td>
<td>Introduction to the Behavior Technician Program</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VMED081</td>
<td>Behavior Technician Certification Training</td>
<td>24.0</td>
</tr>
</tbody>
</table>

Total Hours 48.0

Learning Outcomes
Perform the duties of a behavior technician.

Labor Market Data

Community Health Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43K</td>
<td>304</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>31K</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>68K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-d832fa6e1b18
Health Education Specialists

Job Growth

Wages

59K
AVERAGE
34K
LOW
106K
HIGH

Competition

327

Annual
Openings

Graduates*

*For Program

Caregiver / Personal Care Aide, CC
Certificate of Completion

Control Number:
36901

Curriculum Id:
OEC.CGPCA.CC

This program prepares students to assist the elderly, convalescents, or persons with disabilities with daily living activities at the person's home or in a care facility. In a simulated caregiving environment, students will gain experience performing caregiver duties, which may include nutrition, cleanliness, ambulation, and household activities.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED030</td>
<td>Introduction to Caregiving</td>
<td>20.0</td>
</tr>
<tr>
<td>VMED031</td>
<td>Caregiver Training</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirements: 60 hours (credits are in hours) 60.0 Hours

VMED030 - Introduction to Caregiving 20.0

AND

VMED031 - Caregiver Training 40.0

Total Hours 60.0

Learning Outcomes
Demonstrate how to correctly perform the duties of a caregiver.

Labor Market Data

Home Health and Personal Care Aides

Job Growth

Wages

27K
AVERAGE
25K
LOW
45K
HIGH

Competition

63102

Annual
Openings

Graduates*

*For Program
Healthcare Support Worker, CC

Certificate of Completion

Control Number:
37807

Curriculum Id:
SCC.HSW.CC

This program provides students with the basic foundation of knowledge and skills to become a healthcare support worker. Designed for students who want to pursue a career in the healthcare field, this program will provide a comprehensive overview of the many types of healthcare occupations as well as the academic and clinical requirements necessary to successfully enter those occupations.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED050</td>
<td>Introduction to Healthcare Occupations</td>
<td>60.0</td>
</tr>
<tr>
<td>VMED051</td>
<td>Healthcare Support Worker Pathways</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirements: 80 hours (credits are in hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED050</td>
<td>Introduction to Healthcare Occupations</td>
<td>60.0</td>
</tr>
<tr>
<td>VMED051</td>
<td>Healthcare Support Worker Pathways</td>
<td>20.0</td>
</tr>
</tbody>
</table>
Total Hours 80.0

Learning Outcomes
Identify the academic and clinical requirements to become a healthcare support worker

Labor Market Data

**Data Entry Keyers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>35K</td>
<td></td>
<td>1350</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>23K</td>
<td>56K</td>
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<td>LOW</td>
<td>HIGH</td>
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</tr>
</tbody>
</table>

**File Clerks**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>34K</td>
<td></td>
<td>833</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>25K</td>
<td>61K</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**First-Line Supervisors of Office and Administrative Support Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>60K</td>
<td></td>
<td>7469</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>37K</td>
<td>97K</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**Medical Assistants**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>36K</td>
<td></td>
<td>4435</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>26K</td>
<td>56K</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>46K</td>
<td></td>
<td>1542</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>31K</td>
<td>83K</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Apply Now Request Info

Home Health Aide, CC
Certificate of Completion

Control Number:
Curriculum Id:
SCC.HHA.CC

The home health aide (HHA) program prepares individuals who already hold their Certified Nurse Assistant (CNA) to become Certified Home Health Aides. This course provides an overview of the requirements to transition from CNA to HHA. Instruction builds and expands on the CNA training with increased focus and experience in the areas of patient needs, personal care services, nutrition, cleaning and care in the home. Successful students will be eligible to complete their California Home Health Aide (HHA) Certification.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED060</td>
<td>Overview of the Home Health Aide Training Program</td>
<td>10.0</td>
</tr>
<tr>
<td>VMED061</td>
<td>Home Health Aide (HHA) Training</td>
<td>52.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirements: 62 hours (credits are in hours) 62.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED060</td>
<td>Overview of the Home Health Aide Training Program</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VMED061</td>
<td>Home Health Aide (HHA) Training</td>
</tr>
</tbody>
</table>

Total Hours 62.0

Learning Outcomes
Demonstrate how to perform administrative and patient care duties.

Labor Market Data

<table>
<thead>
<tr>
<th>Home Health and Personal Care Aides</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>63102</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>45K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nursing Assistants</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>6907</td>
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<td></td>
<td>33K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
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</table>

Orderlies

<table>
<thead>
<tr>
<th>Orderlies</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>37K</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Openings</td>
</tr>
</tbody>
</table>
### Kinesiology, AA-T

A.A. Degree for Transfer

**Control Number:**
32434

**Curriculum Id:**
SCC.KIN.AAT

The Associate in Arts in Kinesiology for Transfer degree prepares students to transfer to a four-year institution leading to a baccalaureate degree in Kinesiology. Completion of the degree also provides guaranteed admission with junior status to the CSU system in the Kinesiology major. Please consult a counselor regarding specific course requirements for your transfer institution. Upon completion of the Associate in Arts in Kinesiology for Transfer, students will have a general understanding of the human anatomy, human physiology, and mechanics of human movement, and be able to apply fitness-based concepts.

#### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200AH</td>
<td>Honors General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>KIN101</td>
<td>First Aid and CPR</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS150A</td>
<td>Introductory Physics I</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS250A</td>
<td>Physics for Scientists and Engineers I</td>
<td>5.0</td>
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</tbody>
</table>

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>KIN100</td>
<td>Introduction to Kinesiology</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>KIN125A</td>
<td>Basic Cardio Kickboxing</td>
<td>1.0</td>
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<tr>
<td>KIN125B</td>
<td>Intermediate Cardio Kickboxing</td>
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</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>1.0</td>
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</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN185A</td>
<td>Basic Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN185B</td>
<td>Intermediate Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN185C</td>
<td>Advanced Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN189A</td>
<td>Basic Aqua Aerobics</td>
<td>1.0</td>
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</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>KIN160A</td>
<td>Basic Basketball</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN160B</td>
<td>Intermediate Basketball</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN163A</td>
<td>Basic Indoor Soccer</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN168A</td>
<td>Basic Volleyball</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN168B</td>
<td>Intermediate Volleyball</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE106A</td>
<td>Modern Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE106B</td>
<td>Intermediate Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE108A</td>
<td>Ballet Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE108B</td>
<td>Intermediate Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE115B</td>
<td>Intermediate Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE119A</td>
<td>Jazz Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
<td>1.0</td>
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Available Program Courses

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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<td>Personal Fitness Evaluation</td>
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<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN126A</td>
<td>Basic Spin</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127B</td>
<td>Intermediate Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127C</td>
<td>Advanced Yoga</td>
<td>1.0</td>
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<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
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<td>KIN140A</td>
<td>Basic Circuit Weight Training</td>
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</tr>
<tr>
<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN146B</td>
<td>Intermediate Strength Training</td>
<td>1.0</td>
</tr>
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**Program Requirements**

**A.A. Degree for Transfer**

**Aquatics**

- KIN185A - Basic Swimming  
  1.0

AND

- KIN185B - Intermediate Swimming  
  1.0

AND

- KIN185C - Advanced Swimming  
  1.0

AND

- KIN189A - Basic Aqua Aerobics  
  1.0
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<td>Must select one (1) unit course from</td>
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<td>three different areas- Aquatics,</td>
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<tr>
<td>Combatives, Dance, Fitness, or Team Sports.</td>
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<td>Select two (2) courses from the following</td>
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Select two (2) courses from the following (List A):

OR

MATH220 - Statistics and Probability with Integrated Review 4.0

Team Sports 0.0 Units

KIN160A - Basic Basketball 1.0

AND

KIN160B - Intermediate Basketball 1.0

AND

KIN163A - Basic Indoor Soccer 1.0

AND

KIN168A - Basic Volleyball 1.0

AND

KIN168B - Intermediate Volleyball 1.0

Total Units 21.0 - 24.0

Learning Outcomes

Demonstrate a general understanding of human anatomy, human physiology, and the mechanics of human movement. Demonstrate practical application of fitness concepts.

Kinesiology - Health Promotion, AS

A.S. Degree Major

Control Number:

Curriculum Id:

SCC.KINH.AS

The Associate in Science degree in Kinesiology - Health Promotion provides students with a qualification in Kinesiology, and may also be used in transferring to a CSU or private institution for completion of a 4-year degree. Please consult a counselor regarding specific course requirements for transfer. Upon completion of the Associate in Science degree in Kinesiology - Health Promotion, students will have a general understanding of Kinesiology and Health Promotion and be able to apply fitness-based concepts.

Program Courses

Available Program Courses

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Available Program Courses

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Available Program Courses

No value

Available Program Courses

No value

Available Program Courses

No value

Available Program Courses

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## Program Requirements

### A.S. Degree Major

**AQUATICS** - Select four (4) units from the following area. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

- KIN185A - Basic Swimming
  
  **Units**
  
  1.0

- OR

- KIN185B - Intermediate Swimming
  
  **Units**
  
  1.0

- OR

- KIN185C - Advanced Swimming
  
  **Units**
  
  1.0

- OR

- KIN189A - Basic Aqua Aerobics
  
  **Units**
  
  1.0

**COMBATIVES** - Select four (4) units from the following area. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

**Units**

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<td>DNCE108B</td>
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<tr>
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<td>Tap Dance Fundamentals</td>
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<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
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**FITNESS -** Select four (4) units from the following area. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
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<tr>
<th>Units</th>
<th>Course Name</th>
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<tr>
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<tr>
<td>1.0</td>
<td>KIN121A - Basic Step Aerobics</td>
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<tr>
<td>1.0</td>
<td>KIN126A - Basic Spin</td>
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<td>KIN126B - Intermediate Spin</td>
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<tr>
<td>1.0</td>
<td>KIN127A - Basic Yoga</td>
</tr>
<tr>
<td>1.0</td>
<td>KIN127B - Intermediate Yoga</td>
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<tr>
<td>1.0</td>
<td>KIN127C - Advanced Yoga</td>
</tr>
<tr>
<td>1.0</td>
<td>KIN128A - Basic Tai Chi</td>
</tr>
<tr>
<td>1.0</td>
<td>KIN140A - Basic Circuit Weight Training</td>
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<td>KIN140B - Intermediate Circuit Weight Training</td>
</tr>
<tr>
<td>1.0</td>
<td>KIN140C - Advanced Circuit Weight Training</td>
</tr>
<tr>
<td>1.0</td>
<td>KIN146A - Basic Strength Training</td>
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<tr>
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<tr>
<td>1.0</td>
<td>KIN147 - Strength Training for Women</td>
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</table>
**FITNESS** - Select four (4) units from the following area. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

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<tr>
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<td>KIN201 - Conditioning for Athletes-Co-Ed</td>
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<tr>
<td>KIN203 - Speed and Agility-Men</td>
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<td>OR</td>
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<tr>
<td>KIN204 - Speed and Agility-Women</td>
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**Major Requirements:**

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<thead>
<tr>
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<tbody>
<tr>
<td>KIN100 - Introduction to Kinesiology</td>
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<tr>
<td>KIN101 - First Aid and CPR</td>
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<td><strong>AND</strong></td>
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<tr>
<td>KIN104 - Healthful Living</td>
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<td><strong>AND</strong></td>
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<tr>
<td>PSYC100 - Introduction to Psychology</td>
<td>3.0</td>
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<td><strong>OR</strong></td>
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<tr>
<td>PSYC100H - Honors Introduction to Psychology</td>
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Select a minimum of six (6) units from the following:

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<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
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<tr>
<td><strong>OR</strong></td>
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</tr>
<tr>
<td>BIOL109 - Fundamentals of Biology</td>
<td>3.0</td>
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<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>BIOL109H - Honors Fundamentals of Biology</td>
<td>3.0</td>
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<td><strong>OR</strong></td>
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</tr>
<tr>
<td>BIOL109HL - Honors Fundamentals of Biology Laboratory</td>
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</table>
Select a minimum of six (6) units from the following:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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<tr>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL139</td>
<td>Health Microbiology</td>
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<td>OR</td>
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<tr>
<td>BIOL149</td>
<td>Human Anatomy and Physiology</td>
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<tr>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
<td>5.0</td>
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<td></td>
<td>OR</td>
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<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
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<td>OR</td>
<td></td>
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<td>BIOL249</td>
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<td></td>
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<tr>
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<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
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<tr>
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<td>OR</td>
<td></td>
</tr>
<tr>
<td>KIN102</td>
<td>Nutrition and Fitness</td>
<td>2.0</td>
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<td>OR</td>
<td></td>
</tr>
<tr>
<td>KIN109</td>
<td>Sport in US Society</td>
<td>3.0</td>
</tr>
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<td></td>
<td>OR</td>
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</tr>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>OR</td>
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</tr>
<tr>
<td>KIN111</td>
<td>Sports Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
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<td>OR</td>
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<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
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<tr>
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<td>OR</td>
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<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Select a minimum of six (6) units from the following: \[6.0 \text{ Units}\]

**OR**

PSYC200 - Introduction to Biological Psychology \[3.0 \text{ Units}\]

**TEAM SPORTS** - Select four (4) units from the following area. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. \[0.0 \text{ Units}\]

KIN160A - Basic Basketball \[1.0 \text{ Unit}\]

**OR**

KIN160B - Intermediate Basketball \[1.0 \text{ Unit}\]

**OR**

KIN163A - Basic Indoor Soccer \[1.0 \text{ Unit}\]

**OR**

KIN168A - Basic Volleyball \[1.0 \text{ Unit}\]

**OR**

KIN168B - Intermediate Volleyball \[1.0 \text{ Unit}\]

**Total Units** \[22.0 \text{ Units}\]

**Learning Outcomes**

- Demonstrate knowledge of the broad content within the disciplines of kinesiology and health promotion, and develop skills to enable the synthesis of concepts within and across those disciplines.
- Demonstrate practical application of fitness concepts.

**Labor Market Data**

**Athletic Trainers**
- **Job Growth**
- **Wages**
  - 56K (AVERAGE)
  - 22K (LOW)
  - 103K (HIGH)
- **Competition**
  - 92 (Annual Openings)
  - Graduates*
  - *For Program

**Biochemists and Biophysicists**
- **Job Growth**
- **Wages**
  - 88K (AVERAGE)
  - 45K (LOW)
  - 154K (HIGH)
- **Competition**
  - 45 (Annual Openings)
  - Graduates*
  - *For Program

**Education Administrators, All Other**
- **Job Growth**
- **Wages**
  - 100K
- **Competition**
  - 590 (Annual)
Kinesiology - Health Promotion, CA

Certificate of Achievement

Control Number:

Curriculum Id:
SCC.KINH.CA

The Certificate of Achievement in Kinesiology - Health Promotion provides students with a qualification in Kinesiology, and may also be used in transferring to a CSU or private institution for completion of a 4-year degree. Please consult a counselor regarding specific course requirements for transfer. Upon completion of the Certificate of Achievement in Kinesiology - Health Promotion, students will have a general understanding of Kinesiology and Health Promotion and be able to apply fitness-based concepts.

Program Courses

Available Program Courses

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<th>Course Title</th>
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<td>DNCE106B</td>
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<td>Ballet Fundamentals</td>
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<td>DNCE108B</td>
<td>Intermediate Ballet</td>
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<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
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<tr>
<td>DNCE115B</td>
<td>Intermediate Tap Dance</td>
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<tr>
<td>DNCE119A</td>
<td>Jazz Dance Fundamentals</td>
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<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------</td>
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<tr>
<td>KIN119</td>
<td>Personal Fitness Evaluation</td>
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<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126A</td>
<td>Basic Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127B</td>
<td>Intermediate Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127C</td>
<td>Advanced Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>0.5 - 1.0</td>
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<td>Basic Circuit Weight Training</td>
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<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>0.5 - 1.0</td>
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<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>0.5 - 1.0</td>
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<td>Intermediate Strength Training</td>
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<td>Conditioning for Athletes-Women</td>
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<td>KIN203</td>
<td>Speed and Agility-Men</td>
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<tr>
<td>KIN204</td>
<td>Speed and Agility-Women</td>
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Available Program Courses

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<th>Course Title</th>
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<tr>
<td>ACCT101</td>
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<td>BIOL109</td>
<td>Fundamentals of Biology</td>
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<td>KIN100</td>
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<td>First Aid and CPR</td>
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<th>Course Title</th>
<th>Units</th>
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<tr>
<td>KIN160B</td>
<td>Intermediate Basketball</td>
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<tr>
<td>KIN163A</td>
<td>Basic Indoor Soccer</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN168A</td>
<td>Basic Volleyball</td>
<td>0.5 - 1.0</td>
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<tr>
<td>KIN168B</td>
<td>Intermediate Volleyball</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<tr>
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<tr>
<td>KIN185A</td>
<td>Basic Swimming</td>
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<td>KIN185B</td>
<td>Intermediate Swimming</td>
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<tr>
<td>KIN185C</td>
<td>Advanced Swimming</td>
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<tr>
<td>KIN189A</td>
<td>Basic Aqua Aerobics</td>
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<th>Course Title</th>
<th>Units</th>
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<td>KIN125B</td>
<td>Intermediate Cardio Kickboxing</td>
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</tr>
<tr>
<td>KIN185A</td>
<td>Basic Swimming</td>
<td>0.5 - 1.0</td>
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</table>

Program Requirements

Certificate of Achievement

AQUATICS - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. 4.0 Units

- KIN185A - Basic Swimming 1.0
- OR
- KIN185B - Intermediate Swimming 1.0
- OR
- KIN185C - Advanced Swimming 1.0
- OR
- KIN189A - Basic Aqua Aerobics 1.0

COMBATIVES - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. 0.0 Units

- KIN125A - Basic Cardio Kickboxing 1.0
- OR
- KIN125B - Intermediate Cardio Kickboxing 1.0
- OR
- KIN185A - Basic Swimming 1.0

Certificate Requirements: 12.0 Units

- KIN100 - Introduction to Kinesiology 3.0
- AND
## Certificate Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN101 - First Aid and CPR</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>KIN104 - Healthful Living</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PSYC100 - Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PSYC100H - Honors Introduction to Psychology</td>
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</tr>
</tbody>
</table>

DANCE - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. 0.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE106A - Modern Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE106B - Intermediate Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE108A - Ballet Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE108B - Intermediate Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE115A - Tap Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE115B - Intermediate Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE119A - Jazz Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>DNCE119B - Intermediate Jazz Dance</td>
<td>1.0</td>
</tr>
</tbody>
</table>

FITNESS - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. 0.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN119 - Personal Fitness Evaluation</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>KIN120A - Basic Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
</tbody>
</table>
FITNESS - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN120B - Intermediate Aerobics</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN121A - Basic Step Aerobics</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN126A - Basic Spin</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN126B - Intermediate Spin</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN127A - Basic Yoga</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN127B - Intermediate Yoga</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN127C - Advanced Yoga</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN128A - Basic Tai Chi</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN140A - Basic Circuit Weight Training</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN140B - Intermediate Circuit Weight Training</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN140C - Advanced Circuit Weight Training</td>
<td></td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN146A - Basic Strength Training</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN146B - Intermediate Strength Training</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN146C - Advanced Strength Training</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>KIN147 - Strength Training for Women</td>
<td></td>
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</tbody>
</table>
### FITNESS
Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>KIN200 - Conditioning for Athletes-Men</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN201 - Conditioning for Athletes-Co-Ed</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN202 - Conditioning for Athletes-Women</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN203 - Speed and Agility-Men</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN204 - Speed and Agility-Women</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Select a minimum of six (6) units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT101 - Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL109 - Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109H - Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109HL - Honors Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL109L - Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL139 - Health Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL149 - Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL229 - General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL239 - General Human Anatomy</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL259</td>
<td>Environmental Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>ETHN101</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN102</td>
<td>Nutrition and Fitness</td>
<td>2.0</td>
</tr>
<tr>
<td>KIN109</td>
<td>Sport in US Society</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN111</td>
<td>Sports Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC200</td>
<td>Introduction to Biological Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**TEAM SPORTS** - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN160A</td>
<td>Basic Basketball</td>
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</tr>
<tr>
<td>KIN160B</td>
<td>Intermediate Basketball</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN163A</td>
<td>Basic Indoor Soccer</td>
<td>1.0</td>
</tr>
</tbody>
</table>
TEAM SPORTS - Select four (4) units from the following. Must select one (1) unit course(s) from at least three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

OR

KIN168A - Basic Volleyball 1.0

OR

KIN168B - Intermediate Volleyball 1.0

Total Units 22.0

Learning Outcomes

Demonstrate knowledge of the broad content within the disciplines of kinesiology and health promotion, and develop skills to enable the synthesis of concepts within and across those disciplines.

Demonstrate practical application of fitness concepts.

Labor Market Data

Athletic Trainers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56K</td>
<td>92 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>22K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>103K</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Biochemists and Biophysicists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88K</td>
<td>45 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>45K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>154K</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Education Administrators, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100K</td>
<td>590 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>43K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>147K</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Exercise Physiologists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57K</td>
<td>78 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>17K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>173K</td>
<td>*For Program</td>
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<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
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</table>

Exercise Trainers and Group Fitness Instructors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Kinesiology - Fitness and Active Lifestyle, CA

Certificate of Achievement

Control Number:

Curriculum Id:

The Certificate of Achievement in Kinesiology - Fitness and Active Lifestyle provides students with a qualification in Kinesiology, and may also be used in transferring to a CSU or private institution for completion of a 4-year degree. Please consult a counselor regarding specific course requirements for transfer. Upon completion of the Certificate of Achievement in Kinesiology - Fitness and Active Lifestyle, students will have a general understanding and appreciation of human movement for personal expression and wellness, and be able to apply fitness-based concepts.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN125A</td>
<td>Basic Cardio Kickboxing</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN125B</td>
<td>Intermediate Cardio Kickboxing</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>0.5 - 1.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109HL</td>
<td>Honors Fundamentals of Biology Laboratory</td>
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<tr>
<td>BIOL109L</td>
<td>Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL149</td>
<td>Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL259</td>
<td>Environmental Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>KIN101</td>
<td>First Aid and CPR</td>
<td>3.0</td>
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<td>KIN102</td>
<td>Nutrition and Fitness</td>
<td>2.0</td>
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<td>Healthful Living</td>
<td>3.0</td>
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<td>Sport in US Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN111</td>
<td>Sports Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
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Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>KIN119</td>
<td>Personal Fitness Evaluation</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126A</td>
<td>Basic Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127B</td>
<td>Intermediate Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN127C</td>
<td>Advanced Yoga</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN140A</td>
<td>Basic Circuit Weight Training</td>
<td>0.5 - 1.0</td>
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<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146B</td>
<td>Intermediate Strength Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN146C</td>
<td>Advanced Strength Training</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN147</td>
<td>Strength Training for Women</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN200</td>
<td>Conditioning for Athletes-Men</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN201</td>
<td>Conditioning for Athletes-Co-Ed</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN202</td>
<td>Conditioning for Athletes-Women</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN203</td>
<td>Speed and Agility-Men</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN204</td>
<td>Speed and Agility-Women</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>DNCE106A</td>
<td>Modern Dance Fundamentals</td>
<td>1.0</td>
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<tr>
<td>DNCE106B</td>
<td>Intermediate Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE108A</td>
<td>Ballet Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE108B</td>
<td>Intermediate Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE115B</td>
<td>Intermediate Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE119A</td>
<td>Jazz Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
<td>1.0</td>
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**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN160A</td>
<td>Basic Basketball</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN160B</td>
<td>Intermediate Basketball</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN163A</td>
<td>Basic Indoor Soccer</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN168A</td>
<td>Basic Volleyball</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN168B</td>
<td>Intermediate Volleyball</td>
<td>0.5 - 1.0</td>
</tr>
</tbody>
</table>

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN185A</td>
<td>Basic Swimming</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN185B</td>
<td>Intermediate Swimming</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN185C</td>
<td>Advanced Swimming</td>
<td>0.5 - 1.0</td>
</tr>
<tr>
<td>KIN189A</td>
<td>Basic Aqua Aerobics</td>
<td>0.5 - 1.0</td>
</tr>
</tbody>
</table>

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN100</td>
<td>Introduction to Kinesiology</td>
<td>3.0</td>
</tr>
<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Achievement

**AQUATICS** - Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. 5.0 Units
### Aquatics
- Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN185A</td>
<td>Basic Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN185B</td>
<td>Intermediate Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN185C</td>
<td>Advanced Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN189A</td>
<td>Basic Aqua Aerobics</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### Combatives
- Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN125A</td>
<td>Basic Cardio Kickboxing</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN125B</td>
<td>Intermediate Cardio Kickboxing</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>1.0</td>
</tr>
</tbody>
</table>

### Certificate Requirements:
- 9.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN100</td>
<td>Introduction to Kinesiology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC100</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Dance
- Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE106A</td>
<td>Modern Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE106B</td>
<td>Intermediate Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNCE108A</td>
<td>Ballet Fundamentals</td>
<td>1.0</td>
</tr>
</tbody>
</table>
**DANCE** - Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE108B</td>
<td>Intermediate Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE115A</td>
<td>Tap Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE115B</td>
<td>Intermediate Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE119A</td>
<td>Jazz Dance Fundamentals</td>
<td>1.0</td>
</tr>
<tr>
<td>DNCE119B</td>
<td>Intermediate Jazz Dance</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**FITNESS** - Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN119</td>
<td>Personal Fitness Evaluation</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN120A</td>
<td>Basic Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN120B</td>
<td>Intermediate Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN121A</td>
<td>Basic Step Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN126A</td>
<td>Basic Spin</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN126B</td>
<td>Intermediate Spin</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127A</td>
<td>Basic Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127B</td>
<td>Intermediate Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN127C</td>
<td>Advanced Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>KIN128A</td>
<td>Basic Tai Chi</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN140A</td>
<td>Basic Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN140B</td>
<td>Intermediate Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN140C</td>
<td>Advanced Circuit Weight Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN146A</td>
<td>Basic Strength Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN146B</td>
<td>Intermediate Strength Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN146C</td>
<td>Advanced Strength Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN147</td>
<td>Strength Training for Women</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN200</td>
<td>Conditioning for Athletes-Men</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN201</td>
<td>Conditioning for Athletes-Co-Ed</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN202</td>
<td>Conditioning for Athletes-Women</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN203</td>
<td>Speed and Agility-Men</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN204</td>
<td>Speed and Agility-Women</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select a minimum of six (6) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL109</td>
<td>Fundamentals of Biology</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Select a minimum of six (6) units from the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL109H</td>
<td>Honors Fundamentals of Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL109HL</td>
<td>Honors Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL109L</td>
<td>Fundamentals of Biology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL149</td>
<td>Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL259</td>
<td>Environmental Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>KIN101</td>
<td>First Aid and CPR</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN102</td>
<td>Nutrition and Fitness</td>
<td>2.0</td>
</tr>
<tr>
<td>KIN104</td>
<td>Healthful Living</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN109</td>
<td>Sport in US Society</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN110</td>
<td>Women's Health Issues</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN111</td>
<td>Sports Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Select a minimum of six (6) units from the following: 6.0 Units

MATH219 - Statistics and Probability 4.0

OR

MATH219H - Honors Statistics and Probability 4.0

TEAM SPORTS - Select five (5) units from the following. Must select one (1) unit course(s) from three (3) different areas: Aquatics, Combatives, Dance, Fitness, or Team Sports. 0.0 Units

KIN160A - Basic Basketball 1.0

OR

KIN160B - Intermediate Basketball 1.0

OR

KIN163A - Basic Indoor Soccer 1.0

OR

KIN168A - Basic Volleyball 1.0

OR

KIN168B - Intermediate Volleyball 1.0

Total Units 20.0

Learning Outcomes

Demonstrate knowledge of an integrated kinesiological approach to encourage the adoption of healthy and physically active lifestyles across diverse populations.

Demonstrate practical application of fitness concepts.

Labor Market Data

Athletic Trainers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56K</td>
<td>92 Annual Openings</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22K LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>103K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Biochemists and Biophysicists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88K</td>
<td>45 Annual Openings</td>
</tr>
<tr>
<td></td>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45K LOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>154K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Education Administrators, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For Program
Medical Assistant, CC

Certificate of Completion

Control Number:
36212

Curriculum Id:
OEC.MDAST.CC

The Medical Assistant Certificate is designed to provide the hands-on training, practical experience, and industry support it takes to pursue a professional healthcare career. The program includes practical, real-world experience working with knowledgeable medical professionals and making important industry connections. An emphasis is placed on preparing the student to pass the examination to become a Registered Medical Assistant (RMA).

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED020</td>
<td>Overview of the Medical Assistant Training Program</td>
<td>10.0</td>
</tr>
<tr>
<td>VMED021</td>
<td>Medical Terminology for Medical Assistants</td>
<td>60.0</td>
</tr>
<tr>
<td>VMED022</td>
<td>Business Procedures for Medical Assistants</td>
<td>180.0</td>
</tr>
<tr>
<td>VMED023</td>
<td>Body Systems for Medical Assistants</td>
<td>60.0</td>
</tr>
<tr>
<td>VMED024</td>
<td>Human Diseases and Disorders for Medical Assistants</td>
<td>60.0</td>
</tr>
<tr>
<td>VMED025</td>
<td>Clinical Procedures for Medical Assistants</td>
<td>120.0</td>
</tr>
<tr>
<td>VMED026</td>
<td>Surgical Assisting for Medical Assistants</td>
<td>90.0</td>
</tr>
<tr>
<td>VMED027</td>
<td>Externship for Medical Assistants</td>
<td>150.0</td>
</tr>
</tbody>
</table>
Program Requirements

Certificate of Completion

Certificate requirements: 730 hours (credits are in hours) 730.0 Hours

VMED020 - Overview of the Medical Assistant Training Program 10.0

AND

VMED021 - Medical Terminology for Medical Assistants 60.0

AND

VMED022 - Business Procedures for Medical Assistants 180.0

AND

VMED023 - Body Systems for Medical Assistants 60.0

AND

VMED024 - Human Diseases and Disorders for Medical Assistants 60.0

AND

VMED025 - Clinical Procedures for Medical Assistants 120.0

AND

VMED026 - Surgical Assisting for Medical Assistants 90.0

AND

VMED027 - Externship for Medical Assistants 150.0

Total Hours 730.0

Learning Outcomes

Demonstrate how to perform administrative and patient care duties.

Labor Market Data

Data Entry Keyers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35K</td>
<td>1350</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>23K 56K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW HIGH</td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

File Clerks

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34K</td>
<td>833</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>25K 61K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW HIGH</td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>
First-Line Supervisors of Office and Administrative Support Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60K</td>
<td>7469</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>37K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>97K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Medical Assistants

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36K</td>
<td>4435</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>26K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>56K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46K</td>
<td>1542</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>31K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>83K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Medical Billing, CC

Certificate of Completion

Control Number:

24052

Curriculum Id:

OEC.MEDBL.CC

The Certificate of Completion in Medical Billing is designed to give students the necessary knowledge and skills to hold a medical billing position. Students will have practical experience using computers, medical coding, and patient billing software, be familiar with the rules and guidelines of health care plans in order to submit proper documentation for appropriate reimbursement of services rendered, and have the necessary customer service skills to succeed in this field.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS119</td>
<td>Introduction to Keyboarding and Basic Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>VMED090</td>
<td>Introduction to Medical Coding</td>
<td>48.0</td>
</tr>
<tr>
<td>VMED091</td>
<td>Introduction to Medical Billing</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR500</td>
<td>Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

Certificate requirements: 228 hours (credits are in hours) 228.0 Hours
Certificate requirements: 228 hours (credits are in hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBUS119 - Introduction to Keyboarding and Basic Windows</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VMED090 - Introduction to Medical Coding</td>
<td>48.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VMED091 - Introduction to Medical Billing</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR500 - Workforce Readiness</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 228.0

Learning Outcomes

Apply the concepts and skills of medical billing using industry-standard software; e.g., using TotalMD software.
Demonstrate effective workforce skills, including oral and written communication, and resume and interview preparation.

Labor Market Data

**Insurance Claims and Policy Processing Clerks**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42K</td>
<td>1446 Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>29K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>67K</td>
<td>*For Program</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46K</td>
<td>1542 Annual</td>
</tr>
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<td>Openings</td>
</tr>
<tr>
<td></td>
<td>31K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>83K</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
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</tbody>
</table>

**Medical Secretaries and Administrative Assistants**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42K</td>
<td>4615 Annual</td>
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<td></td>
<td>30K</td>
<td>Graduates*</td>
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<td>60K</td>
<td>*For Program</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

**Medical Transcriptionists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30K</td>
<td>758 Annual</td>
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<td></td>
<td>17K</td>
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<td></td>
<td>60K</td>
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</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
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</tbody>
</table>
Nurse Assistant Acute Care, CC

Certificate of Completion

Control Number:
37805

Curriculum Id:
OEC.RNAAC.CC

The Nurse Assistant Acute Care program is designed to train nurse assistants for employment in the acute care facility. Integrated throughout the program are essential employability skills for the healthcare industry. Content area skills focus on direct patient care of the chronically ill patient. Safety practices in the acute care setting will be emphasized. Students will learn skills associated with neonatal and postpartum care, elimination, and surgery, as well as patient admissions, transfers, and discharges. Students may complete the first course, VMED 070, prior to becoming nurse assistants.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED070</td>
<td>Acute Care Theory for Nurse Assistants</td>
<td>90.0</td>
</tr>
<tr>
<td>VMED071</td>
<td>Acute Care Practice for Nurse Assistants</td>
<td>90.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate Requirements: 180 hours (credits are in hours)</th>
<th>180.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED070 - Acute Care Theory for Nurse Assistants</td>
<td>90.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>VMED071 - Acute Care Practice for Nurse Assistants</td>
<td>90.0</td>
</tr>
</tbody>
</table>

Total Hours: 180.0

Learning Outcomes

Demonstrate proper patient care skills in the acute care setting

Labor Market Data

Home Health and Personal Care Aides

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27K</td>
<td>63102</td>
</tr>
<tr>
<td>25K AVERAGE</td>
<td>45K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
</tbody>
</table>

Nursing Assistants

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33K</td>
<td>6907</td>
</tr>
<tr>
<td>25K AVERAGE</td>
<td>45K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
</tbody>
</table>
The Certificate of Completion in Nursing Assistant is designed to provide students with the clinical and theoretical knowledge to prepare for the Certified Nursing Assistant (CNA) designation. Students will learn to be part of a healthcare team under the supervision of a nurse. The curriculum is based on the professional standards established by regulatory agencies, and it covers essential topics included in the Nurse Assistant Certification Exam. Due to Health Department regulations, a physical exam, CPR certification, and background check must be completed at the start of the program.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMED010</td>
<td>Overview of the Nursing Assistant Training Program</td>
<td>10.0</td>
</tr>
<tr>
<td>VMED011</td>
<td>Certified Nursing Assistant (CNA) Training</td>
<td>160.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Completion

Certificate requirements: 170 hours (credits are in hours) 170.0 Units

VMED010 - Overview of the Nursing Assistant Training Program 10.0

AND

VMED011 - Certified Nursing Assistant (CNA) Training 160.0

Total Units 170.0
Learning Outcomes
Demonstrate the clinical skills required to become a Nursing Assistant.

Labor Market Data

<table>
<thead>
<tr>
<th>Home Health and Personal Care Aides</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>AVERAGE</td>
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<td>*For Program</td>
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<table>
<thead>
<tr>
<th>Nursing Assistants</th>
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<th>Wages</th>
<th>Competition</th>
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<tbody>
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<td>AVERAGE</td>
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<td>26K</td>
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<td></td>
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<td>47K</td>
<td>Graduates*</td>
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<td>*For Program</td>
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<table>
<thead>
<tr>
<th>Orderlies</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td></td>
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<td>37K</td>
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<td></td>
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<td>AVERAGE</td>
<td>Annual Op</td>
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<td></td>
<td></td>
<td>28K</td>
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<td>52K</td>
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<td></td>
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<td>LOW</td>
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<td>HIGH</td>
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</table>

<table>
<thead>
<tr>
<th>Psychiatric Aides</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<td></td>
<td></td>
<td>31K</td>
<td>109</td>
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<tr>
<td></td>
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<td>42K</td>
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<td></td>
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<td>*For Program</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Nutrition and Dietetics, AS-T
A.S. Degree for Transfer

Control Number:
35735

Curriculum Id:
SCC.NUTR.AST

The Associate in Science in Nutrition and Dietetics for Transfer degree prepares students to transfer to a four-year institution leading to a baccalaureate degree in Nutrition and Dietetics or similar major. Completion of the degree also provides guaranteed admission with junior status to the CSU system in Nutrition and Dietetics or similar major. Please consult a counselor regarding specific course requirements for your transfer institution.

Program Courses
Available Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL239</td>
<td>General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL249</td>
<td>Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM209B</td>
<td>General Chemistry B</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM280A</td>
<td>Organic Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200AH</td>
<td>Honors General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100</td>
<td>Introduction to Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC100H</td>
<td>Honors Introduction to Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR120</td>
<td>Food and Culture</td>
<td>0.0</td>
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</tbody>
</table>

Program Requirements

A.S. Degree for Transfer

Major requirements: 16.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTR115</td>
<td>Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

AND

BIOL229 - General Microbiology 5.0

AND

CHEM200A - General Chemistry A 5.0

OR

CHEM200AH - Honors General Chemistry A 5.0

AND

PSYC100 - Introduction to Psychology 3.0
Major requirements: 16.0 Units

OR

PSYC100H - Honors Introduction to Psychology 3.0

Select one (1) course from the following (List B): (An additional course from List A 4-5 units) 3.0 - 4.0 Units

NUTR120 - Food and Culture 3.0

Select two (2) courses from the following (List A): 8.0 - 10.0 Units

BIOL239 - General Human Anatomy 4.0

AND

BIOL249 - Human Physiology 4.0

AND

CHEM200B - General Chemistry B 5.0

AND

CHEM280A - Organic Chemistry A 5.0

AND

MATH219 - Statistics and Probability 4.0

OR

MATH219H - Honors Statistics and Probability 4.0

OR

MATH220 - Statistics and Probability with Integrated Review 4.0

Total Units 27.0 - 30.0

Learning Outcomes

Effectively demonstrate knowledge of nutrition science including an analysis of information sources, and an examination of the scientific method in relation to current nutrition research.

Analyze and explain the relationship between diet, lifestyle, and health outcomes, within the framework of cultural and social influences.

Labor Market Data

<table>
<thead>
<tr>
<th>Dietitians and Nutritionists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LOW 74K</td>
<td>380 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>LOW 35K</td>
<td>105K AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIGH 105K</td>
<td>380 Graduates*</td>
<td></td>
</tr>
</tbody>
</table>

*For Program
Lifelong Learning & Personal Development

Looking to maximize your potential? Acquire the necessary academic, technical, and workforce skills to reach your personal, educational, and career goals so that you can benefit from and contribute to society as productive, active members of your communities.

Programs


Adult Basic Education, COM

Certificate of Competency

Control Number:
33421

Curriculum Id:
OEC.ABE.COM

The Certificate of Competency in Adult Basic Education is designed to prepare students for basic reading, writing, spelling, and math skills used in the Adult High School Diploma Program, General Education Development (GED) Preparation, and college courses.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE023</td>
<td>Adult Basic Education Reading</td>
<td>72.0</td>
</tr>
<tr>
<td>ABE026</td>
<td>Adult Basic Education Spelling</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE024</td>
<td>Adult Basic Education Writing</td>
<td>72.0</td>
</tr>
<tr>
<td>ABE025</td>
<td>Adult Basic Education Mathematics</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Competency

<table>
<thead>
<tr>
<th>Certificate requirements: 216 hours (credits are in hours)</th>
<th>144.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE024 - Adult Basic Education Writing</td>
<td>72.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ABE025 - Adult Basic Education Mathematics</td>
<td>72.0</td>
</tr>
<tr>
<td>Select one (1) course from the following:</td>
<td>72.0 Hours</td>
</tr>
<tr>
<td>ABE023 - Adult Basic Education Reading</td>
<td>72.0</td>
</tr>
</tbody>
</table>

OR
Select one (1) course from the following: 72.0 Hours

ABE026 - Adult Basic Education Spelling 72.0

Total Hours 216.0

Learning Outcomes
Demonstrate proficient skills in basic writing, mathematics, reading and spelling used in high school courses, GED Preparation, and college courses.

Apply Now Request Info

Adult Basic Education/Adult Secondary Education Mathematics, COM
Certificate of Competency

Control Number: 33422

Curriculum Id: OEC.ABEM.COM

The Certificate of Competency in ABE/ASE Mathematics is designed to prepare students for higher level math skills in the Adult High School Diploma Program, General Education Development (GED) Preparation, and college courses.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE025</td>
<td>Adult Basic Education Mathematics</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH159</td>
<td>Math Fundamentals 2</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Competency

Certificate requirements: 144 hours (credits are in hours) 144.0 Hours

ABE025 - Adult Basic Education Mathematics 72.0

AND

HSMTH159 - Math Fundamentals 2 72.0

Total Hours 144.0

Learning Outcomes
Demonstrate proficiency in pre algebraic concepts.

Apply Now Request Info

Adult Basic Education/Adult Secondary Education Reading, COM
Certificate of Competency

Control Number: 33420

Curriculum Id:
The Certificate of Competency in ABE/ASE Reading is designed to prepare students for higher level reading skills used in high school courses, General Education Development (GED) Preparation, and college courses.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSRDG093</td>
<td>Building Reading Skills 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSRDG094</td>
<td>Building Reading Skills 2</td>
<td>72.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

**Certificate of Competency**

- Certificate requirements: 144 hours (credits are in hours)  
- HSRDG093 - Building Reading Skills 1: 72.0
- AND
- HSRDG094 - Building Reading Skills 2: 72.0
- Total Hours: 144.0

**Learning Outcomes**

Demonstrate level gains in reading.

Apply Now Request Info

**Adult Basic Education/Adult Secondary Education Writing, COM**

**Certificate of Competency**

- Control Number: 33555
- Curriculum Id: OEC.ABEW.COM

The Certificate of Competency in ABE/ASE Writing is designed to prepare students for higher level writing skills in the Adult High School Diploma Program, General Education Development (GED) Preparation, and college courses.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG066</td>
<td>English Fundamentals 2</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG083</td>
<td>Composition 1</td>
<td>72.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

**Certificate of Competency**

- Certificate requirements: 144 hours (credits are in hours)  
- HSENG066 - English Fundamentals 2: 72.0
- AND

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb1b18
## Certificate of Competency

**Control Number:**
36209  

**Curriculum Id:**
OEC.ASEA.COM

### Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMTH103</td>
<td>Math Study Skills Support 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH104</td>
<td>Math Study Skills Support 1B</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH176</td>
<td>College Preparation Algebra 1A</td>
<td>72.0</td>
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<tr>
<td>HSMTH177</td>
<td>College Preparation Algebra 1B</td>
<td>72.0</td>
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</tbody>
</table>

### Program Requirements

**Certificate requirements: 174 hours (credits are in hours)**  
174.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMTH103 - Math Study Skills Support 1A</td>
<td></td>
<td>15.0</td>
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<tr>
<td>AND</td>
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<td></td>
</tr>
<tr>
<td>HSMTH104 - Math Study Skills Support 1B</td>
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<td>15.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSMTH176 - College Preparation Algebra 1A</td>
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<td>72.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSMTH177 - College Preparation Algebra 1B</td>
<td></td>
<td>72.0</td>
</tr>
</tbody>
</table>
Total Hours 174.0

Learning Outcomes
- Demonstrate proficiency in core elementary algebra concepts.
- Demonstrate effective math study skills.

Apply Now Request Info

Adult Secondary Education, College Preparatory Composition, COM

Certificate of Competency

Control Number: 36211

Curriculum Id: OEC.ASEC.COM

The Certificate of Competency in College Preparatory Composition is designed to prepare students for college level writing.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG083</td>
<td>Composition 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG086</td>
<td>College Preparatory Composition</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Competency

<table>
<thead>
<tr>
<th>Certificate requirements: 144 hours (credits are in hours)</th>
<th>144.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG083 - Composition 1</td>
<td>72.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>HSENG086 - College Preparatory Composition</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Total Hours 144.0

Learning Outcomes
- Utilize the writing process to compose grammatically correct sentences, paragraphs, and essays that are unified, supported, organized, and coherent.
- Apply critical reading strategies to written works for meaning, rhetorical strategies, and evaluation of ideas.
- Conduct library research and write a paper in MLA format with proper documentation.

Apply Now Request Info

Adult Secondary Education Mathematics, COM

Certificate of Competency

Control Number: 36584

Curriculum Id: OEC.ASEM.COM

The Certificate of Competency in ASE Mathematics is designed to prepare students for higher level math skills in the Adult High School Diploma Program, General Education Development (GED and HiSET) Preparation, and college courses.
Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMTH158</td>
<td>Math Fundamentals 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH159</td>
<td>Math Fundamentals 2</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Competency

Certificate Requirements: 144 hours (credits are in hours) 144.0 Hours

HSMTH158 - Math Fundamentals 1 72.0

AND

HSMTH159 - Math Fundamentals 2 72.0

Total Hours 144.0

Learning Outcomes
Demonstrate proficiency in pre algebraic concepts

Apply Now Request Info

College Preparation Mathematics, COM
Certificate of Competency

Control Number: 36897
Curriculum Id: OEC.CPM.COM

The Certificate of Competency in Adult Secondary Education, College Preparation Mathematics is designed to prepare students with arithmetic and basic Algebra skills for higher level Algebra and math study skills to transition to College Math Algebra Course.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMTH103</td>
<td>Math Study Skills Support 1A</td>
<td>15.0</td>
</tr>
<tr>
<td>HSMTH104</td>
<td>Math Study Skills Support 1B</td>
<td>15.0</td>
</tr>
<tr>
<td>MATHCE206</td>
<td>College Preparation Essential Mathematics</td>
<td>144.0</td>
</tr>
<tr>
<td>MATHCE255</td>
<td>College Preparation Algebra</td>
<td>144.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Competency

Certificate Requirements: 318 hours (credits are in hours) 318.0 Hours

HSMTH103 - Math Study Skills Support 1A 15.0

AND
Certificate Requirements: 318 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMTH104</td>
<td>Math Study Skills Support 1B</td>
<td>15.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATHCE206</td>
<td>College Preparation Essential Mathematics</td>
<td>144.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATHCE255</td>
<td>College Preparation Algebra</td>
<td>144.0</td>
</tr>
</tbody>
</table>

Total Hours 318.0

Learning Outcomes

- Accurately compute using core arithmetic and elementary algebra concepts.
- Demonstrate effective math study skills.

Apply Now Request Info

College Readiness, COM

Certificate of Competency

Control Number:
36372

Curriculum Id:
OEC.CR.COM

This certificate will provide college readiness algebra and composition classes to prepare students to be successful in college and/or university placement and studies.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG086</td>
<td>College Preparatory Composition</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH176</td>
<td>College Preparation Algebra 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH177</td>
<td>College Preparation Algebra 1B</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Competency

Certificate Requirements: 216 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG086</td>
<td>College Preparatory Composition</td>
<td>72.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSMTH176</td>
<td>College Preparation Algebra 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSMTH177</td>
<td>College Preparation Algebra 1B</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Total Hours 216.0
Learning Outcomes
Demonstrate college readiness in composition.
Demonstrate college readiness in algebra.

Effective Communication Skills, CC
Certificate of Completion

Control Number:
36214

Curriculum Id:
OEC.ECOMS.CC

The Certificate of Completion in Communication Skills for Adults is designed to develop the foundational communication skills necessary for successful employment and continuing education.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR002</td>
<td>Self-Advocacy</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR006</td>
<td>Communication Skills for Successful Employment</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR007</td>
<td>Social Skills and Necessary Etiquette</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR008</td>
<td>Building Critical Thinking Skills</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete all courses</td>
<td>240.0 Hours</td>
</tr>
<tr>
<td>WKPR002 - Self-Advocacy</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR006 - Communication Skills for Successful Employment</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR007 - Social Skills and Necessary Etiquette</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR008 - Building Critical Thinking Skills</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours 240.0

Learning Outcomes
Demonstrate foundational communication skills to interact effectively with other people.

High School Equivalency Test (HiSET), COM
Certificate of Competency

Control Number:
The Certificate of Competency in High School Equivalency Test (HiSet) provides individualized prescriptive instruction in preparation for a High School equivalency exam. Covers test taking strategies and the essentials of reading, writing, mathematics, science, and social studies.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE009</td>
<td>Academic Skills</td>
<td>72.0 - 468.0</td>
</tr>
<tr>
<td>HSS400</td>
<td>High School Equivalency Test Preparation</td>
<td>180.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

Certificate of Competency

Certificate requirements: 252-468 hours (credits are in hours) 252.0 - 468.0 Hours

| ABE009 - Academic Skills                                      | 72.0 - 468.0 |
| HSS400 - High School Equivalency Test Preparation             | 180.0    |

Total Hours 252.0 - 468.0

**Learning Outcomes**

- Demonstrate foundational knowledge and comprehension of the natural sciences, social and behavioral sciences, and humanities.
- Demonstrate proficiency in the core math concepts from arithmetic through geometry.
- Demonstrate effective written communication skills.

Apply Now Request Info

### Office Leadership Skills, CC

Certificate of Completion

**Control Number:**

37803

**Curriculum Id:**

OEC.OLS.CC

The Certificate of Completion in Office Leadership Skills is designed to give students the necessary knowledge and skills to support entry-level front office workers looking for a promotion. The program provides training in public speaking and beginning budgeting skills necessary for payroll services.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR002</td>
<td>Self-Advocacy</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR007</td>
<td>Social Skills and Necessary Etiquette</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR014</td>
<td>Basic Finances in the Workforce</td>
<td>32.0</td>
</tr>
</tbody>
</table>
Program Requirements
Certificate of Completion

Certificate Requirements: 184 hours (credits are in hours) 184.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR002</td>
<td>Self-Advocacy</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WKPR007</td>
<td>Social Skills and Necessary Etiquette</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WKPR014</td>
<td>Basic Finances in the Workforce</td>
<td>32.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WKPR015</td>
<td>Public Communications</td>
<td>32.0</td>
</tr>
</tbody>
</table>

Total Hours 184.0

Learning Outcomes
Employ office leadership skills using clear and concise communication and basic budgeting knowledge.

Office Technology, CC
Certificate of Completion

Control Number: 38399

Curriculum Id: OEC.OT.CC

The Certificate of Completion in Office Technology is designed to prepare students in acquiring or improving critical thinking, communication skills, and basic online safety awareness necessary for employment.

Program Courses
Available Program Courses

No value

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR009</td>
<td>Beginning Computers</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR018</td>
<td>Social Media and Online Safety in the Workplace</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirement: 120 hours (credits are in hours) 120.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR009</td>
<td>Beginning Computers</td>
<td>60.0</td>
</tr>
</tbody>
</table>
Certificate Requirement: 120 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AND**

WKPR018 - Social Media and Online Safety in the Workplace  
60.0

Total Hours  
120.0

Learning Outcomes
Employ office technology skills using effective communication skills via social media networking and other online media forms.

**Gerontology***

Department Chair
Nancy Parent
(714) 628-5939
Parent_Nancy@sccollege.edu

Course
OAP200 - Health and Wellness
OAP457 - Music Arts for Older Adults
OAP518 - Creative Cooking for Older Adults
OAP800 - Introduction to Keyboarding, Basic Windows and Navigating the Internet
OAP802 - Seminar for Older Adults
OAP823 - Manipulative Skills for Older Adults

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Secondary Education, COM

Certificate of Competency

Control Number:
36914

Curriculum Id:
OEC.SSHS.COM

The Certificate of Competency in Secondary Education is designed to offer students instruction ranging from the basic skill level to the high school level with the purpose of preparing them to earn a high school diploma and for other higher educational or job opportunities. Each high school course is seventy-two (72) hours unless otherwise noted.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG083</td>
<td>Composition 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG084</td>
<td>Composition 2</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG085</td>
<td>Composition 3</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG086</td>
<td>College Preparatory Composition</td>
<td>72.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>HSART020</td>
<td>Literature Brought to Life</td>
<td>72.0</td>
</tr>
<tr>
<td>HSART070</td>
<td>Short Stories</td>
<td>72.0</td>
</tr>
<tr>
<td>HSART828</td>
<td>Understanding America Through Art</td>
<td>72.0</td>
</tr>
<tr>
<td>HSART837</td>
<td>Understanding America Through Art</td>
<td>72.0</td>
</tr>
<tr>
<td>HSART845</td>
<td>Drawing and Painting 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSART846</td>
<td>Drawing and Painting 2</td>
<td>72.0</td>
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</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE009</td>
<td>Academic Skills</td>
<td>72.0</td>
</tr>
<tr>
<td>ABE023</td>
<td>Adult Basic Education Reading</td>
<td>72.0</td>
</tr>
<tr>
<td>ABE024</td>
<td>Adult Basic Education Writing</td>
<td>72.0</td>
</tr>
<tr>
<td>ABE025</td>
<td>Adult Basic Education Mathematics</td>
<td>72.0</td>
</tr>
<tr>
<td>ABE026</td>
<td>Adult Basic Education Spelling</td>
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<tr>
<td>HSOTH050</td>
<td>Basics of Leadership Part 1</td>
<td>36.0</td>
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<tr>
<td>HSOTH202</td>
<td>Basics of Leadership Part 2</td>
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<tr>
<td>HSOTH505</td>
<td>Spanish 2A</td>
<td>72.0</td>
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<tr>
<td>HSOTH510</td>
<td>Spanish 2B</td>
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<td>HSOTH513</td>
<td>Spanish 4A</td>
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<td>HSOTH514</td>
<td>Spanish 4B</td>
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<tr>
<td>HSS338</td>
<td>Workforce Preparation</td>
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<tr>
<td>HSS770</td>
<td>Orientation to College</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>HSSOC215</td>
<td>Introduction to Economics</td>
<td>72.0</td>
</tr>
<tr>
<td>HSSOC222</td>
<td>Government 1: United States Federal Government and Politics</td>
<td>72.0</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HSSOC218</td>
<td>U.S. History 1: Colonization to Industrialization</td>
<td>72.0</td>
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</tbody>
</table>

No value
### Course Code | Course Title | Units
---|---|---
HSSOC219 | U.S. History 2: The Shaping of Modern America | 72.0

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSSOC229</td>
<td>World History, Geography, and Culture 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSSOC230</td>
<td>World History, Geography, and Culture 2</td>
<td>72.0</td>
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</table>

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMTH101</td>
<td>Introduction to Calculus 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH102</td>
<td>Introduction to Calculus 1B</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH154</td>
<td>Pre-Algebra A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH155</td>
<td>Pre-Algebra B</td>
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</tr>
<tr>
<td>HSMTH156</td>
<td>Essential Mathematics 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH157</td>
<td>Essential Mathematics 2</td>
<td>72.0</td>
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<tr>
<td>HSMTH159</td>
<td>Math Fundamentals 2</td>
<td>72.0</td>
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<tr>
<td>HSMTH161</td>
<td>Introduction to Trigonometry 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH163</td>
<td>Algebra 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH164</td>
<td>Algebra 1B</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH165</td>
<td>Algebra 2A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH166</td>
<td>Algebra 2B</td>
<td>72.0</td>
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<tr>
<td>HSMTH167</td>
<td>Geometry A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH168</td>
<td>Geometry B</td>
<td>72.0</td>
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<tr>
<td>HSMTH176</td>
<td>College Preparation Algebra 1A</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH177</td>
<td>College Preparation Algebra 1B</td>
<td>72.0</td>
</tr>
<tr>
<td>HSMTH180</td>
<td>Introduction to Trigonometry 1B</td>
<td>72.0</td>
</tr>
<tr>
<td>MATHCE206</td>
<td>College Preparation Essential Mathematics</td>
<td>144.0</td>
</tr>
<tr>
<td>MATHCE255</td>
<td>College Preparation Algebra</td>
<td>144.0</td>
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#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HSSCI100</td>
<td>Chemistry 1B</td>
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<tr>
<td>HSSCI184</td>
<td>Chemistry 1A</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
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<td>-------</td>
</tr>
<tr>
<td>HSSCI190</td>
<td>Physical Science 1</td>
<td>72.0</td>
</tr>
<tr>
<td>HSSCI191</td>
<td>Physical Science 2</td>
<td>72.0</td>
</tr>
<tr>
<td>HSSCI192</td>
<td>Basic Science 1</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSENG020</td>
<td>Literature Brought to Life</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG030</td>
<td>AP English 1A</td>
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<tr>
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<tr>
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<td>HSSCI183</td>
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</tr>
<tr>
<td>HSSOC216</td>
<td>World Cultures 1A</td>
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</tr>
<tr>
<td>HSSOC217</td>
<td>World Cultures 1B</td>
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Available Program Courses

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<tr>
<td>HSSCI193</td>
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</table>

Program Requirements

Certificate of Competency

Certificates Requirements: 2,304 hours (credits are in hours) 0.0 Units

**ELECTIVE COURSES: 576 hours (credits are in hours)** 576.0 Units

- ABE023 - Adult Basic Education Reading 72.0
- AND
- ABE009 - Academic Skills 72.0
- AND
- ABE024 - Adult Basic Education Writing 72.0
- AND
- ABE025 - Adult Basic Education Mathematics 72.0
- AND
- HSOTH050 - Basics of Leadership Part 1 36.0
- AND
- ABE026 - Adult Basic Education Spelling 72.0
- AND
- HSOTH202 - Basics of Leadership Part 2 36.0
- AND
- HSOTH505 - Spanish 2A 72.0
- AND
- HSOTH510 - Spanish 2B 72.0
<table>
<thead>
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<th>Course</th>
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<tr>
<td>Eiective Courses: 576 hours (credits are in hours)</td>
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<td>AND</td>
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<tr>
<td>HSS338 - Workforce Preparation</td>
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<tr>
<td>HSS770 - Orientation to College</td>
<td>8.0</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>HSO0HS514 - Spanish 4B</td>
<td>72.0</td>
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<td>AND</td>
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<tr>
<td>HSO0HS513 - Spanish 4A</td>
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<td>English: 576 hours. Required courses: Must include one (1) of the following composition courses:</td>
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<td>HSENG083 - Composition 1</td>
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<td>HSENG084 - Composition 2</td>
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<td>AND</td>
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<td>HSENG085 - Composition 3</td>
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<td>HSENG086 - College Preparatory Composition</td>
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<td>Electives: (credits are in hours)</td>
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<tr>
<td>HSSOC216 - World Cultures 1A</td>
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<td>HSSOC217 - World Cultures 1B</td>
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<td>AND</td>
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<tr>
<td>HSSC182 - Physiology 1A</td>
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<tr>
<td>AND</td>
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<tr>
<td>HSSC183 - Physiology 1B</td>
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<td>AND</td>
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<tr>
<td>HSSC196 - Health Science</td>
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<td>Electives: 504 hours (credits are in hours)</td>
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<tr>
<td>AND</td>
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<tr>
<td>HSENG020 - Literature Brought to Life</td>
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</table>
Electives: 504 hours (credits are in hours)

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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HSENG030 - AP English 1A</td>
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<td>HSENG050 - English Through Literature 11B</td>
<td>72.0</td>
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<tr>
<td>HSENG051 - English Through Literature 12B</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG052 - English Language Arts 1</td>
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<td>HSENG053 - English Language Arts 2</td>
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<td>HSENG063 - English Through Literature 11A</td>
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<td>HSENG067 - English Fundamentals 3</td>
<td>72.0</td>
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<tr>
<td>HSENG068 - English Fundamentals 4</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG070 - The Short Story</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG072 - Poetry</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG076 - The Novel</td>
<td>72.0</td>
</tr>
<tr>
<td>HSENG098 - Building Vocabulary 3</td>
<td>72.0</td>
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</table>
Electives: 504 hours (credits are in hours)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>HSENG201</td>
<td>Survey of English Level 1</td>
<td>72.0</td>
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<td>HSENG202</td>
<td>Survey of English Level 2</td>
<td>72.0</td>
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<td>HSENG203</td>
<td>Survey of English Level 3</td>
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<tr>
<td>HSENG204</td>
<td>Survey of English Level 4</td>
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<tr>
<td>HSRDG089</td>
<td>Reading Proficiency Development</td>
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<td>Reading Improvement</td>
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HUMANITIES: 144 hours (credits are in hours)  

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<tbody>
<tr>
<td>HSART020</td>
<td>Literature Brought to Life</td>
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<td>HSART070</td>
<td>Short Stories</td>
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<tr>
<td>HSART828</td>
<td>Understanding America Through Art</td>
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<td>HSART837</td>
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<td>HSART845</td>
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<td>HSART846</td>
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MATHEMATICS: 288 hours (credits are in hours)  

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<tr>
<td>MATHCE255</td>
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<tr>
<td>HSMTH161</td>
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<td>HSMTH159</td>
<td>Math Fundamentals 2</td>
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<tr>
<td>HSMTH157</td>
<td>Essential Mathematics 2</td>
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<td>HSMTH156</td>
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<td>HSMTH163</td>
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<td>HSMTH164</td>
<td>Algebra 1B</td>
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<td>HSMTH167</td>
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<td>HSMTH168</td>
<td>Geometry B</td>
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<tr>
<td>HSMTH176</td>
<td>College Preparation Algebra 1A</td>
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<td>HSMTH177</td>
<td>College Preparation Algebra 1B</td>
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<tr>
<td>HSMTH180</td>
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<tr>
<td>MATHCE206</td>
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<td></td>
<td>MATHEMATICS: 288 hours (credits are in hours)</td>
<td>288.0</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd323aa6eb18
**MATHEMATICS: 288 hours (credits are in hours)**  
288.0 Units

<table>
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<tr>
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<tbody>
<tr>
<td>HSMTH155 - Pre-Algebra B</td>
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<tr>
<td>HSMTH154 - Pre-Algebra A</td>
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<td><strong>AND</strong></td>
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<tr>
<td>HSMTH102 - Introduction to Calculus 1B</td>
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<td><strong>AND</strong></td>
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<tr>
<td>HSMTH101 - Introduction to Calculus 1A</td>
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Must include one (1) of the following physical science courses: 72 hours (credits are in hours)  
72.0 Units

<table>
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<td>HSSCI184 - Chemistry 1A</td>
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<td><strong>AND</strong></td>
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<tr>
<td>HSSCI190 - Physical Science 1</td>
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<td><strong>AND</strong></td>
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<td>HSSCI191 - Physical Science 2</td>
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<td><strong>AND</strong></td>
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<tr>
<td>HSSCI192 - Basic Science 1</td>
<td>72.0</td>
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Must include both of the following World History courses: 144 hours (credits are in hours)  
144.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HSSOC229 - World History, Geography, and Culture 1</td>
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<tr>
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<tr>
<td>HSSOC230 - World History, Geography, and Culture 2</td>
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Must include both of the following courses: 144 hours (credits are in hours)  
144.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
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<td><strong>AND</strong></td>
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<tr>
<td>HSSOC222 - Government 1: United States Federal Government and Politics</td>
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**NATURAL SCIENCES: 288 hours. Must include one (1) of the following biological science courses:**  
72.0 Units

<table>
<thead>
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<th>Course</th>
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<tbody>
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<td>HSSCI168 - Life Science 1</td>
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</table>
NATURAL SCIENCES: 288 hours. Must include one (1) of the following biological science courses: 72.0 Units

HSSCI169 - Life Science 2 72.0

AND

HSSCI193 - Basic Science 2 72.0

SOCIAL AND BEHAVIORAL SCIENCES: 432 hours. Must include both of the following US History courses: 144.0 Units

HSSOC218 - U.S. History 1: Colonization to Industrialization 72.0

AND

HSSOC219 - U.S. History 2: The Shaping of Modern America 72.0

Total Units 2304.0

Learning Outcomes

Demonstrate foundational knowledge and comprehension of the natural sciences, social and behavioral sciences, and humanities. Demonstrate proficiency in the core concepts from the student's selected mathematics courses. Demonstrate effective written communication skills.

Secondary Education/GED Preparation, CC

Certificate of Completion

Control Number:
24467

Curriculum Id:
OEC.SSGED.CC

The Certificate of Completion in Secondary Education/GED Preparation prepares students for the reading, writing, and math skills necessary for the achievement of the official GED Certificate.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tr>
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<tr>
<td>HSGED031</td>
<td>GED Test Preparation</td>
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</table>

Program Requirements

Certificate of Completion

Certificate requirements: 648 hours (credits are in hours) 648.0 Hours

ABE009 - Academic Skills 288.0

AND

HSGED031 - GED Test Preparation 360.0

Total Hours 648.0

Learning Outcomes
Demonstrate foundational knowledge and comprehension of the natural sciences, social and behavioral sciences, and humanities.
Demonstrate proficiency in the core math concepts from arithmetic through geometry.
Demonstrate effective written communication skills.

HS Diploma Prog/GED*

Mission

The mission of Santiago Canyon College’s Continuing Education Adult High School Diploma Program and Adult Basic Education Department is to empower students to learn, to act, to communicate, and to think critically. We are committed to maintaining standards of excellence while helping students maximize their potential by acquiring the necessary skills to reach their personal, educational, and vocational goals as productive, contributing community members.

Department Chair

Jolene Shields
(714) 628-5948
Shields_Jolene@sccollege.edu

Course

HSART020 - Literature Brought to Life
HSART070 - Short Stories
HSART828 - Understanding America Through Art
HSART837 - The Film As Art
HSART845 - Drawing and Painting 1
HSART846 - Drawing and Painting 2
HSENG020 - Literature Brought to Life
HSENG030 - AP English 1A
HSENG050 - English Through Literature 11B
HSENG051 - English Through Literature 12B
HSENG052 - English Language Arts 1
HSENG053 - English Language Arts 2
HSENG063 - English Through Literature 11A
HSENG064 - English Through Literature 12A
HSENG066 - English Fundamentals 2
HSENG067 - English Fundamentals 3
HSENG068 - English Fundamentals 4
HSENG070 - The Short Story
HSENG072 - Poetry
HSENG075 - The Novel
HSENG083 - Composition 1
HSENG084 - Composition 2
HSENG085 - Composition 3
HSENG086 - College Preparatory Composition
HSENG098 - Building Vocabulary 3
HSENG201 - Survey of English Level 1
HSENG202 - Survey of English Level 2
HSENG203 - Survey of English Level 3
HSENG204 - Survey of English Level 4
HSGED031 - GED Test Preparation
HSMTH101 - Introduction to Calculus 1A
HSMTH102 - Introduction to Calculus 1B
HSMTH103 - Math Study Skills Support 1A
HSMTH104 - Math Study Skills Support 1B
HSMTH120 - Integrated Math 1A
HSMTH121 - Integrated Math 1B
HSMTH122 - Integrated Math 2A
HSMTH123 - Integrated Math 2B
HSMTH124 - Integrated Math 3A
HSMTH125 - Integrated Math 3B
HSMTH154 - Pre-Algebra A
HSMTH155 - Pre-Algebra B
HSMTH156 - Essential Mathematics 1
HSMTH157 - Essential Mathematics 2
HSMTH158 - Math Fundamentals 1
HSMTH159 - Math Fundamentals 2
HSMTH161 - Introduction to Trigonometry 1A
HSMTH163 - Algebra 1A
HSMTH164 - Algebra 1B
HSMTH165 - Algebra 2A
HSMTH166 - Algebra 2B
HSMTH167 - Geometry A
HSMTH168 - Geometry B
HSMTH176 - College Preparation Algebra 1A
HSMTH177 - College Preparation Algebra 1B
HSMTH180 - Introduction to Trigonometry 1B
HSOTH040 - Introduction to Academic Pathways and Programs
HSOTH050 - Basics of Leadership Part 1
HSOTH153 - Supervised Tutoring
HSOTH202 - Basics of Leadership Part 2
HSOTH505 - Spanish 2A
HSOTH510 - Spanish 2B
HSOTH513 - Spanish 4A
HSOTH514 - Spanish 4B
HSRDG089 - Reading Proficiency Development
HSRDG090 - Reading Improvement
HSRDG093 - Building Reading Skills 1
HSRDG094 - Building Reading Skills 2
HSS338 - Workforce Preparation
HSS400 - High School Equivalency Test Preparation
HSS770 - Orientation to College
HSSCI100 - Chemistry 1B
HSSCI168 - Life Science 1
HSSCI169 - Life Science 2
HSSCI182 - Physiology 1A
HSSCI183 - Physiology 1B
HSSCI184 - Chemistry 1A
HSSCI190 - Physical Science 1
HSSCI191 - Physical Science 2
HSSCI192 - Basic Science 1
HSSCI193 - Basic Science 2
HSSCI196 - Health Science
HSSOC215 - Introduction to Economics
HSSOC216 - World Cultures 1A
HSSOC217 - World Cultures 1B
HSSOC218 - U.S. History 1: Colonization to Industrialization
HSSOC219 - U.S. History 2: The Shaping of Modern America
HSSOC222 - Government 1: United States Federal Government and Politics
HSSOC229 - World History, Geography, and Culture 1
HSSOC230 - World History, Geography, and Culture 2
MATHCE100 - Math Study Skills and Basic Skills Support
MATHCE206 - College Preparation Essential Mathematics
MATHCE255 - College Preparation Algebra

Programs
Adult Secondary Education, College Preparation Algebra, COM
Adult Secondary Education, College Preparatory Composition, COM
Adult Secondary Education Mathematics, COM
College Preparation Mathematics, COM
College Readiness, COM
Essential Mathematics and Math Study Skills Support, COM
High School Equivalency Test (HiSET), COM
The Certificate of Completion in Technical Skills for Higher Learning is designed to provide students with intellectual, developmental, and learning disabilities the necessary knowledge and technical skills for entry-level support employment and continuing education.

**Program Courses**

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<td>Beginning Computers</td>
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**Program Requirements**

**Certificate Requirements:** 120 hours (credits are in hours)  
120.0 Hours  

- WKPR008 - Building Critical Thinking Skills  
  60.0  
  AND  
- WKPR009 - Beginning Computers  
  60.0  

**Total Hours**  
120.0

**Learning Outcomes**

- Demonstrate appropriate decision-making skills on-the-job.  
- Demonstrate basic touch-typing proficiency.

---

The Certificate of Completion in Transition to Higher Learning is designed to give students with intellectual, developmental, and learning disabilities the necessary knowledge and skills to be successful in their college career and future employment. Students will become familiar with college rules and guidelines as well as demonstrate an ability to address and meet their needs.

**Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32faa6eb18  
492/2244
### Course Code

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### Program Requirements

Certificate of Completion

**Certificate Requirements: 120 hours (credits are in hours)**

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<th>Hours</th>
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**Total Hours**

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<tbody>
<tr>
<td></td>
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</table>

### Learning Outcomes

Demonstrate how to appropriately ask for accommodations needed in the classroom.

### Personalized

**DON'T SEE YOUR PROGRAM LISTED?**

**TALK TO A COUNSELOR ABOUT BUILDING YOUR OWN!**

Santiago Canyon College offers three different Comprehensive Student Education Plans to personalize a pathway for you. PLAN A is a Comprehensive Student Education Plan for an Associate Degree is designed to have the student receive an AA/AS General Education Degree, after completing 24 units of General Education. PLAN B is a Comprehensive Student Education Plan for Transfer/CSU is designed to the students to complete the required courses to transfer to the California State University System. PLAN C is a Comprehensive Student Education Plan for Transfer under the (IGETC) - Intersegmental General Education Transfer Curriculum, students are to complete the required courses to transfer to either the California State University System or University of California System.

Santiago Canyon College also offers a number of Associate Degrees for Transfer. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

### Requirements

The following is required for all AA-T or AS-T degrees:

- Completion of 60 CSU-transferable semester units.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Completion of a minimum of 18 semester units in an “AA-T” or “AS-T” major as detailed in the program section of the catalog. All courses in the major must be completed with a grade of C or better (Title 5 § 55063).
- Certified completion of the California State University General Education- Breadth pattern (CSU GE Breadth) (see page 8 for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern for CSU (see page 9 for more information).
The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an “associate degree for transfer”, a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor’s degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor’s degree (unless the major is a designated “high-unit” major).

Programs

- California State University General Education Breadth (CSU), CA
- Intersegmental General Education Transfer Curriculum (IGETC), CA
- Liberal Arts: Arts, Humanities, and Communication, AA
- Liberal Arts: Mathematics and Sciences, AA
- Liberal Arts: Multi-Cultural Studies, AA
- Liberal Arts: Social and Behavioral Sciences, AA

California State University General Education Breadth (CSU), CA

Certificate of Achievement

Control Number: 18117
Curriculum Id: SCC.CSU.CA

Complete all CSU General Education Breadth Requirements (Plan B) to a minimum of 39 units.

Program Courses

Available Program Courses

No value

Program Requirements

Certificate of Achievement

<table>
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<tr>
<th>Certificate requirements:</th>
<th>39.0 Units</th>
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<tbody>
<tr>
<td>CSU GE Breadth Courses</td>
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Total Units 39.0

Learning Outcomes

- Demonstrate an ability to create and organize an individualized educational plan.
- Demonstrate responsibility for one’s own learning and educational goal to the fulfillment of the CSU Certificate of Achievement.

Intersegmental General Education Transfer Curriculum (IGETC), CA

Certificate of Achievement

Control Number: 18118
Curriculum Id: SCC.IGETC.CA
Complete all Intersegmental General Education Transfer Curriculum Requirements (Plan C) to a minimum of 34 units.

Program Courses
Available Program Courses

No value

Program Requirements
Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate Requirements:</th>
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<tbody>
<tr>
<td>IGETC Courses</td>
<td>34.0</td>
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</tbody>
</table>

Total Units 34.0

Learning Outcomes

Demonstrate an ability to create and organize an individualized educational plan.
Demonstrate responsibility for one's own learning and educational goal to the fulfillment of the IGETC Certificate of Achievement.

Apply Now Request Info

Liberal Arts: Arts, Humanities, and Communication, AA
A.A. Degree Major

Control Number:
18317

Curriculum Id:
SCC.LAAHC.AA

The integrated curriculum of the Liberal Arts degree provides a broad exposure to the arts, humanities, sciences, and social sciences, while offering the opportunity for depth of knowledge within an area of emphasis. The program will enable students to develop an appreciation and understanding of the logic, aesthetic, and ethical values that have shaped and enriched our culture and to develop intellectual maturity, a deeper understanding of themselves, others, and the world. The curriculum provides a basic framework for lifelong individual study as well as preparation for university study. These courses emphasize the study of cultural literacy, humanistic activities and the artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments. This area of emphasis will prepare students for a variety of majors within the Humanities discipline including Creative Writing, English, Foreign Language, Humanities and Art, and Philosophy. It will also provide lower-division preparation for a wide range of majors within the Communications discipline. Complete general education Plan A (associate degree only, non-transfer), Plan B (CSU-GE Breadth, CSU transfer) or Plan C (IGETC, UC or CSU transfer). Students are advised to meet with a counselor to select a general education pattern most appropriate to their educational goals. Units used to satisfy an area of emphasis may be used to satisfy general education requirements.

Program Courses
Available Program Courses

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<tr>
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<th>Course Title</th>
<th>Units</th>
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<td>Language and Culture</td>
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<td>ART100H</td>
<td>Honors Introduction to Art Concepts</td>
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<tr>
<td>ART101</td>
<td>Survey of Western Art History I: Prehistory Through the Middle Ages</td>
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<td>Honors Survey of Western Art History I: Prehistory Through the Middle Ages</td>
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Available Program Courses

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Program Requirements

A.A. Degree Major

Area of emphasis requirements for the associate in arts degree. 18.0 Units

Courses A through L: 0.0 Units

ASL110 - American Sign Language I 4.0

AND

ASL111 - American Sign Language II 4.0

AND

ASL116 - Introduction to Deaf Studies 3.0

AND
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<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
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<td><strong>OR</strong></td>
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<tr>
<td>ART102H - Honors Survey of Western Art History II: Renaissance Through the Twentieth Century</td>
<td>3.0</td>
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<td><strong>AND</strong></td>
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<tr>
<td>COMM100 - Introduction to Interpersonal Communication</td>
<td>3.0</td>
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<tr>
<td><strong>OR</strong></td>
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<td>COMM100H - Honors Introduction to Interpersonal Communication</td>
<td>3.0</td>
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<tr>
<td><strong>AND</strong></td>
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<td>COMM101 - Group Dynamics</td>
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<td><strong>AND</strong></td>
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<td>COMM110 - Public Speaking</td>
<td>3.0</td>
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<td><strong>AND</strong></td>
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<td>COMM111 - Argumentation and Debate</td>
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<td><strong>AND</strong></td>
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<td>DNCE100 - Dance History and Appreciation</td>
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Courses A through L: 0.0 Units

AND

ENGL103 - Critical Thinking and Writing 4.0

OR

ENGL103H - Honors Critical Thinking and Writing 4.0

AND

ENGL231 - Survey of English Literature I 3.0

AND

ENGL232 - Survey of English Literature II 3.0

AND

ENGL233A - Shakespeare's Comedies and Romances 3.0

AND

ENGL233B - Shakespeare's Tragedies and History Plays 3.0

AND

ENGL241 - Survey of American Literature, 1600-1865 3.0

AND

ENGL242 - Survey of American Literature, 1865-Present 3.0

AND

ENGL246 - Survey of Chicano Literature 3.0

AND

ENGL270 - Children's Literature 3.0

AND

ENGL271 - Survey of World Literature I 3.0

AND

ENGL272 - Survey of World Literature II 3.0

AND

ENGL278 - Survey of Literature by Women 3.0

AND

FREN101 - Elementary French 1 5.0
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Catalog

Courses M through Z: 0.0 Units

AND

CINE103 - History of Film to 1945 3.0

AND

CINE104 - History of Film From 1945 to Present 3.0

Total Units 18.0

Learning Outcomes

- Think critically in terms of constructing arguments and presenting evidence to support their views through oral, artistic and written communication.
- Understand and articulate how culture, society, and diversity shape the role of the individual within society and human relations across cultures and disciplines.

Apply Now Request Info

Liberal Arts: Mathematics and Sciences, AA

A.A. Degree Major

Control Number: 18318

Curriculum Id: SCC.LAMS.AA

The integrated curriculum of the Liberal Arts degree provides a broad exposure to the arts, humanities, sciences, and social sciences, while offering the opportunity for depth of knowledge within an area of emphasis. The program will enable students to develop an appreciation and understanding of the logic, aesthetic, and ethical values that have shaped and enriched our culture and to develop intellectual maturity, a deeper understanding of themselves, others, and the world. The curriculum provides a basic framework for lifelong individual study as well as preparation for university study. The science courses in this category examine the physical universe, its life forms and its natural phenomena. These courses will assist the student in developing an appreciation of the scientific method and encourage an understanding of the relationships between science and other human activities. The mathematics courses will encourage the understanding of mathematical concepts through the development of quantitative reasoning skills. Students are required to complete at least one mathematics course within this area of emphasis. This area of emphasis will provide students with lower-division preparation for a variety of majors within the scientific disciplines, including Astronomy, Biology, Chemistry, Earth Sciences, Geology and Physics and will provide preparation for Mathematics majors. Additionally, students may undertake preparation for Nursing, Kinesiology, Public Health and other Health Science majors. Many of the courses will also assist students in prerequisite preparation for graduate programs within Health Sciences. In addition to the area of emphasis, students are required to complete a general education pattern (Plan A, B, or C). Students are advised to meet with a counselor to select the general education pattern most appropriate to their educational goals. Units used to satisfy an area of emphasis may be used to satisfy general education requirements.

Program Courses

Available Program Courses

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ERTH160 | Oceanography | 3.0
ERTH200 | Geology of California | 3.0
GEOG100 | World Regional Geography | 3.0
GEOG100H | Honors World Regional Geography | 3.0
GEOG101 | Physical Geography | 3.0
GEOG101H | Honors Physical Geography | 3.0
GEOG101L | Physical Geography Laboratory | 1.0

### Available Program Courses

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Program Requirements

A.A. Degree Major

Area of emphasis requirements for the associate in science degree. 18.0 Units

Courses A through L: 0.0 Units

- ANTH101 - Introduction to Physical Anthropology 3.0

AND

- ASTR100L - Astronomy Laboratory 1.0

AND

- ASTR102 - Introduction to Stars and Galaxies 3.0

AND

- ASTR103 - Introduction to the Solar System 3.0

AND

- ASTR112 - Introduction to Cosmology 3.0

AND

- BIOL109 - Fundamentals of Biology 3.0

OR

- BIOL109H - Honors Fundamentals of Biology 3.0

AND

- BIOL109HL - Honors Fundamentals of Biology Laboratory 1.0
Courses A through L: 0.0 Units

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AND

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AND

PHYS250B - Physics for Scientists and Engineers II 5.0

AND

PHYS250C - Physics for Scientists and Engineers III 5.0

AND

PSC100 - Survey of Chemistry and Physics 4.0

AND

WATR107 - California Water Resources 3.0

Total Units 18.0

Learning Outcomes

Analyze and evaluate scientific and mathematical topics.
Clearly communicate scientific and mathematical reasoning and qualitative problem solving skills using appropriate vocabulary, methodologies and diverse technologies.

Liberal Arts: Multi-Cultural Studies, AA

A.A. Degree Major

Control Number: 18319

Curriculum Id: SCC.MCS.AA

The integrated curriculum of the Liberal Arts degree provides a broad exposure to the arts, humanities, sciences, and social sciences, while offering the opportunity for depth of knowledge within an area of emphasis. The program will enable students to develop an appreciation and understanding of the logic, aesthetic, and ethical values that have shaped and enriched our culture and to develop intellectual maturity, a deeper understanding of themselves, others, and the world. The curriculum provides a basic framework for lifelong individual study as well as preparation for university study. These inter-disciplinary courses promote an appreciation of multi-cultural influences in contemporary society. Courses in this category encourage students to acquire the knowledge, skills and attitude needed to function effectively in a pluralistic democratic society and to interact, negotiate and communicate with peoples from diverse groups in order to create a civic and moral community that works for the common good. This emphasis will provide students with lower-division major preparation for disciplines within the area of study devoted to culture and society. These majors include Chicano Studies, Ethnic Studies, Foreign Language, Global Studies, International Development and Women's Studies. Complete general education Plan A (associate degree only, non-transfer), Plan B (CSU-GE Breadth, CSU transfer) or Plan C (IGETC, UC or CSU transfer). Students are advised to meet with a counselor to select a general education pattern most appropriate to their educational goals. Units used to satisfy an area of emphasis may be used to satisfy general education requirements.

Program Courses

Available Program Courses

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Program Requirements

A.A. Degree Major

Area of emphasis requirements for the associate in arts degree.  
18.0 Units

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- ASL110 - American Sign Language I  
  4.0

AND

- ASL111 - American Sign Language II  
  4.0

AND

- ASL116 - Introduction to Deaf Studies  
  3.0

AND

- ASL210 - American Sign Language III  
  4.0

AND

- ANTH100 - Introduction to Cultural Anthropology  
  3.0

OR

- ANTH100H - Honors Introduction to Cultural Anthropology  
  3.0

AND

- ANTH104 - Language and Culture  
  3.0

AND

- ART101 - Survey of Western Art History I: Prehistory Through the Middle Ages  
  3.0

OR

- ART101H - Honors Survey of Western Art History I: Prehistory Through the Middle Ages  
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AND

- ART102 - Survey of Western Art History II: Renaissance Through the Twentieth Century  
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Total Units: 18.0

Learning Outcomes

- Demonstrate knowledge, skills, and attitudes to function positively and productively within a diverse society and in upper division coursework.
- Communicate effectively with individuals and groups from diverse populations.
- Appreciate the multi-cultural influences on our contemporary culture and society.

Liberal Arts: Social and Behavioral Sciences, AA

A.A. Degree Major

Control Number: 18320

Curriculum Id: SCC.SBS.AA

The integrated curriculum of the Liberal Arts degree provides a broad exposure to the arts, humanities, sciences, and social sciences, while offering the opportunity for depth of knowledge within an area of emphasis. The program will enable students to develop an appreciation and understanding of the logic, aesthetic, and ethical values that have shaped and enriched our culture and to develop intellectual maturity, a deeper understanding of themselves, others, and the world. The curriculum provides a basic framework for lifelong individual study as well as preparation for university study. Courses in this category emphasize the connection between human behavior and social, political and economic institutions and promote an understanding of how societies and social subgroups operate. Students will be encouraged to apply critical thinking techniques as they evaluate the way individuals act and have acted in response to their societies. The courses will ensure opportunities for students to develop an understanding of the perspectives and methods of
inquiry used in the social and behavioral sciences. This area of emphasis will provide students with lower-division major preparation for many disciplines within the social sciences including Criminal Justice, Economics, Political Science, Psychology, Sociology and History. Complete general education Plan A (associate degree only, non-transfer), Plan B (CSU-GE Breadth, CSU transfer) or Plan C (IGETC, UC or CSU transfer). Students are advised to meet with a counselor to select a general education pattern most appropriate to their educational goals. Units used to satisfy an area of emphasis may be used to satisfy general education requirements.

Program Courses
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Program Requirements

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<td>HIST101 - World Civilizations to the 16th Century</td>
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### Courses A through L:

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<td>HIST118 - Social and Cultural History of the United States</td>
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<tr>
<td>HIST120 - The United States to 1877</td>
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<tr>
<td>HIST121 - The United States Since 1877</td>
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<tr>
<td>HIST122 - American History-Dynamics of Change</td>
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<tr>
<td>HIST124 - Mexican-American History in the United States</td>
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<tr>
<td>HIST127 - Women in U.S. History</td>
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<tr>
<td>HIST133 - History of California</td>
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<tr>
<td>HIST152 - Latin American History</td>
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<tr>
<td>HIST162 - Asian Civilizations</td>
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<tr>
<td>HIST240 - Introduction to Peace and Conflict Studies</td>
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<tr>
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<tr>
<td>PSYC190 - Psychology of Human Sexuality</td>
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**OR**

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<tr>
<td>HIST122H - Honors American History-Dynamics of Change</td>
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<td>HIST124H - Honors Mexican-American History in the United States</td>
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<td>HIST133H - Honors History of California</td>
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<td>HIST162H - Honors Asian Civilizations</td>
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<td>HIST240H - Honors Introduction to Peace and Conflict Studies</td>
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<td>IDS155H - Honors Human Sexuality</td>
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<tr>
<td>MATH219H - Honors Statistics and Probability</td>
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<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
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<tr>
<td>POLT101H - Honors American Government and Politics</td>
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<td>POLT200 - American Political Thought</td>
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<tr>
<td>POLT220 - International Politics</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>POLT221 - Women in American Politics</td>
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<td>AND</td>
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<tr>
<td>POLT230 - Political Theory</td>
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<tr>
<td>POLT201 - Introduction to Comparative Politics</td>
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<td>PSYC157 - Introduction to Child Psychology</td>
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## Courses M through Z:

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<td>PSYC190 - Psychology of Human Sexuality</td>
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<td><strong>OR</strong></td>
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<tr>
<td>IDS155 - Human Sexuality</td>
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Courses M through Z:

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<td>SOC130</td>
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<tr>
<td>GSWS102</td>
<td>Women in America: Work, Family, Self</td>
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Total Units: 18.0

Learning Outcomes

- Think critically about how individuals are influenced by political, economic, cultural and family institutions in various cultural settings.
- Experience using social science methods of data collection and analysis in order to draw logical conclusions about individuals and society.
- Discuss, compare and contrast, and analyze U.S. and world political systems in various historical periods.

Apply Now Request Info

STEM

Does using mathematics to solve problems intrigue you? Do you like to figure out how things operate by taking them apart? The majors in the Interest Area of Science, Technology, Engineering and Math prepare students for careers in sciences, engineering, mathematics and more. Check out the list of majors below and explore them based on careers in the field, and degrees and courses offered.

Programs

- Applied Robotics and Embedded Programming, CERT
- Astronomy, AS
- Biology, AS
- Biology, AS-T
- Biotechnology, AS
- Biotechnology Biomanufacturing Technician, CA
- Biotechnology Laboratory Technician: Food Safety, CA
- Chemistry, AS
- Computer Retail Sales and Support, CA
- Computer Science, AS
- Computer Science, AS-T
- Computer Science, CA
- Earth Sciences, AS
- General Biotechnology Technician, CA
- Geology, AS-T
- Land Surveying, AS
- Land Surveying, CA
- Mathematics, AS-T
- Physics, AS-T
- Wastewater/Environmental Sanitation, AS
- Wastewater/Environmental Sanitation, CA
Applied Robotics and Embedded Programming, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:

SCC.CMPRA.CERT

The Certificate of Proficiency in Applied Robotics and Embedded Programming will lead to entry-level employment in computer science, engineering, and other areas where high aptitude in computer programming is recognized. The program prepares students for careers as robotics technicians, engineering technicians, and junior programmers.

Program Courses

Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
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<td>CMPR157</td>
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<tr>
<td>CMPR213</td>
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Program Requirements

Certificate requirements:

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<tr>
<td>CMPR157 - Introduction to Robotics</td>
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<tr>
<td>CMPR213 - C# Programming</td>
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Total Units: 9.0

Learning Outcomes

Demonstrate and apply knowledge of common microprocessors and design software applications which can be used in industry-standard embedded devices.

Labor Market Data

<table>
<thead>
<tr>
<th>Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other</th>
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</thead>
<tbody>
<tr>
<td>Job Growth</td>
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<tr>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32fae1eb18
Astronomy, AS

A.S. Degree Major

Control Number:
33223

Curriculum Id:
SCC.ASTR.AS

The Associate of Science degree in Astronomy provides a foundation in astronomy and physics for students planning to transfer into a baccalaureate program in astronomy, astrophysics or astronomy education leading to a career in astronomy and/or physics research, education, or technology and programming.

Program Courses
### Available Program Courses

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<td>Introduction to Stars and Galaxies</td>
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<tr>
<td>ASTR103</td>
<td>Introduction to the Solar System</td>
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<td>Introduction to Cosmology</td>
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<td>CMPR120</td>
<td>Introduction to Programming</td>
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<td>Physics for Scientists and Engineers I</td>
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<td>PHYS250B</td>
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<tr>
<td>PHYS250C</td>
<td>Physics for Scientists and Engineers III</td>
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### Program Requirements

A.S. Degree Major

Major requirements for the associate in science degree: 25.0 Units

- **ASTR100L - Astronomy Laboratory** 1.0
- **AND**
- **ASTR102 - Introduction to Stars and Galaxies** 3.0
- **AND**
- **ASTR103 - Introduction to the Solar System** 3.0
- **OR**
- **ASTR112 - Introduction to Cosmology** 3.0
- **AND**
- **CMPR120 - Introduction to Programming** 3.0
- **AND**
- **PHYS250A - Physics for Scientists and Engineers I** 5.0
- **AND**
- **PHYS250B - Physics for Scientists and Engineers II** 5.0
- **AND**
- **PHYS250C - Physics for Scientists and Engineers III** 5.0

Total Units 25.0

### Learning Outcomes

Demonstrate an understanding that science is based on observations of the universe and how it is used to understand some basic phenomena of our world.
Labor Market Data

**Astronomers**

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<th>Wages</th>
<th>Competition</th>
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<td>358K</td>
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**Atmospheric and Space Scientists**

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<td>191K</td>
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<td>LOW</td>
<td>191K</td>
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**Natural Sciences Managers**

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**Physicists**

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Biology, AS

A.S. Degree Major

Control Number:

11856

Curriculum Id:

SCC.BIOLAS

The Associate of Science degree in Biology prepares students for transfer to a four-year institution leading to a baccalaureate degree in biology or disciplines such as microbiology, botany, zoology, and careers in teaching, medicine and health sciences.

**Program Courses**

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<th>Course Title</th>
<th>Units</th>
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<td>Cellular and Molecular Biology</td>
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<tr>
<td>BIOL221</td>
<td>Animal Diversity and Evolution</td>
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<td>Course Title</td>
<td>Units</td>
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<tr>
<td>BIOL231</td>
<td>Plant Diversity and Ecology</td>
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<td>General Chemistry A</td>
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<td>CHEM200AH</td>
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<td>General Chemistry B</td>
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**Program Requirements**

**A.S. Degree Major**

**Major requirements:**  

25.0 Units

- BIOL211 - Cellular and Molecular Biology  
  5.0

  **AND**

- BIOL221 - Animal Diversity and Evolution  
  5.0

  **AND**

- BIOL231 - Plant Diversity and Ecology  
  5.0

  **AND**

- CHEM200A - General Chemistry A  
  5.0

  **OR**

- CHEM200AH - Honors General Chemistry A  
  5.0

  **AND**

- CHEM200B - General Chemistry B  
  5.0

**Total Units**  

25.0

**Learning Outcomes**

Demonstrate an understanding of the basic theories of biology.

Demonstrate a knowledge of and an ability to apply and effectively communicate the scientific method.

**Labor Market Data**

**Animal Scientists**

- Job Growth: 31 Annual Openings
- Wages: Low 42K, Average 50K, High 66K
- Competition: 31 Graduates*

*For Program

**Biochemists and Biophysicists**

- Job Growth: 45 Annual Openings
- Wages: Average 88K
- Competition:
Biology, AS-T
A.S. Degree for Transfer

Control Number:
35110

Curriculum Id:
SCC.BIOLAST

The Associate in Science in Biology for Transfer degree prepares students for transfer to a four-year institution leading to a baccalaureate degree in biology or disciplines such as microbiology, botany, zoology, and careers in teaching, medicine and health sciences.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>BIOL211</td>
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Apply Now Request Info
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<td>4.0</td>
</tr>
<tr>
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<td>Introductory Physics I</td>
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<tr>
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<td>Introductory Physics II</td>
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**Program Requirements**

A.S. Degree for Transfer

**Major requirements:** 37.0 Units

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Course Code</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL211</td>
<td>BIOL211 - Cellular and Molecular Biology</td>
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<td>BIOL221</td>
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<tr>
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<td>PHYS150B</td>
<td>PHYS150B - Introductory Physics II</td>
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</table>

**Total Units** 37.0

**Learning Outcomes**

Demonstrate an understanding of the basic theories of biology.
Demonstrate a knowledge of and an ability to apply and effectively communicate the scientific method.

## Labor Market Data

<table>
<thead>
<tr>
<th>Animal Scientists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<table>
<thead>
<tr>
<th>Biochemists and Biophysicists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>45K</td>
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<td>Graduates*</td>
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<table>
<thead>
<tr>
<th>Biological Scientists, All Other</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
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<td></td>
<td>59K</td>
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<td>Graduates*</td>
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<td></td>
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<table>
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<tr>
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<th>Job Growth</th>
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<th>Competition</th>
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<td>30K</td>
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<table>
<thead>
<tr>
<th>Environmental Science and Protection Technicians, Including Health</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td>101K</td>
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<td>Graduates*</td>
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</table>

---

### Biotechnology Biomanufacturing Technician, CA

Certificate of Achievement

**Control Number:**
32598

**Curriculum Id:**
SCC.BTMFT.CA
The Certificate of Achievement in Biotechnology Biomanufacturing Technician is designed for students who wish to obtain the skills required to gain employment in industries influenced by biotechnology as well as for incumbent workers seeking career opportunities. Upon completion of this certificate program, students will be eligible to obtain employment as laboratory assistants or biomanufacturing technicians.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL190</td>
<td>Introduction to Biotechnology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL190L</td>
<td>Introduction to Biotechnology Lab</td>
<td>1.0</td>
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<tr>
<td>BIOL191</td>
<td>Biotech A: Basic Lab Skills</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL192</td>
<td>Biotech B: Proteins</td>
<td>4.0</td>
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<tr>
<td>BIOL194</td>
<td>Quality and Regulatory Compliance in Biosciences</td>
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<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
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<tr>
<td>CHEM200AH</td>
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**Program Requirements**

**Certificate of Achievement**

<table>
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<tr>
<th>Certificate requirements:</th>
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<td>AND</td>
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</tr>
<tr>
<td>BIOL190L - Introduction to Biotechnology Lab</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL191 - Biotech A: Basic Lab Skills</td>
<td>4.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>BIOL192 - Biotech B: Proteins</td>
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<tr>
<td>AND</td>
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<tr>
<td>BIOL194 - Quality and Regulatory Compliance in Biosciences</td>
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<tr>
<td>AND</td>
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<tr>
<td>CHEM200A - General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CHEM200AH - Honors General Chemistry A</td>
<td>5.0</td>
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</tbody>
</table>

**Total Units** 19.0

**Learning Outcomes**

- Demonstrate an understanding of and follow workplace safety guidelines.
- Demonstrate proficiency in following standard operating procedures (SOPs).
Properly maintain a laboratory notebook.
Understand and correctly operate laboratory equipment.

# Labor Market Data

## Agricultural and Food Science Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<td></td>
<td>39K</td>
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## Architectural and Engineering Managers

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<th>Job Growth</th>
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## Biochemists and Biophysicists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
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<td>88K</td>
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## Bioengineers and Biomedical Engineers

<table>
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<th>Job Growth</th>
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<th>Competition</th>
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<tr>
<td>61K</td>
<td>157K</td>
<td></td>
</tr>
<tr>
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<td>HIGH</td>
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</table>

## Biological Scientists, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>96K</td>
<td>254</td>
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<tr>
<td>AVERAGE</td>
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<tr>
<td>59K</td>
<td>139K</td>
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<tr>
<td>LOW</td>
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</table>

## Biotechnology Lab Assistant, CA

| | |
---|---|
**Certificate of Achievement**

**Control Number:**

**Curriculum Id:**

SCC.BTLA.CERT

[Apply Now Request Info]
The Certificate of Achievement in Biotechnology Lab Assistant is designed for students who wish to obtain the skills required to gain employment in industries influenced by biotechnology as well as for incumbent workers seeking career opportunities. Upon completion of this certificate program, students will be eligible to obtain employment as laboratory assistants.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL190</td>
<td>Introduction to Biotechnology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL190L</td>
<td>Introduction to Biotechnology Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>BIOL191</td>
<td>Biotech A: Basic Lab Skills</td>
<td>4.0</td>
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<tr>
<td>BIOL211</td>
<td>Cellular and Molecular Biology</td>
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<tr>
<td>CHEM100</td>
<td>Introductory Chemistry</td>
<td>4.0</td>
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</tbody>
</table>

Program Requirements

Certificate of Achievement

Certificate Requirements: 12.0 - 13.0 Units

BIOL191 - Biotech A: Basic Lab Skills 4.0

AND

CHEM100 - Introductory Chemistry 4.0

AND

BIOL190 - Introduction to Biotechnology 3.0

AND

BIOL190L - Introduction to Biotechnology Lab 1.0

OR

BIOL211 - Cellular and Molecular Biology 5.0

Total Units 12.0 - 13.0

Learning Outcomes

Develop knowledge necessary to select and develop Science, Technology, Engineering & Mathematics (STEM) careers.

Labor Market Data

Agricultural and Food Science Technicians

Job Growth 39K

Wages AVERAGE 27K 86K

Competition 104 Annual Openings Graduates*

*For Program

Architectural and Engineering Managers

Job Growth

Wages LOW 27K HIGH 86K

Competition

### Biochemists and Biophysicists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88K</td>
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<td>45K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>154K</td>
<td>Openings</td>
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<tr>
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<td>HIGH</td>
<td>Graduates*</td>
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<td></td>
<td>*For Program</td>
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### Bioengineers and Biomedical Engineers

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<th>Competition</th>
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<tbody>
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<td>Annual</td>
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<tr>
<td></td>
<td>157K</td>
<td>Openings</td>
</tr>
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<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
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### Biological Scientists, All Other

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96K</td>
<td>254</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>59K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>139K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
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**Biotechnology Laboratory Technician: Food Safety, CA**

**Certificate of Achievement**

**Control Number:**
32648

**Curriculum Id:**
SCC.BTLFS.CA

The Certificate of Achievement in Biotechnology Laboratory Technician of Food Safety is designed for students who wish to obtain the skills required to gain employment in industries influenced by biotechnology within the food industry as well as for incumbent workers seeking career opportunities. Upon completion of this certificate program, students will be eligible to obtain employment as laboratory assistants or quality assurance/quality control (QA/QC) technicians, especially within the food industry.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL190</td>
<td>Introduction to Biotechnology</td>
<td>3.0</td>
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<tr>
<td>BIOL190L</td>
<td>Introduction to Biotechnology Lab</td>
<td>1.0</td>
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<tr>
<td>BIOL191</td>
<td>Biotech A: Basic Lab Skills</td>
<td>4.0</td>
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</table>
Course Code | Course Title | Units
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BIOL196 | Food Safety | 2.0
BIOL211 | Cellular and Molecular Biology | 5.0

Program Requirements
Certificate of Achievement

Certificate requirements: 10.0 - 11.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL191</td>
<td>Biotech A: Basic Lab Skills</td>
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</table>

AND

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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AND

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<tr>
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<th>Course Title</th>
<th>Units</th>
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AND

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<th>Course Title</th>
<th>Units</th>
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<tbody>
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<td>BIOL190L</td>
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OR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL211</td>
<td>Cellular and Molecular Biology</td>
<td>5.0</td>
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</tbody>
</table>

Total Units 10.0 - 11.0

Learning Outcomes

- Demonstrate an understanding of and follow workplace safety guidelines.
- Demonstrate proficiency operating within a regulated environment as it pertains to food safety.
- Properly maintain a laboratory notebook.
- Understand and correctly operate laboratory equipment.

Labor Market Data

**Agricultural and Food Science Technicians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>86K HIGH</td>
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**Agricultural Inspectors**

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<td>Graduates*</td>
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<tr>
<td></td>
<td>87K HIGH</td>
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</table>

**Dietetic Technicians**
The Associate of Science degree in Biotechnology is designed for students who wish to obtain the skills required to gain employment in industries influenced by biotechnology as well as for incumbent workers seeking career opportunities. Upon completion of this program, students will be eligible to obtain employment as laboratory assistants, biomanufacturing technicians, or research and development technicians. This degree can help prepare for transfer to the Biomanufacturing B.S. degree at Mira Costa or Solano Community Colleges. Additional coursework is required for entry to the B.S. programs at these campuses. Please see a counselor for guidance.

**Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Introduction to Biotechnology Lab</td>
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</tr>
<tr>
<td>BIOL192</td>
<td>Biotech B: Proteins</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL193</td>
<td>Biotech C: Nucleic Acids</td>
<td>4.0</td>
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<tr>
<td>BIOL194</td>
<td>Quality and Regulatory Compliance in Biosciences</td>
<td>2.0</td>
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<td>BIOL202</td>
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<tr>
<td>BIOL211</td>
<td>Cellular and Molecular Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200AH</td>
<td>Honors General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Available Program Courses

No value

Program Requirements

A.S. Degree Major

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL190 - Introduction to Biotechnology</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL190L - Introduction to Biotechnology Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL191 - Biotech A: Basic Lab Skills</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL192 - Biotech B: Proteins</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL193 - Biotech C: Nucleic Acids</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL194 - Quality and Regulatory Compliance in Biosciences</td>
<td>2.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL202 - Cell Culture Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>BIOL211 - Cellular and Molecular Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL229 - General Microbiology</td>
<td>5.0</td>
</tr>
</tbody>
</table>
Major requirements: 34.0 Units

AND

CHEM200A - General Chemistry A 5.0

OR

CHEM200AH - Honors General Chemistry A 5.0

AND

MATH219 - Statistics and Probability 4.0

OR

MATH219H - Honors Statistics and Probability 4.0

OR

MATH220 - Statistics and Probability with Integrated Review 4.0

AND

*If planning to transfer to the Biomanufacturing B.S. programs, students must take BIOL 211 instead of BIOL 229. 0.0

Total Units 34.0

Learning Outcomes

Demonstrate an understanding of and follow workplace safety guidelines.
Demonstrate proficiency in following standard operating procedures (SOPs).
Properly maintain a laboratory notebook.
Understand and correctly operate laboratory equipment.

Labor Market Data

Agricultural and Food Science Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>39K</td>
<td>AVERAGE</td>
<td>104 Annual Openings Graduates*</td>
</tr>
<tr>
<td>27K LOW</td>
<td>86K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Architectural and Engineering Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>171K</td>
<td>AVERAGE</td>
<td>814 Annual Openings Graduates*</td>
</tr>
<tr>
<td>107K LOW</td>
<td>315K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Biochemists and Biophysicists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Certificate of Achievement in Biotechnology Laboratory Technician is designed for students who wish to obtain the skills required to gain employment in industries influenced by biotechnology as well as for incumbent workers seeking career opportunities. Upon completion of this certificate program, students will be eligible to obtain employment as laboratory assistants, biomanufacturing technicians, or research and development technicians.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL139</td>
<td>Health Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL211</td>
<td>Cellular and Molecular Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL229</td>
<td>General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIOL290</td>
<td>Biochemistry and Molecular Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200B</td>
<td>General Chemistry B</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL190</td>
<td>Introduction to Biotechnology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIOL190L</td>
<td>Introduction to Biotechnology Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>BIOL191</td>
<td>Biotech A: Basic Lab Skills</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL192</td>
<td>Biotech B: Proteins</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL193</td>
<td>Biotech C: Nucleic Acids</td>
<td>4.0</td>
</tr>
<tr>
<td>BIOL194</td>
<td>Quality and Regulatory Compliance in Biosciences</td>
<td>2.0</td>
</tr>
<tr>
<td>BIOL202</td>
<td>Cell Culture Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200AH</td>
<td>Honors General Chemistry A</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

Certificate requirements: 25.0 Units

- BIOL191 - Biotech A: Basic Lab Skills 4.0
- AND
- BIOL192 - Biotech B: Proteins 4.0
- AND
- BIOL193 - Biotech C: Nucleic Acids 4.0
- AND
- BIOL194 - Quality and Regulatory Compliance in Biosciences 2.0
- AND
- BIOL202 - Cell Culture Techniques 2.0
- AND
- CHEM200A - General Chemistry A 5.0
- OR
- CHEM200AH - Honors General Chemistry A 5.0
- AND
- BIOL190 - Introduction to Biotechnology 3.0
- AND
- BIOL190L - Introduction to Biotechnology Lab 1.0
- OR
- BIOL211 - Cellular and Molecular Biology 5.0
Select a minimum of six (6) units from the following (may not be a course used to satisfy the certificate requirements):

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL139 - Health Microbiology</td>
<td>4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL229 - General Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL197 - Science, Technology, Engineering and Mathematics (STEM) Internship</td>
<td>1.0 - 4.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL290 - Biochemistry and Molecular Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CHEM200B - General Chemistry B</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIOL211 - Cellular and Molecular Biology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Total Units** 31.0

**Learning Outcomes**
- Demonstrate an understanding of and follow workplace safety guidelines.
- Demonstrate proficiency in following standard operating procedures (SOPs).
- Properly maintain a laboratory notebook.
- Understand and correctly operate laboratory equipment.

**Labor Market Data**

### Agricultural and Food Science Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39K</td>
<td>104</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td>Annual Openings</td>
</tr>
<tr>
<td>LOW 27K</td>
<td>86K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Architectural and Engineering Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>171K</td>
<td>814</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td>Annual Openings</td>
</tr>
<tr>
<td>LOW 107K</td>
<td>315K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Biochemists and Biophysicists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88K</td>
<td>45</td>
</tr>
<tr>
<td>AVERAGE</td>
<td></td>
<td>Annual Openings</td>
</tr>
<tr>
<td>LOW 45K</td>
<td>154K</td>
<td></td>
</tr>
</tbody>
</table>
Chemistry, AS
A.S. Degree Major

Control Number:
11933

Curriculum Id:
SCC.CHEM.AS

The Associate of Science degree in Chemistry provides basic courses for a wide variety of occupations, or prepares the student to enter a curriculum in a four-year institution leading to a baccalaureate degree. The major fields of chemistry are inorganic and organic chemistry, biochemistry, and chemical engineering. These fields provide career opportunities in industry, research, and teaching, and also entry into graduate or professional programs such as medicine, pharmacy and other related health fields.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200AH</td>
<td>Honors General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200B</td>
<td>General Chemistry B</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM280A</td>
<td>Organic Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM280B</td>
<td>Organic Chemistry B</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH180</td>
<td>Single Variable Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH180H</td>
<td>Honors Single Variable Calculus I</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Program Requirements
A.S. Degree Major

Major requirements: 24.0 Units
Major requirements: 24.0 Units

CHEM200A - General Chemistry A
5.0

OR

CHEM200AH - Honors General Chemistry A
5.0

AND

CHEM200B - General Chemistry B
5.0

AND

CHEM280A - Organic Chemistry A
5.0

AND

CHEM280B - Organic Chemistry B
5.0

AND

MATH180 - Single Variable Calculus I
4.0

OR

MATH180H - Honors Single Variable Calculus I
4.0

Total Units 24.0

Learning Outcomes

Solve problems that embody the intellectual principles of Chemistry.
Critically analyze, and interpret data to draw valid scientific conclusions and communicate those conclusions in a clear and articulate manner.

Labor Market Data

<table>
<thead>
<tr>
<th>Biochemists and Biophysicists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>88K</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td>154K</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Engineers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>100K</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td>68K</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
<td>155K</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Technicians</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>48K</td>
<td>204</td>
</tr>
</tbody>
</table>

*For Program
The Certificate of Achievement in Computer Retail Sales and Support is the first stage of the statewide IT Technician pathway and prepares students to develop their fundamental IT Technician Skills. While completing coursework in customer service, communication, Microsoft Office, and information systems coursework, along with earning the CompTIA A+ industry certification, students gain practical experience as they learn how to succeed in an IT retail environment.

### Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS100</td>
<td>Fundamentals of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS101</td>
<td>Introduction to Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR120</td>
<td>Introduction to Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT121</td>
<td>Human Relations and Organizational Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Program Requirements
Certificate of Achievement

Certificate requirements: 18.0 Units

BUS100 - Fundamentals of Business 3.0

AND

BUS121 - Human Relations and Organizational Behavior 3.0

OR

MGMT121 - Human Relations and Organizational Behavior 3.0

AND

BUS150 - Introduction to Information Systems and Applications 3.0

AND

BUS222 - Business Writing 3.0

OR

MGMT122 - Business Communications 3.0

AND

CIS101 - Introduction to Microsoft Office 3.0

AND

CMPR120 - Introduction to Programming 3.0

Total Units 18.0

Learning Outcomes
Qualify for entry level IT positions such as Retail Salespersons, Customer Service Representatives, Retail Sales Workers, and Sales Representatives.

Labor Market Data

Computer Network Support Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>67K</td>
<td>38K</td>
<td>679 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>75K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>92K</td>
<td>*For Program</td>
</tr>
<tr>
<td>HIGH</td>
<td>112K</td>
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</tbody>
</table>

Computer User Support Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>56K</td>
<td>36K</td>
<td>2908 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>50K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>70K</td>
<td>*For Program</td>
</tr>
<tr>
<td>HIGH</td>
<td>92K</td>
<td></td>
</tr>
</tbody>
</table>
## Computer, Automated Teller, and Office Machine Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39K <strong>AVERAGE</strong></td>
<td>743 <strong>Annual Openings</strong></td>
</tr>
<tr>
<td></td>
<td>17K <strong>LOW</strong></td>
<td><strong>Graduates</strong>*</td>
</tr>
<tr>
<td></td>
<td>70K <strong>HIGH</strong></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Computer Science, AS

A.S. Degree Major

#### Control Number:

11903

#### Curriculum Id:

SCC.CMPR.AS

The Associate of Science degree in Computer Science leads to entry-level employment in computer science, engineering and other areas where high aptitude in computer programming is recognized. The program prepares students for careers as engineering aides, scientific computing technicians and junior programmers. The program also prepares students to transfer to a university with a major in Computer Science.

#### Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS111</td>
<td>Python Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR100</td>
<td>The Computer and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR105</td>
<td>Visual BASIC Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR112</td>
<td>Java Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR120</td>
<td>Introduction to Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR121</td>
<td>Programming Concepts</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Program Requirements

A.S. Degree Major

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>18.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR100 - The Computer and Society</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CMPR105 - Visual BASIC Programming</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CMPR112 - Java Programming</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CMPR120 - Introduction to Programming</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>CPI101 - Introduction to Programming</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*For Program*
### Major requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR121 - Programming Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CIS111 - Python Programming</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>18.0</strong></td>
</tr>
</tbody>
</table>

### Learning Outcomes

Demonstrate knowledge and practice of computer information systems and computer science.

### Labor Market Data

#### Computer and Information Research Scientists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
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<tr>
<td></td>
<td>129K</td>
<td>93</td>
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<tr>
<td>AVERAGE</td>
<td>76K</td>
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<td>186K</td>
<td></td>
</tr>
<tr>
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</tbody>
</table>

#### Computer and Information Systems Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>159K</td>
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</tr>
<tr>
<td>AVERAGE</td>
<td>90K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>283K</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Computer Hardware Engineers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110K</td>
<td>299</td>
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<tr>
<td>AVERAGE</td>
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#### Computer Network Architects

<table>
<thead>
<tr>
<th>Job Growth</th>
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<tbody>
<tr>
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<tr>
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#### Computer Network Support Specialists

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Computer Science, AS-T
A.S. Degree for Transfer

Control Number:
33379

Curriculum Id:
SCC.CMPR.AST

The Associate in Science in Computer Science for Transfer prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree. Employment opportunities are available as programmers in government, business and education. Successful completion of the transfer degree in Computer Science guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in Computer Science or a related field.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR122</td>
<td>Programming Concepts and Methodology I</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR132</td>
<td>Programming Concepts and Methodology II</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR149</td>
<td>Discrete Structures for Computer Science</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR154</td>
<td>Computer Architecture and Organization</td>
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<tr>
<td>MATH180</td>
<td>Single Variable Calculus I</td>
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Program Requirements
A.S. Degree for Transfer

Major requirements: 30.0 Units

<table>
<thead>
<tr>
<th>Course Requirement</th>
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<td>CMPR122 - Programming Concepts and Methodology I</td>
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AND

<table>
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AND

<table>
<thead>
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<tbody>
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AND

<table>
<thead>
<tr>
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<tbody>
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AND
Major requirements:  

<table>
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<tr>
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<tr>
<td>MATH180 - Single Variable Calculus I</td>
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<td><strong>OR</strong></td>
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<tr>
<td>MATH180H - Honors Single Variable Calculus I</td>
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<tr>
<td>MATH185 - Single Variable Calculus II</td>
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<td><strong>AND</strong></td>
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<tr>
<td>PHYS250A - Physics for Scientists and Engineers I</td>
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<td><strong>AND</strong></td>
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<tr>
<td>PHYS250B - Physics for Scientists and Engineers II</td>
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</table>

Total Units: 30.0

Learning Outcomes

Apply knowledge of mathematics, science, and computer science to identify, formulate, and solve computer science problems.

Labor Market Data

### Computer and Information Research Scientists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>129K</td>
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<tr>
<td></td>
<td>76K</td>
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### Computer and Information Systems Managers

<table>
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### Computer Hardware Engineers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
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<tbody>
<tr>
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### Computer Network Architects

<table>
<thead>
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<th>Job Growth</th>
<th>Wages</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>449</td>
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<td></td>
<td></td>
<td>Annual</td>
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</table>
Computer Science, CA
Certificate of Achievement

Control Number:
21649

Curriculum Id:
SCC.CMPR.CA

The Certificate of Achievement in Computer Science leads to entry-level employment in computer science, engineering and other areas where high aptitude in computer programming is recognized. The program prepares students for careers as engineering aides, scientific computing technicians and junior programmers. The program also prepares students to transfer to a university with a major in computer science.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR100</td>
<td>The Computer and Society</td>
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<tr>
<td>CMPR105</td>
<td>Visual BASIC Programming</td>
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<tr>
<td>CMPR112</td>
<td>Java Programming</td>
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</tr>
<tr>
<td>CMPR120</td>
<td>Introduction to Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR121</td>
<td>Programming Concepts</td>
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<tr>
<td>CMPR213</td>
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Program Requirements
Certificate of Achievement

<table>
<thead>
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<th>Certificate requirements:</th>
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<tbody>
<tr>
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<tr>
<td>CMPR105 - Visual BASIC Programming</td>
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<tr>
<td>CMPR112 - Java Programming</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32bfa6eb18
Certificate requirements:

<table>
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<td>CMPR120 - Introduction to Programming</td>
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<tr>
<td>CMPR121 - Programming Concepts</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
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<tr>
<td>CMPR213 - C# Programming</td>
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</tbody>
</table>

Total Units 18.0

Learning Outcomes

Demonstrate knowledge and practice of computer science.

Labor Market Data

**Computer and Information Research Scientists**

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**Computer Network Architects**

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**Computer Network Support Specialists**

<table>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32baa6eb18
# Earth Sciences, AS

**A.S. Degree Major**

**Control Number:**
11934

**Curriculum Id:**
SCC.ERTH.AS

The Associate of Science in Earth Sciences degree is designed to provide students who need or want broad knowledge of the Earth sciences for their profession, but do not necessarily plan on becoming professional geoscientists. In addition to the geosciences, professions where such knowledge could prove to be useful include environmental sciences, urban planning and land use, transportation, travel and tourism, education, park rangers and other recreation professionals.

## Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ERTH100</td>
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<td>Physical Geology Laboratory</td>
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<td>ERTH111</td>
<td>Historical Geology</td>
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<tr>
<td>ERTH130</td>
<td>Environmental Geology</td>
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<tr>
<td>ERTH160</td>
<td>Oceanography</td>
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<tr>
<td>GEOG130</td>
<td>Introduction to Weather and Climate</td>
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**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ERTH200</td>
<td>Geology of California</td>
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<td>ERTH212</td>
<td>San Andreas Fault System Geology Field Study</td>
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<td>ERTH214</td>
<td>Orange County Geology Field Study</td>
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**Available Program Courses**

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<td>Units</td>
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<td>GEOG150</td>
<td>Exploring Maps and Geographic Technologies</td>
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<td>GEOG155</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
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<td>LIB100</td>
<td>Library Research Fundamentals</td>
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<td>LIB103</td>
<td>Advanced Internet Research</td>
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<tr>
<td>SURV155</td>
<td>Introduction to Geographic Information Systems</td>
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**Program Requirements**

A.S. Degree Major

<table>
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<tr>
<th>Major requirements:</th>
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</thead>
<tbody>
<tr>
<td>ERTH100 - Physical Geology</td>
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</table>

AND

| ERTH100L - Physical Geology Laboratory | 1.0        |

AND

| ERTH111 - Historical Geology | 4.0 |

AND

| ERTH130 - Environmental Geology | 3.0 |

OR

| ERTH160 - Oceanography | 3.0 |

OR

| GEOG130 - Introduction to Weather and Climate | 3.0 |

Select a minimum of one (1) unit from the following: 1.0 - 4.0 Units

| ERTH200 - Geology of California | 3.0 |

AND

| ERTH212 - San Andreas Fault System Geology Field Study | 1.0 |

AND

| ERTH214 - Orange County Geology Field Study | 1.0 |

Select a minimum of six (6) units from the following: 6.0 Units

| An additional course from above (may not be a course used to satisfy the requirements in above list) | 3.0 |

AND
Select a minimum of six (6) units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ASTR103</td>
<td>Introduction to the Solar System</td>
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<tr>
<td>ERTH120</td>
<td>Earth Sciences</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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<td>ERTH121</td>
<td>Earth Sciences for Educators</td>
<td>3.0</td>
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<tr>
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<td>GEOG150</td>
<td>Exploring Maps and Geographic Technologies</td>
<td>4.0</td>
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<tr>
<td>AND</td>
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<td></td>
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<tr>
<td>GEOG155</td>
<td>Introduction to Geographic Information Systems</td>
<td>3.0</td>
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<tr>
<td>OR</td>
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<td></td>
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<tr>
<td>SURV155</td>
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<td>3.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>LIBI103</td>
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</table>

Total Units: 18.0 - 21.0

Learning Outcomes
- Demonstrate an understanding of geoscience processes based upon observation of Earth materials and features.
- Demonstrate an understanding of the basic principles of the geosciences.

Labor Market Data

### Geoscientists, Except Hydrologists and Geographers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>93K</td>
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<tr>
<td>AVERAGE</td>
<td>184K</td>
<td>Annual</td>
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<td>LOW</td>
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<td>Openings</td>
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<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
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</table>

### Natural Sciences Managers

<table>
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*For Program
Geology, AS-T
A.S. Degree for Transfer

Control Number:
32044

Curriculum Id:
SCC.GEOlast

The Associate in Science in Geology for Transfer degree prepares students for transfer to a four-year college or university to complete a baccalaureate degree in a geoscience major. Geoscientists find employment with environmental companies that clean up and monitor pollution problems. Geotechnical companies also employ geoscientists to evaluate risk from earthquakes, landslides, and other geological hazards. Oil and mining companies employ geoscientists to find new resources. The federal, state, county, and city governments also employ geoscientists for many of the same functions, as well as for geoscience research, and to monitor compliance with environmental regulations. Universities, colleges, and museums offer opportunities for teaching and/or research. Successful completion of the Associate in Science in Geology for Transfer guarantees the student acceptance to a California State University campus to pursue a baccalaureate degree in geology or a related field. While it does not guarantee the student acceptance to the University of California system, it does provide the major preparation needed by geology students transferring to a University of California campus in geology or related fields.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM200A</td>
<td>General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200AH</td>
<td>Honors General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM200B</td>
<td>General Chemistry B</td>
<td>5.0</td>
</tr>
<tr>
<td>ERTH100</td>
<td>Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>ERTH100L</td>
<td>Physical Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ERTH111</td>
<td>Historical Geology</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH180</td>
<td>Single Variable Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH180H</td>
<td>Honors Single Variable Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH185</td>
<td>Single Variable Calculus II</td>
<td>4.0</td>
</tr>
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</table>

Program Requirements
A.S. Degree for Transfer

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>26.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM200A - General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>CHEM200AH - Honors General Chemistry A</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>CHEM200B - General Chemistry B</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ERTH100 - Physical Geology</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Major requirements:

AND

ERTH100L - Physical Geology Laboratory

AND

ERTH111 - Historical Geology

AND

MATH180 - Single Variable Calculus I

OR

MATH180H - Honors Single Variable Calculus I

AND

MATH185 - Single Variable Calculus II

Total Units 26.0

Learning Outcomes

Demonstrate an understanding of geological processes based upon observation of Earth materials and features.
Demonstrate an understanding of the basic principles of geology.

Labor Market Data

**Atmospheric and Space Scientists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>135K</td>
<td></td>
<td>42 Annual Openings</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>94K</td>
<td>191K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates*</td>
</tr>
<tr>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Computer Occupations, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>77K</td>
<td></td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td>39K</td>
<td>143K</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
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<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2491 Annual Openings</td>
</tr>
<tr>
<td>Graduates*</td>
</tr>
<tr>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Conservation Scientists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>58K</td>
<td></td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td></td>
</tr>
<tr>
<td>26K</td>
<td>106K</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Annual Openings</td>
</tr>
<tr>
<td>Graduates*</td>
</tr>
<tr>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Environmental Engineers**
Land Surveying, AS
A.S. Degree Major

Control Number:
11906

Curriculum Id:
SCC.SURV.AS

The Associate of Science degree in Land Surveying provides the student a thorough background in land surveying and mapping in addition to an introduction to collection, manipulation, formatting and mapping of geospatial data. The successful graduate of this program will have the technical expertise necessary for an entry level position in the fields of Geographic Information Systems, Land Surveying, and Digital Photogrammetry. The program also assists those students preparing for the State Land Surveyor-In-Training and Land Surveyor’s Exams. The State Board of Registration for Professional Engineers and Land Surveyors will grant one year of experience credit for students completing an Associate Degree in Survey/Mapping Sciences.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV118</td>
<td>Plane Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV119</td>
<td>Advanced Plane Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV205</td>
<td>Computer Aided Drafting Fundamentals For Surveyors</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV221</td>
<td>Advanced Problems in Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV222</td>
<td>Advanced Problems in Surveying II</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV229</td>
<td>Legal Aspects of Land Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV230</td>
<td>Legal Aspects of Land Surveying II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
A.S. Degree Major

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>23.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV118 - Plane Surveying</td>
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*For Program
### Major requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV119</td>
<td>Advanced Plane Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURV205</td>
<td>Computer Aided Drafting Fundamentals For Surveyors</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURV221</td>
<td>Advanced Problems in Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURV222</td>
<td>Advanced Problems in Surveying II</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURV229</td>
<td>Legal Aspects of Land Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURV230</td>
<td>Legal Aspects of Land Surveying II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units: 23.0**

### Learning Outcomes

> Be prepared for careers in Geographical Information Systems, Land Surveying, and Digital Photogrammetry.

### Labor Market Data

#### Cartographers and Photogrammetrists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
<td>28</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>24K</td>
<td>Annual</td>
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<tr>
<td>LOW</td>
<td>122K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

#### Surveying and Mapping Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77K</td>
<td>202</td>
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<tr>
<td>AVERAGE</td>
<td>30K</td>
<td>Annual</td>
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<td>LOW</td>
<td>120K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

#### Surveyors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100K</td>
<td>105</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>40K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>130K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
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</table>

*For Program
Land Surveying, CA
Certificate of Achievement

Control Number:
21668

Curriculum Id:
SCC.SURV.CA

The Certificate of Achievement in Land Surveying provides the student a thorough background in land surveying and mapping in addition to an introduction to collection, manipulation, formatting and mapping of geospatial data. The successful graduate of this program will have the technical expertise necessary for an entry level position in the fields of Geographic Information Systems, Land Surveying, and Digital Photogrammetry. The program also assists those students preparing for the State Land Surveyor-In-Training and Land Surveyor's Exams. The State Board of Registration for Professional Engineers and Land Surveyors will grant one year of experience credit for students completing an Associate Degree in Survey/Mapping Sciences.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV118</td>
<td>Plane Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV119</td>
<td>Advanced Plane Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>SURV205</td>
<td>Computer Aided Drafting Fundamentals For Surveyors</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV221</td>
<td>Advanced Problems in Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV222</td>
<td>Advanced Problems in Surveying II</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV229</td>
<td>Legal Aspects of Land Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>SURV230</td>
<td>Legal Aspects of Land Surveying II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV118 - Plane Surveying</td>
<td>4.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SURV119 - Advanced Plane Surveying</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SURV205 - Computer Aided Drafting Fundamentals For Surveyors</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SURV221 - Advanced Problems in Surveying I</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
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<tr>
<td>SURV222 - Advanced Problems in Surveying II</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>SURV229 - Legal Aspects of Land Surveying I</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Certificate requirements:

AND

SURV230 - Legal Aspects of Land Surveying II 3.0

Total Units 23.0

Learning Outcomes

Be prepared for careers in Geographical Information Systems (GIS), Land Surveying, and Digital Photogrammetry.

Labor Market Data

Cartographers and Photogrammetrists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85K</td>
<td>24K</td>
<td>28 Annual Op</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>122K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Surveying and Mapping Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>77K</td>
<td>30K</td>
<td>202 Annual Op</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>120K</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
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</table>

Surveyors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>100K</td>
<td>40K</td>
<td>105 Annual Op</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>130K</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
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</table>

Mathematics, AS-T

A.S. Degree for Transfer

Control Number: 31040

Curriculum Id: SCC.MATH.AST

The Associate in Science in Mathematics for Transfer degree prepares students to transfer to a four-year institution leading to a baccalaureate degree. Employment opportunities are available as mathematicians in government, health, industry and education. Successful completion of the transfer degree in Mathematics guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in Mathematics or a related field.

Program Courses

Available Program Courses

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd325a6f1b18
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR112</td>
<td>Java Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR120</td>
<td>Introduction to Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR213</td>
<td>C# Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH219</td>
<td>Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H</td>
<td>Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220</td>
<td>Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS250A</td>
<td>Physics for Scientists and Engineers I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH287</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH290</td>
<td>Linear Algebra</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH295</td>
<td>Differential Equations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
A.S. Degree for Transfer

Major requirements: 12.0 Units

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH180</td>
<td>Single Variable Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH180H</td>
<td>Honors Single Variable Calculus I</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH185</td>
<td>Single Variable Calculus II</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH280</td>
<td>Intermediate Calculus</td>
<td>4.0</td>
</tr>
</tbody>
</table>

OR

MATH180H - Honors Single Variable Calculus I 4.0

AND

MATH185 - Single Variable Calculus II 4.0

AND

MATH280 - Intermediate Calculus 4.0

Select one (1) course from the following (List A): 3.0 - 5.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH287</td>
<td>Introduction to Linear Algebra and Differential Equations</td>
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</tbody>
</table>
Select one (1) course from the following (List A):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH290 - Linear Algebra</td>
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</tr>
<tr>
<td>MATH295 - Differential Equations</td>
<td>3.0</td>
</tr>
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</table>

Select one (1) course from the following (List B):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPR112 - Java Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR120 - Introduction to Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR213 - C# Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH219 - Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH219H - Honors Statistics and Probability</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH220 - Statistics and Probability with Integrated Review</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS250A - Physics for Scientists and Engineers I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Total Units: 18.0 - 22.0

Learning Outcomes

- Create mathematical models of real world phenomena, apply those models to make predictions about the behavior of the phenomena, apply appropriate problem solving techniques and critically evaluate the veracity of the obtained results.
- Clearly communicate mathematical reasoning and problem solving skills using a variety of formats, diverse technologies, and appropriate mathematical vocabulary and notation.
- Integrate into educational and professional conduct a calm, confident, and ethical approach to mathematical reasoning and problem solving while taking personal responsibility for mathematical success.

Labor Market Data

**Data Scientists and Mathematical Science Occupations, All Other**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>55K</td>
<td>184K</td>
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</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Openings</td>
</tr>
</tbody>
</table>

*For Program
Mathematicians

<table>
<thead>
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<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>108K</td>
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<td>AVERAGE</td>
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<td>85K</td>
<td>144K</td>
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</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td></td>
</tr>
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</table>

Middle School Teachers, Except Special and Career/Technical Education

<table>
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Natural Sciences Managers

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Operations Research Analysts

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Physics, AS-T

A.S. Degree for Transfer

Control Number: 31039

Curriculum Id: SCC.PHYS.AST

The Associate in Science in Physics for Transfer degree provides a foundation in physics and mathematics for students planning to transfer into a baccalaureate program in physics or physics education. Successful completion of the transfer degree in Physics guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in Physics or a related field.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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**Program Requirements**

A.S. Degree for Transfer

**Major requirements:**

**27.0 Units**

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<td>MATH185</td>
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<td>PHYS250C</td>
<td>Physics for Scientists and Engineers III</td>
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**Total Units**

27.0

**Learning Outcomes**

Apply appropriate physical laws and mathematical techniques to analyze various physical situations.
Perform various scientific experiments and analyze data to check agreement with theoretical predictions.

**Labor Market Data**

<table>
<thead>
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<th>Astronomers</th>
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<th>Competition</th>
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*For Program

**Atmospheric and Space Scientists**
### Wastewater/Environmental Sanitation, AS

**A.S. Degree Major**

**Control Number:**
11908

**Curriculum Id:**
SCC.WATRW.AS

The Associate of Science degree in the Wastewater/Environmental Sanitation program is designed to prepare students for careers in the environmental protection field of waste water treatment. This program is also designed to enable those already working in the field to upgrade their skills. Subjects addressed include water quality and public health regulations, conventional wastewater treatment process operation, advanced treatment processes, and wastewater recycling and disposal.

### Program Courses

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**Natural Sciences Managers**

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404

Apply Now Request Info
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<td>WATR060</td>
<td>Water Utility Maintenance and Construction</td>
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<tr>
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<td>Water Distribution</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR062</td>
<td>Advanced Water Distribution</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR063</td>
<td>Electrical Wiring and Controls for Operators</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR064</td>
<td>Pumps and Pumping</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR071</td>
<td>Water Treatment Fundamentals</td>
<td>3.0</td>
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<tr>
<td>WATR080</td>
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<td>3.0</td>
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<tr>
<td>WATR081</td>
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<tr>
<td>WATR107</td>
<td>California Water Resources</td>
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</table>

Program Requirements

A.S. Degree Major

Major requirements: 12.0 Units

WATR050 - Water Mathematics and Hydraulics 3.0

AND

WATR080 - Introduction to Wastewater Treatment 3.0

AND

WATR081 - Wastewater Treatment 3.0

AND

WATR082 - Advanced Wastewater Treatment 3.0

Select three (3) courses from the following: 9.0 Units

WATR020 - Introduction to Water Science 3.0

AND

WATR053 - Water Reclamation and Reuse 3.0
Select three (3) courses from the following: 9.0 Units

AND

WATR060 - Water Utility Maintenance and Construction 3.0

AND

WATR061 - Water Distribution 3.0

AND

WATR062 - Advanced Water Distribution 3.0

AND

WATR063 - Electrical Wiring and Controls for Operators 3.0

AND

WATR064 - Pumps and Pumping 3.0

AND

WATR071 - Water Treatment Fundamentals 3.0

AND

WATR073 - Water Quality 3.0

AND

WATR083 - Collection Systems 3.0

AND

WATR107 - California Water Resources 3.0

Total Units 21.0

Learning Outcomes
Evaluate wastewater treatment processes with respect to their capabilities to achieve compliance with California public health and environmental standards.

Labor Market Data

<table>
<thead>
<tr>
<th>Conservation Scientists</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td>Job Growth</td>
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<td>31 Annual Openings</td>
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<td>AVERAGE</td>
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<td>Low</td>
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<table>
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<th>Competition</th>
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<tbody>
<tr>
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*For Program
Wastewater/Environmental Sanitation, CA

Certificate of Achievement

Control Number:
21669

Curriculum Id:
SCC.WATRW.CA

The Certificate of Achievement in Wastewater/Environmental Sanitation program is designed to prepare students for careers in the environmental protection field of waste water treatment. This program is also designed to enable those already working in the field to upgrade their skills. Subjects addressed include water quality and public health regulations, conventional wastewater treatment process operation, advanced treatment processes, and wastewater recycling and disposal.

Program Courses

Available Program Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>Water Mathematics and Hydraulics</td>
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<td>Water Reclamation and Reuse</td>
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<td>Water Utility Maintenance and Construction</td>
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<td>Advanced Water Distribution</td>
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<td>WATR063</td>
<td>Electrical Wiring and Controls for Operators</td>
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<td>Pumps and Pumping</td>
<td>3.0</td>
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<td>WATR081</td>
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<tr>
<td>WATR107</td>
<td>California Water Resources</td>
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</table>

**Program Requirements**

**Certificate of Achievement**

Certificate requirements: 12.0 Units

- WATR050 - Water Mathematics and Hydraulics 3.0

AND

- WATR080 - Introduction to Wastewater Treatment 3.0

AND

- WATR081 - Wastewater Treatment 3.0

AND

- WATR082 - Advanced Wastewater Treatment 3.0

Select three (3) courses from the following: 9.0 Units

- WATR020 - Introduction to Water Science 3.0

AND

- WATR053 - Water Reclamation and Reuse 3.0

AND

- WATR060 - Water Utility Maintenance and Construction 3.0

AND

- WATR061 - Water Distribution 3.0

AND

- WATR062 - Advanced Water Distribution 3.0

AND

- WATR063 - Electrical Wiring and Controls for Operators 3.0

AND

- WATR064 - Pumps and Pumping 3.0

AND

- WATR071 - Water Treatment Fundamentals 3.0

AND

- WATR073 - Water Quality 3.0
Select three (3) courses from the following: 9.0 Units

AND

WATR083 - Collection Systems 3.0

AND

WATR107 - California Water Resources 3.0

Total Units 21.0

Learning Outcomes

Evaluate wastewater treatment processes with respect to their capabilities to achieve compliance with California public health and environmental standards.

Labor Market Data

<table>
<thead>
<tr>
<th>Conservation Scientists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
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<th>Wages</th>
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<td></td>
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<td></td>
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<tr>
<th>Water and Wastewater Treatment Plant and System Operators</th>
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<th>Wages</th>
<th>Competition</th>
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<td></td>
<td></td>
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Apply Now Request Info

Wastewater Treatment, CERT
Certificate of Proficiency

Control Number:
Curriculum Id:
SCC.WWTRE.CERT

The Certificate of Proficiency in the Wastewater/Environmental Sanitation program is designed to prepare students for careers in the environmental protection field of waste water treatment. Subjects addressed include water quality and public health regulations, conventional wastewater treatment process operation, advanced treatment processes, and wastewater recycling and disposal.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<td>Water Mathematics and Hydraulics</td>
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<td>WATR053</td>
<td>Water Reclamation and Reuse</td>
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<td>WATR080</td>
<td>Introduction to Wastewater Treatment</td>
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<td>WATR083</td>
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</table>

Program Requirements

Certificate of Proficiency

Certificate requirements: 12.0 Units

- WATR050 - Water Mathematics and Hydraulics 3.0
- AND
- WATR081 - Wastewater Treatment 3.0
- AND
- WATR082 - Advanced Wastewater Treatment 3.0
- AND
- WATR053 - Water Reclamation and Reuse 3.0
- OR
- WATR080 - Introduction to Wastewater Treatment 3.0
- OR
- WATR083 - Collection Systems 3.0

Total Units 12.0

Learning Outcomes

Analyze conventional and advanced water treatment technologies for their capability to provide drinking water that meets public health and safety standards established by the State of California.

Labor Market Data

<table>
<thead>
<tr>
<th>Conservation Scientists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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*For Program
Natural Sciences Managers

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Water and Wastewater Treatment Plant and System Operators

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<tr>
<td></td>
<td>54K</td>
<td>Openings</td>
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<td></td>
<td>113K</td>
<td>Graduates*</td>
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<tr>
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Water Conservation, CERT

Certificate of Proficiency

Control Number:

Curriculum Id:
SCC.WATRC.CERT

This program prepares students for careers in Water Conservation, and certification by the California-Nevada Section of the American Water Works Association as a Water Use Efficiency Practitioner. Required courses explore drinking water distribution systems; regional water supply issues; current water consumption for residential, commercial, industrial, and agricultural customers; common conservation practices; and effective customer education and communication.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS090</td>
<td>Principles of Project Management</td>
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<td>BUS222</td>
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Program Requirements

Certificate of Proficiency

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AND
Certificate Requirements: 12.0 Units

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<tr>
<td>BUS222 - Business Writing</td>
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Total Units 12.0

Learning Outcomes

Evaluate past water consumption records for a variety of residential, commercial, industrial, and agricultural customers, and formulate cost effective means to reduce water consumption for such customers.

Labor Market Data

Conservation Scientists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td></td>
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Environmental Engineers

<table>
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Fish and Game Wardens

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Natural Sciences Managers

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<td>Annual Openerings</td>
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<td></td>
<td>74K 259K</td>
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**Project Management Specialists and Business Operations Specialists, All Other**

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<th>Competition</th>
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</table>

Apply Now Request Info

**Water Distribution, AS**

A.S. Degree Major

**Control Number:**

11907

**Curriculum Id:**

SCC.WATRD.AS

The Associate of Science degree in Water Distribution program is designed to prepare students for careers in the public health field of drinking water distribution. This program is also designed to enable those already working in the field to upgrade their skills. Subjects addressed include water quality and public health regulations, water distribution system components and operation, drinking water disinfection practices, and related water mathematics and hydraulic principles.

**Program Courses**

*Available Program Courses*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
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<td>WATR020</td>
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</tr>
<tr>
<td>WATR050</td>
<td>Water Mathematics and Hydraulics</td>
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<td>WATR052</td>
<td>Water Conservation Practitioner</td>
<td>3.0</td>
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<tr>
<td>WATR053</td>
<td>Water Reclamation and Reuse</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR060</td>
<td>Water Utility Maintenance and Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR061</td>
<td>Water Distribution</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR062</td>
<td>Advanced Water Distribution</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR063</td>
<td>Electrical Wiring and Controls for Operators</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR064</td>
<td>Pumps and Pumping</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR071</td>
<td>Water Treatment Fundamentals</td>
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<tr>
<td>WATR107</td>
<td>California Water Resources</td>
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**Program Requirements**

A.S. Degree Major

<table>
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AND
Major requirements:

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<thead>
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<td>WATR062 - Advanced Water Distribution</td>
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<td>WATR053 - Water Reclamation and Reuse</td>
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<tr>
<td>WATR107 - California Water Resources</td>
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</table>

Total Units 21.0

Learning Outcomes

Analyze drinking water distribution systems and practices with respect to their ability to achieve compliance with California public health standards.

Labor Market Data

**Conservation Scientists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>58K</td>
<td>31 Annual Openings</td>
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<tr>
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**Environmental Engineers**
Water Distribution, CA

Certificate of Achievement

Control Number:
19625

Curriculum Id:
SCC.WATRD.CA

The Certificate of Achievement in Water Distribution is designed to prepare students for careers in the public health field of drinking water distribution. This program is also designed to enable those already working in the field to upgrade their skills. Subjects addressed include water quality and public health regulations, water distribution system components and operation, drinking water disinfection practices, and related water mathematics and hydraulic principles.

Program Courses
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<td>WATR020</td>
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<td>WATR107</td>
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**Program Requirements**

Certificate of Achievement

<table>
<thead>
<tr>
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<td>WATR062 - Advanced Water Distribution</td>
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Select four (4) courses from the following: 12.0 Units

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<td>WATR064 - Pumps and Pumping</td>
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AND
Select four (4) courses from the following: 12.0 Units

WATR071 - Water Treatment Fundamentals 3.0

AND

WATR107 - California Water Resources 3.0

Total Units 21.0

Learning Outcomes
Evaluate drinking water distribution systems and practices with respect to their capabilities to achieve compliance with California public health standards.

Labor Market Data

<table>
<thead>
<tr>
<th>Conservation Scientists</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td>Job Growth</td>
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<th>Wages</th>
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<tbody>
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<table>
<thead>
<tr>
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<th>Wages</th>
<th>Competition</th>
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<tr>
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*For Program
Water Distribution, CERT
Certificate of Proficiency

Control Number:
Curriculum Id:
SCC.WATRD.CERT

The Certificate of Proficiency in Water Distribution program prepares students for careers in the public health field of drinking water distribution. Subjects addressed include water quality and public health regulations, water distribution system components and operation, drinking water disinfection practices, and related water mathematics and hydraulic principles.

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Program Requirements
Certificate of Proficiency

Certificate requirements: 12.0 Units

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</table>

Total Units 12.0

Learning Outcomes
Evaluate drinking water distribution systems and practices with respect to their capabilities to achieve compliance with California public health standards.
### Labor Market Data

#### Conservation Scientists
- **Job Growth**:  
- **Wages**:  
  - Low: 26K  
  - Average: 58K  
  - High: 106K  
- **Competition**: 31 Annual Openings Graduates*  
  *For Program

#### Environmental Engineers
- **Job Growth**:  
- **Wages**:  
  - Low: 26K  
  - Average: 58K  
  - High: 106K  
- **Competition**: 234 Annual Openings Graduates*  
  *For Program

#### Fish and Game Wardens
- **Job Growth**:  
- **Wages**:  
  - Low: 26K  
  - Average: 58K  
  - High: 106K  
- **Competition**: 28 Annual Openings Graduates*  
  *For Program

#### Natural Sciences Managers
- **Job Growth**:  
- **Wages**:  
  - Low: 26K  
  - Average: 58K  
  - High: 106K  
- **Competition**: 146 Annual Openings Graduates*  
  *For Program

#### Project Management Specialists and Business Operations Specialists, All Other
- **Job Growth**:  
- **Wages**:  
  - Low: 26K  
  - Average: 58K  
  - High: 106K  
- **Competition**: 8606 Annual Openings Graduates*  
  *For Program

---

**Water Equipment Operation and Maintenance, CERT**

Certificate of Proficiency

**Control Number:**

**Curriculum Id:**
SCC.WAEOM.CERT

Students will be introduced to the operation and maintenance of mechanical and electrical equipment associated with the Water and Wastewater industries. Courses in this program will assist students in obtaining related industry certifications from the American Water Works Association and the Water Environment Federation.
Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WATR060</td>
<td>Water Utility Maintenance and Construction</td>
<td>3.0</td>
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<tr>
<td>WATR063</td>
<td>Electrical Wiring and Controls for Operators</td>
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<tr>
<td>WATR064</td>
<td>Pumps and Pumping</td>
<td>3.0</td>
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<td>WATR065</td>
<td>Backflow Prevention Devices</td>
<td>2.0</td>
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Program Requirements
Certificate of Proficiency

Certificate requirements: 11.0 - 12.0 Units

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<td>Electrical Wiring and Controls for Operators</td>
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<tr>
<td>AND</td>
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<td>WATR064</td>
<td>Pumps and Pumping</td>
<td>3.0</td>
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<td>WATR083</td>
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Total Units 11.0 - 12.0

Learning Outcomes
Analyze the performance of a wide variety of equipment items used in the water and wastewater industry.

Labor Market Data

**Conservation Scientists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>58K</td>
<td>31</td>
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<td>AVERAGE</td>
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<td>Annual</td>
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<td>LOW</td>
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</tr>
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<td>*For Program</td>
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**Natural Sciences Managers**

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<tbody>
<tr>
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<td>146</td>
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<tr>
<td>AVERAGE</td>
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<td>Annual</td>
</tr>
<tr>
<td></td>
<td></td>
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</table>
Water and Wastewater Treatment Plant and System Operators

Job Growth

Wages

Competition

Graduates*

*For Program

Water Treatment, AS
A.S. Degree Major

Control Number:

19623

Curriculum Id:

SCC.WATRT.AS

The Associate of Science degree in Water Treatment is designed to prepare students for careers in the public health field of drinking water treatment. This program is also designed to enable those already working in the field to upgrade their skills. Subjects addressed include water quality and public health regulations, conventional water treatment processes, advanced water treatment processes, drinking water disinfection practices, and related water mathematics and hydraulic principles.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>WATR050</td>
<td>Water Mathematics and Hydraulics</td>
<td>3.0</td>
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<tr>
<td>WATR052</td>
<td>Water Conservation Practitioner</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR053</td>
<td>Water Reclamation and Reuse</td>
<td>3.0</td>
</tr>
<tr>
<td>WATR060</td>
<td>Water Utility Maintenance and Construction</td>
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<td>WATR061</td>
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<tr>
<td>WATR062</td>
<td>Advanced Water Distribution</td>
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<td>Electrical Wiring and Controls for Operators</td>
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<td>WATR064</td>
<td>Pumps and Pumping</td>
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<tr>
<td>WATR065</td>
<td>Backflow Prevention Devices</td>
<td>2.0</td>
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<tr>
<td>WATR071</td>
<td>Water Treatment Fundamentals</td>
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<td>WATR072</td>
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<td>3.0</td>
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<tr>
<td>WATR073</td>
<td>Water Quality</td>
<td>3.0</td>
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<tr>
<td>WATR074</td>
<td>Water Quality Laboratory Analysis</td>
<td>2.0</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>WATR080</td>
<td>Introduction to Wastewater Treatment</td>
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<tr>
<td>WATR107</td>
<td>California Water Resources</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements
A.S. Degree Major

Major requirements: 12.0 Units

- **WATR050** - Water Mathematics and Hydraulics
- AND
- **WATR071** - Water Treatment Fundamentals
- AND
- **WATR072** - Advanced Water Treatment
- AND
- **WATR073** - Water Quality

Select three (3) courses from the following: 9.0 Units

- **WATR020** - Introduction to Water Science
- AND
- **WATR052** - Water Conservation Practitioner
- AND
- **WATR053** - Water Reclamation and Reuse
- AND
- **WATR060** - Water Utility Maintenance and Construction
- AND
- **WATR061** - Water Distribution
- AND
- **WATR062** - Advanced Water Distribution
- AND
- **WATR063** - Electrical Wiring and Controls for Operators
- AND
- **WATR064** - Pumps and Pumping

AND
Select three (3) courses from the following:

**9.0 Units**

**WATR065 - Backflow Prevention Devices** 2.0

AND

**WATR074 - Water Quality Laboratory Analysis** 2.0

AND

**WATR080 - Introduction to Wastewater Treatment** 3.0

AND

**WATR107 - California Water Resources** 3.0

**Total Units** 21.0

**Learning Outcomes**

Analyze conventional and advanced water treatment technologies for their capability to provide drinking water that meets public health and safety standards established by the State of California.

**Labor Market Data**

<table>
<thead>
<tr>
<th>Conservation Scientists</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td></td>
<td>58K</td>
<td>LOW</td>
<td>31 Annual Opening</td>
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<td></td>
<td>AVERAGE</td>
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<td>106K</td>
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<td></td>
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<td>HIGH</td>
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<td>Natural Sciences Managers</td>
<td>Job Growth</td>
<td>Wages</td>
<td>Competition</td>
</tr>
<tr>
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<td>150K</td>
<td>LOW</td>
<td>146 Annual Opening</td>
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<tr>
<td>Water and Wastewater Treatment Plant and System Operators</td>
<td>Job Growth</td>
<td>Wages</td>
<td>Competition</td>
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<tr>
<td></td>
<td>80K</td>
<td>LOW</td>
<td>250 Annual Opening</td>
</tr>
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<td></td>
<td>AVERAGE</td>
<td>54K</td>
<td>Graduates*</td>
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<tr>
<td></td>
<td></td>
<td>113K</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
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</tbody>
</table>

**Apply Now Request Info**

**Water Treatment, CA**

Certificate of Achievement

**Control Number:**

19624
Curriculum Id:
SCC.WATRT.CA

The Certificate of Achievement in Water Treatment is designed to prepare students for careers in the public health field of drinking water treatment. This program is also designed to enable those already working in the field to upgrade their skills. Subjects addressed include water quality and public health regulations, conventional water treatment processes, advanced water treatment processes, drinking water disinfection practices, and related water mathematics and hydraulic principles.

**Program Courses**

Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<td>WATR080</td>
<td>Introduction to Wastewater Treatment</td>
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</tr>
<tr>
<td>WATR107</td>
<td>California Water Resources</td>
<td>3.0</td>
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</table>

**Program Requirements**

Certificate of Achievement

Certificate requirements: 12.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>WATR050</td>
<td>Water Mathematics and Hydraulics</td>
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<td>AND</td>
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<td>WATR071</td>
<td>Water Treatment Fundamentals</td>
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<tr>
<td>AND</td>
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<td>WATR072</td>
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<td>12.0 Units</td>
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<td>WATR073 - Water Quality</td>
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<td>Select three (3) courses from the following:</td>
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<tr>
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<td>AND</td>
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<td>WATR052 - Water Conservation Practitioner</td>
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<td>WATR053 - Water Reclamation and Reuse</td>
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<td>WATR060 - Water Utility Maintenance and Construction</td>
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<td>WATR062 - Advanced Water Distribution</td>
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<td>WATR064 - Pumps and Pumping</td>
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<td>WATR074 - Water Quality Laboratory Analysis</td>
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<td>WATR080 - Introduction to Wastewater Treatment</td>
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<td>AND</td>
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<td>WATR107 - California Water Resources</td>
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<td>Total Units</td>
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</table>

**Learning Outcomes**

Analyze conventional and advanced water treatment technologies for their capability to provide drinking water that meets public health and safety standards established by the State of California.

**Labor Market Data**
The Certificate of Proficiency in Water Treatment is designed to prepare students for careers in the public health field of drinking water treatment. Subjects addressed include water quality and public health regulations, conventional water treatment processes, advanced water treatment processes, drinking water disinfection practices, and related water mathematics and hydraulic principles.

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<tr>
<td>WATR073</td>
<td>Water Quality</td>
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</tbody>
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Program Requirements

Certificates requirements: 12.0 Units

WATR050 - Water Mathematics and Hydraulics 3.0
Certificates requirements: 12.0 Units

AND

WATR071 - Water Treatment Fundamentals 3.0

AND

WATR072 - Advanced Water Treatment 3.0

AND

WATR073 - Water Quality 3.0

Total Units 12.0

Learning Outcomes
Analyze conventional and advanced water treatment technologies for their capability to provide drinking water that meets public health and safety standards established by the State of California.

Labor Market Data

Conservation Scientists

<table>
<thead>
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<tr>
<td></td>
<td>26K</td>
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Natural Sciences Managers

<table>
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<th>Job Growth</th>
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Water and Wastewater Treatment Plant and System Operators

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<td>LOW</td>
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<tr>
<td></td>
<td>113K</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

Apply Now Request Info

Water Utility Management, CERT
Certificate of Proficiency

Control Number:

Curriculum Id: SCC.WUMGT.CERT
The Certificate of Proficiency in Water Utility Management program provides current and potential employees with the supervisory and management skills needed to become the future leaders in water and wastewater organizations. Courses explore general principles of project management, supervision, and business communications, as well as specific management issues related to the Water and Wastewater industries.

### Program Courses

#### Available Program Courses

<table>
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<td>MGMT122</td>
<td>Business Communications</td>
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#### Available Program Courses

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<td>MGMT121</td>
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<td>MGMT135</td>
<td>Human Resource Management</td>
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</tbody>
</table>

### Program Requirements

#### Certificate of Proficiency

**Requirements for the certificate of proficiency:**  
**15.0 Units**

- **PBLC080 - Principles of Project Management**  
  3.0

  OR

- **BUS090 - Principles of Project Management**  
  3.0

  AND

- **CIS101 - Introduction to Microsoft Office**  
  3.0

  AND

- **MGMT122 - Business Communications**  
  3.0

  OR

- **BUS222 - Business Writing**  
  3.0

  AND

- **MGMT123 - Supervision**  
  3.0
Requirements for the certificate of proficiency: 15.0 Units

AND

WATR092 - Water Utility Management 3.0

Select one (1) course from the following: 3.0 Units

BUS121 - Human Relations and Organizational Behavior 3.0

AND

MGMT121 - Human Relations and Organizational Behavior 3.0

AND

MGMT135 - Human Resource Management 3.0

Total Units 18.0

Learning Outcomes

Formulate and evaluate a project team to execute routine and special missions in the Water and Wastewater industries.

Labor Market Data

Conservation Scientists

Job Growth  Wages  Competition
58K  AVERAGE 31 Annual Openings
26K  106K Graduates*
LOW  HIGH

Natural Sciences Managers

Job Growth  Wages  Competition
150K  AVERAGE 146 Annual Openings
74K  259K Graduates*
LOW  HIGH

Water and Wastewater Treatment Plant and System Operators

Job Growth  Wages  Competition
80K  AVERAGE 250 Annual Openings
54K  113K Graduates*
LOW  HIGH

Workforce Training

Looking to maximize your potential? Acquire the necessary academic, technical, and workforce skills to reach your personal, educational, and career goals so that you can benefit from and contribute to society as productive, active members of your communities.
Programs

- Apprenticeship Carpentry, Acoustical Installer, AS
- Apprenticeship Carpentry, Acoustical Installer, CA
- Apprenticeship Carpentry, Concrete, AS
- Apprenticeship Carpentry, Concrete, CA
- Apprenticeship Carpentry, Drywall/Lather, AS
- Apprenticeship Carpentry, Drywall/Lather, CA
- Apprenticeship Carpentry, Drywall Finisher, AS
- Apprenticeship Carpentry, Drywall Finisher, CA
- Apprenticeship Carpentry, Finish Carpentry, AS
- Apprenticeship Carpentry, Finish Carpentry, CA
- Apprenticeship Carpentry, Framing, AS
- Apprenticeship Carpentry, Framing, CA
- Apprenticeship Carpentry, Insulator, AS
- Apprenticeship Carpentry, Insulator, CA
- Apprenticeship Carpentry, Millwrighting, AS
- Apprenticeship Carpentry, Millwrighting, CA
- Apprenticeship Carpentry, Pile Driver, AS
- Apprenticeship Carpentry, Pile Driver, CA
- Apprenticeship Carpentry, Plastering, AS
- Apprenticeship Carpentry, Plastering, CA
- Apprenticeship Carpentry, Tilt-Up, AS
- Apprenticeship Carpentry, Tilt-Up, CA
- Apprenticeship Cosmetology, CA
- Apprenticeship Electricity, Industrial, AS
- Apprenticeship Electricity, Industrial, CA
- Apprenticeship Electricity, Intelligent Transportation Systems Electrician, AS
- Apprenticeship Electricity, Intelligent Transportation Systems Electrician, CA
- Apprenticeship Electricity, Sound Installer, AS
- Apprenticeship Electricity, Sound Installer, CA
- Apprenticeship Electricity, Sound Technician, AS
- Apprenticeship Electricity, Sound Technician, CA
- Apprenticeship Operating Engineers, Construction Safety Inspector, AS
- Apprenticeship Operating Engineers, Construction Safety Inspector, CA
- Apprenticeship Operating Engineers, Heavy Duty Repairer, AS
- Apprenticeship Operating Engineers, Heavy Duty Repairer, CA
- Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, AS
- Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, CA
- Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, AS
- Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, CA
- Apprenticeship Operating Engineers, Special Inspector, AS
- Apprenticeship Operating Engineers, Special Inspector, CA
- Apprenticeship Power Lineman, AS
- Apprenticeship Power Lineman, CA
- Apprenticeship Surveying, Chainman, AS
- Apprenticeship Surveying, Chainman, CA
- Apprenticeship Surveying, Chief of Party, AS
- Apprenticeship Surveying, Chief of Party, CA
- Basic Employment Skills, CC
- Carpenter, CC
- Construction Inspection, AS
- Construction Inspection, CA
- Construction Laborer, CC
- Construction Management, AS
- Construction Management, CA
- Custodial Technician, CC
- General Electrician, AS
- General Electrician, CA
- Maintenance Electrician, AS
- Maintenance Electrician, CA
- Understanding and Supporting Employees with Disabilities, CC
- Wastewater/Environmental Sanitation, AS
Wastewater/Environmental Sanitation, CA
Wastewater Treatment, CERT
Water Conservation, CERT
Water Distribution, AS
Water Distribution, CA
Water Distribution, CERT
Water Equipment Operation and Maintenance, CERT
Water Treatment, AS
Water Treatment, CA
Water Treatment, CERT
Water Utility Management, CERT
Workforce Skills, CC
Working with Students with Disabilities, CC

Apprenticeship Carpentry, Acoustical Installer, AS

A.S. Degree Major

Control Number:
31107

Curriculum Id:
SCC.ACAAT.AS

The Associate of Science degree in Apprenticeship Carpentry, Acoustical Installer provides the required related and supplemental instruction for interior systems apprentices in the technical skills required in the trade. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA061B</td>
<td>Advanced Acoustical Ceiling Layout</td>
<td>1.5</td>
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<tr>
<td>ACA061C</td>
<td>Advanced Acoustical Ceiling Installation</td>
<td>1.5</td>
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<tr>
<td>ACA065</td>
<td>prefab/Sound Panels</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA072A</td>
<td>Basic Metal Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA073C</td>
<td>Framing Curves and Arches</td>
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</tr>
<tr>
<td>ACA074B</td>
<td>Advanced Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA083</td>
<td>Door and Door Frames</td>
<td>1.5</td>
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Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACA061A</td>
<td>Acoustical Ceilings</td>
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<tr>
<td>ACA062</td>
<td>Standard Acoustical Grids</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA063</td>
<td>Suspended Ceilings</td>
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</tr>
<tr>
<td>ACA064</td>
<td>Acoustical Soffits</td>
<td>1.5</td>
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<tr>
<td>ACA066</td>
<td>Concealed/Glue-Up/Staple-Up Systems</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA067</td>
<td>Designer and Specialty Trims</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<tr>
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</tr>
<tr>
<td>ACA068</td>
<td>Metal Pan and Security Systems</td>
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<tr>
<td>ACA071A</td>
<td>Orientation</td>
<td>2.0</td>
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<tr>
<td>ACA071B</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA071C</td>
<td>Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA074A</td>
<td>Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA079A</td>
<td>Drywall and Acoustical Ceilings</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Program Requirements**

A.S. Degree Major

Major requirements: 19.5 Units

- ACA061A - Acoustical Ceilings 1.5
- ACA062 - Standard Acoustical Grids 1.5
- ACA063 - Suspended Ceilings 1.5
- ACA064 - Acoustical Soffits 1.5
- ACA066 - Concealed/Glue-Up/Staple-Up Systems 1.5
- ACA067 - Designer and Specialty Trims 1.5
- ACA068 - Metal Pan and Security Systems 1.5
- ACA071A - Orientation 2.0
- ACA071B - Safety and Health Certifications 2.0
- ACA071C - Tool/Equipment Applications 1.5
- ACA074A - Print Reading 2.0
Major requirements:  

19.5 Units  

AND  

ACA079A - Drywall/Acoustical Ceilings 1.5  

Select four (4) courses from the following: 6.0 - 6.5 Units  

ACA061B - Advanced Acoustical Ceiling Layout 1.5  

OR  

ACA061C - Advanced Acoustical Ceiling Installation 1.5  

OR  

ACA065 - Prefab/Sound Panels 1.5  

OR  

ACA072A - Basic Metal Framing 1.5  

OR  

ACA073C - Framing Curves and Arches 1.5  

OR  

ACA074B - Advanced Print Reading 2.0  

OR  

ACA083 - Door/Door Frames 1.5  

Total Units 25.5 - 26.0  

Learning Outcomes  
Be eligible to work as an Acoustical Installer journeyworker.  

Labor Market Data  

<table>
<thead>
<tr>
<th>Cabinetmakers and Bench Carpenters</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>458 Annual Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>37K AVERAGE 25K LOW to 68K HIGH</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Carpenters</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>6203 Annual Openings</td>
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<td>Graduates*</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>49K AVERAGE 19K LOW to 96K HIGH</td>
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</tbody>
</table>
Apprenticeship Carpentry, Acoustical Installer, CA

Certificate of Achievement

Control Number:
31109

Curriculum Id:
SCC.ACAAT.CA

The Certificate of Achievement in Apprenticeship Carpentry, Acoustical Installer provides the required related and supplemental instruction for interior systems apprentices in the technical skills required in the trade. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

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Program Requirements

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>19.5 Units</th>
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<tbody>
<tr>
<td>ACA061A - Acoustical Ceilings</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA062 - Standard Acoustical Grids</td>
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<tr>
<td>AND</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA067 - Designer and Specialty Trims</td>
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<tr>
<td>AND</td>
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</table>
## Certificate requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
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<td>ACA074A - Print Reading</td>
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<td><strong>AND</strong></td>
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<td>ACA079A - Drywall/Acoustical Ceilings</td>
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</tbody>
</table>

Select four (4) courses from the following:

<table>
<thead>
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<tbody>
<tr>
<td>ACA061B - Advanced Acoustical Ceiling Layout</td>
<td>1.5</td>
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<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ACA061C - Advanced Acoustical Ceiling Installation</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ACA065 - Prefab/Sound Panels</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ACA072A - Basic Metal Framing</td>
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</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ACA073C - Framing Curves and Arches</td>
<td>1.5</td>
</tr>
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<tr>
<td>ACA074B - Advanced Print Reading</td>
<td>2.0</td>
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<td><strong>OR</strong></td>
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<tr>
<td>ACA083 - Door/Door Frames</td>
<td>1.5</td>
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</tbody>
</table>

**Total Units** 25.5 - 26.0

### Learning Outcomes

Be eligible to work as an Acoustical Installer journeyworker.

### Labor Market Data
<table>
<thead>
<tr>
<th>Program</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td></td>
<td>37K AVERAGE</td>
<td>458 Annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25K LOW 68K HIGH</td>
<td>Openings</td>
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<td>Graduates*</td>
</tr>
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<td>*For Program</td>
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<tr>
<td><strong>Carpenters</strong></td>
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<td>Graduates*</td>
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<td><strong>Construction and Building Inspectors</strong></td>
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<td></td>
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<td>*For Program</td>
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<tr>
<td><strong>First-Line Supervisors of Construction</strong></td>
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<td>72K AVERAGE</td>
<td>3114 Annual</td>
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<tr>
<td>Trades and Extraction Workers</td>
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<td>30K LOW 121K HIGH</td>
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<td>Graduates*</td>
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<td>*For Program</td>
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<tr>
<td><strong>Helpers--Carpenters</strong></td>
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<td>36K AVERAGE</td>
<td>129 Annual</td>
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<td>28K LOW 51K HIGH</td>
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<td>Graduates*</td>
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<tr>
<td></td>
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</tbody>
</table>

**Apprenticeship Carpentry, Concrete, AS**

A.S. Degree Major

**Control Number:**

13235

**Curriculum Id:**

SCC.ACACO.AS

The Associate of Science degree in Apprenticeship Carpentry, Concrete is designed to provide the related and supplemental instruction required for carpentry apprentices. Concrete finishers place and finish concrete floors, driveways, sidewalks, curbs, bridge decks and other concrete structures. They apply architectural exposed, patterned or stamped, broomed and smooth finishes on concrete surfaces.
They are skilled at repairing, waterproofing and restoring concrete surfaces. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA021C</td>
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</tr>
<tr>
<td>ACA022A</td>
<td>Commercial Floor Framing</td>
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<tr>
<td>ACA023B</td>
<td>Basic Roof Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024A</td>
<td>Basic Commercial Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024D</td>
<td>Transit Level/Laser</td>
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<td>ACA028E</td>
<td>Bridge Falsework</td>
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<td>ACA029A</td>
<td>Rigging</td>
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<td>ACA029C</td>
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<td>Water Treatment Facilities</td>
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**Available Program Courses**

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</tr>
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<td>Foundations and Flatwork</td>
<td>1.5</td>
</tr>
<tr>
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<td>Tilt-Up Panel Construction</td>
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<tr>
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<td>Wall Forming</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA026C</td>
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</tr>
<tr>
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<td>Stairs and Ramp Forming</td>
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<tr>
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</table>

**Program Requirements**

A.S. Degree Major

<p>| Major requirements: | 19.5 Units |</p>
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<thead>
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<td>ACA021B - Safety and Health Certifications</td>
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<td>1.5</td>
</tr>
<tr>
<td>AND</td>
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<tr>
<td>ACA026A - Tilt-Up Panel Construction</td>
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<td>AND</td>
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<td>ACA026C - Gang Forms/Columns</td>
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<td>ACA026D - Abutments</td>
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<td>AND</td>
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<td>OR</td>
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<tr>
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Select four (4) courses from the following:  

6.0 - 7.0 Units

OR

ACA024A - Basic Commercial Framing 1.5

OR

ACA024D - Transit Level/Laser 2.0

OR

ACA025D - Advanced Print Reading 2.0

OR

ACA028E - Bridge Falsework 1.5

OR

ACA029A - Rigging 1.5

OR

ACA029C - Solar Installer Level 1 1.5

OR

ACA095 - Water Treatment Facilities 1.5

Total Units 25.5 - 26.5

Learning Outcomes

Be eligible to work as a Concrete journeyworker.
Have a basis for further college education.

Labor Market Data

Cement Masons and Concrete Finishers

Job Growth

Wages

Competition

54K
AVERAGE
33K
58K
LOW
HIGH
1140
Annual
Openings
Graduates*
*For Program

First-Line Supervisors of Construction Trades and Extraction Workers

Job Growth

Wages

Competition

72K
AVERAGE
30K
52K
LOW
HIGH
3114
Annual
Openings
Graduates*
*For Program

Miscellaneous Construction and Related Workers

Job Growth

Wages

Competition

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32b9a6eb18
Apprenticeship Carpentry, Concrete, CA

Certificate of Achievement

Control Number:
21657

Curriculum Id:
SCC.ACACO.CA

The Certificate of Achievement in Apprenticeship Carpentry, Concrete is designed to provide the related and supplemental instruction required for carpentry apprentices. Concrete finishers place and finish concrete floors, driveways, sidewalks, curbs, bridge decks and other concrete structures. They apply architectural exposed, patterned or stamped, broomed and smooth finishes on concrete surfaces. They are skilled at repairing, waterproofing and restoring concrete surfaces. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<td>Commercial Floor Framing</td>
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<td>Advanced Print Reading</td>
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Available Program Courses

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<td>Course Title</td>
<td>Units</td>
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<tr>
<td>ACA028A</td>
<td>Bridge Construction</td>
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</table>

**Program Requirements**

**Certificate of Achievement**

**Certificate requirements:** 19.5 Units

- ACA004C - Print Reading 2.0
- ACA021A - Orientation 2.0
- ACA021B - Safety and Health Certifications 2.0
- ACA021E - Tool/Equipment Applications 1.5
- ACA025A - Foundations and Flatwork 1.5
- ACA026A - Tilt-Up Panel Construction 1.5
- ACA026B - Wall Forming 1.5
- ACA026C - Gang Forms/Columns 1.5
- ACA026D - Abutments 1.5
- ACA027C - Beam and Deck Forming 1.5
## Certificate requirements:

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AND

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<th>Units</th>
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Select four (4) courses from the following:

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OR

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<th>Units</th>
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OR

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OR

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OR

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OR

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<th>Units</th>
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**Total Units**

25.5 - 26.5

## Learning Outcomes

- Be eligible to work as a Concrete journeyworker.
- Have a basis for further college education.

## Labor Market Data

<table>
<thead>
<tr>
<th>Cement Masons and Concrete Finishers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32baa6eb18

610/2244
Apprenticeship Carpentry, Drywall/Lather, AS
A.S. Degree Major

Control Number:
11988

Curriculum Id:
SCC.ACADL.AS

The Associate of Science degree in Apprenticeship Carpentry, Drywall/Lather provides the related and supplemental instruction required for interior systems apprentices. Drywall/Lathers install metal stud framing, drywall, and lath according to layout plans, blueprints, and specifications. They frame and construct walls and ceilings to the necessary height and dimensions, and complete the construction for the interior/exterior of a building including the heavy gage framing and application for the exterior of the project. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ACA072C</td>
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<tr>
<td>ACA074C</td>
<td>Air, Moisture, and Thermal Barriers</td>
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<tr>
<td>ACA075B</td>
<td>Light Gage Welding LAC</td>
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<tr>
<td>ACA075C</td>
<td>Light Gage Welding AWS - B</td>
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<tr>
<td>ACA076A</td>
<td>Basic Hand Finishing</td>
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<td>ACA076B</td>
<td>Automatic Finishing Tools</td>
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<tr>
<td>ACA077A</td>
<td>Drywall Installation/Finish Trims</td>
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<tr>
<td>ACA077B</td>
<td>Advanced Hand Finishing</td>
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</table>
### Course Code | Course Title | Units
--- | --- | ---
ACA077C | Advanced Automatic Finishing Tools | 1.5
ACA078B | Advanced Metal Framing | 1.5
ACA078C | Wet Wall Finishes | 1.5
ACA078D | Ceiling and Soffit Finishing | 1.5
ACA079A | Drywall and Acoustical Ceilings | 1.5
ACA079C | Drywall Applications | 1.5
ACA082B | S/B Firestop/Fireproofing Procedures | 1.5
ACA082C | Decorative Trims and Textures | 1.5
ACA089 | Freeform Lathing | 1.5

### Available Program Courses

| Course Code | Course Title | Units |
--- | --- | ---
ACA071A | Orientation | 2.0
ACA071B | Safety and Health Certifications | 2.0
ACA071C | Tool/Equipment Applications | 1.5
ACA072A | Basic Metal Framing | 1.5
ACA072B | Basic Lathing | 1.5
ACA073A | Framing Ceilings and Soffits | 1.5
ACA073B | Framing Suspended Ceilings | 1.5
ACA073C | Framing Curves and Arches | 1.5
ACA074A | Print Reading | 2.0
ACA074B | Advanced Print Reading | 2.0
ACA075A | Light Gage Welding AWS - A | 1.5
ACA083 | Door and Door Frames | 1.5

### Program Requirements

**A.S. Degree Major**

**Major requirements:** 20.0 Units

| Course Code | Course Title | Units |
--- | --- | ---
ACA071A | Orientation | 2.0

**AND**

| Course Code | Course Title | Units |
--- | --- | ---
ACA071B | Safety and Health Certifications | 2.0

**AND**
# Major requirements:

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<tr>
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Select six (6) units from the following:

<table>
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<tr>
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<tr>
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Select six (6) units from the following:  

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<td>ACA077A - Drywall Installation/Finish Trims</td>
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<td>ACA077B - Advanced Hand Finishing</td>
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<td>ACA077C - Advanced Automatic Finishing Tools</td>
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<td>1.5</td>
<td>ACA078C - Wet Wall Finishes</td>
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<td>ACA078D - Ceiling and Soffit Finishing</td>
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<td>1.5</td>
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<td>ACA089 - Freeform Lathing</td>
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</table>

Total Units: 26.0

Learning Outcomes

- Safely operate tools and equipment used by drywall applicators in the construction industry.
- Interpret prints to determine the appropriate use of construction methods and materials consistent with drywall applicator industry standards.

Labor Market Data

https://sccollege.elumenapp.com/catalog/all-pages/4a006690-0be1-4c3d-b807-d33246a1eb18
Apprenticeship Carpentry, Drywall/Lather, CA

Certificate of Achievement

Control Number:
21664

Curriculum Id:
SCC.ACADL.CA

The Certificate of Achievement in Apprenticeship Carpentry, Drywall/Lather provides the related and supplemental instruction required for interior systems apprentices. Drywall/Lathers install metal stud framing, drywall, and lath according to layout plans, blueprints, and specifications. They frame and construct walls and ceilings to the necessary height and dimensions, and complete the construction for the interior/exterior of a building including the heavy gage framing and application for the exterior of the project. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<th>Course Title</th>
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**Program Requirements**

**Certificate of Achievement**

Certificate requirements: 20.0 Units

- ACA071A - Orientation 2.0
  
  AND
  
- ACA071B - Safety and Health Certifications 2.0
  
  AND
  
- ACA071C - Tool/Equipment Applications 1.5
  
  AND
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<td>ACA073B - Framing Suspended Ceilings</td>
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</tr>
<tr>
<td>ACA073C - Framing Curves and Arches</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA074A - Print Reading</td>
<td>2.0</td>
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<tr>
<td>ACA074B - Advanced Print Reading</td>
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<tr>
<td>ACA075A - Light Gage Welding AWS - A</td>
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<tr>
<td>ACA083 - Door/Door Frames</td>
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</table>

Select six (6) units from the following: 6.0 Units

| OR |
|---------------------------|------------|
| ACA072C - Advanced Lathing | 1.5 |
| ACA074C - Air, Moisture, and Thermal Barriers | 1.5 |
| ACA075B - Light Gage Welding LAC | 1.5 |
| ACA075C - Light Gage Welding AWS - B | 1.5 |
| ACA076A - Basic Hand Finishing | 1.5 |
| ACA076B - Automatic Finishing Tools | 1.5 |
Select six (6) units from the following:  

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<tr>
<th>Unit</th>
<th>Description</th>
<th>Units</th>
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<tr>
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<td>ACA077B</td>
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<td>1.5</td>
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<td>ACA089</td>
<td>Freeform Lathing</td>
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</table>

Total Units: 26.0

**Learning Outcomes**
- Safely operate tools and equipment used by drywall applicators in the construction industry.
- Interpret prints to determine the appropriate use of construction methods and materials consistent with drywall applicator industry standards.

**Labor Market Data**

<table>
<thead>
<tr>
<th>Drywall and Ceiling Tile Installers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>50K</td>
<td>1173 Annual</td>
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</tbody>
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Apprenticeship Carpentry, Drywall Finisher, AS
A.S. Degree Major

Control Number:
13234

Curriculum Id:
SCC.ACADF.AS

The Associate of Science degree in Apprenticeship Carpentry, Drywall Finisher is designed to provide related and supplemental instruction including the technical skills required in the trade. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA071A</td>
<td>Orientation</td>
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</tr>
<tr>
<td>ACA071B</td>
<td>Safety and Health Certifications</td>
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<td>ACA074A</td>
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<td>S/B Firestop/Fireproofing Procedures</td>
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<td>Course Title</td>
<td>Units</td>
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**Program Requirements**

A.S. Degree Major

**Major requirements:**

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</table>
Major requirements: 24.0 Units

ACA082B - S/B Firestop/Fireproofing Procedures 1.5

AND

ACA082C - Decorative Trims and Textures 1.5

Total Units 24.0

Learning Outcomes

Begin a career as a journeyworker drywall finisher.
Have a basis for further college education.

Labor Market Data

**Drywall and Ceiling Tile Installers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td>50K</td>
<td>AVERAGE</td>
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</tr>
<tr>
<td>30K</td>
<td>LOW</td>
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<tr>
<td>95K</td>
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<tr>
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**First-Line Supervisors of Construction Trades and Extraction Workers**

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Apprenticeship Carpentry, Drywall Finisher, CA

Certificate of Achievement

Control Number:
21663

Curriculum Id:
SCC.ACADF.CA

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**Program Requirements**

Certificate of Achievement

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<td>AND</td>
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</table>

Total Units: 24.0

Learning Outcomes

Begin a career as a journeyworker drywall finisher.
Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Job</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
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<td>1173</td>
</tr>
<tr>
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<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30K</td>
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</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
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</table>

| First-Line Supervisors of Construction Trades and Extraction Workers        |            |       | 3114        |
|                                                                        | 72K         |       | Annual Openings |
|                                                                        | AVERAGE     |       | Graduates*     |
|                                                                        | 30K         |       | *For Program   |
|                                                                        | 121K        |       |              |
|                                                                        | LOW         |       |              |
|                                                                        | HIGH        |       |              |
A.S. Degree Major

Control Number:
13231

Curriculum Id:
SCC.ACAFI.AS

The Associate of Science degree in Apprenticeship Carpentry, Finish Carpentry provides the related and supplemental instruction required in the trade. Finish carpenters cut, shape and assemble wood products, including moldings, panels and furniture. They also fabricate store fixtures, which includes the use of metal, plastics, and glass. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA004C</td>
<td>Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA021A</td>
<td>Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA021B</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA021C</td>
<td>Basic Wall Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024D</td>
<td>Transit Level/Laser</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA025D</td>
<td>Advanced Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA033A</td>
<td>Cabinet Millwork and Assembly</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA033B</td>
<td>Cabinet Installation</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA033C</td>
<td>Show Case and Loose Store Fixtures</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA033D</td>
<td>Molding and Trims</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA034A</td>
<td>Plastic Laminates</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA034B</td>
<td>Solid and Stone Surfaces</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA034C</td>
<td>Stair Trim</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA034D</td>
<td>Doors and Door Hardware</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA035C</td>
<td>Exit and Electrical Security Devices</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Program Requirements
A.S. Degree Major

Major requirements: 25.0 Units

ACA004C - Print Reading 2.0

AND

ACA021A - Orientation 2.0

AND
Major requirements: 25.0 Units

ACA021B - Safety and Health Certifications 2.0

AND

ACA021C - Basic Wall Framing 1.5

AND

ACA024D - Transit Level/Laser 2.0

AND

ACA025D - Advanced Print Reading 2.0

AND

ACA033A - Cabinet Millwork and Assembly 1.5

AND

ACA033B - Cabinet Installation 1.5

AND

ACA033C - Show Case/Loose Store Fixtures 1.5

AND

ACA033D - Molding and Trims 1.5

AND

ACA034A - Plastic Laminates 1.5

AND

ACA034B - Solid and Stone Surfaces 1.5

AND

ACA034C - Stair Trim 1.5

AND

ACA034D - Doors and Door Hardware 1.5

AND

ACA035C - Exit and Electrical Security Devices 1.5

Total Units 25.0

Learning Outcomes
Begin a career as a journeyworker carpenter.
Have a basis for further college education.

Labor Market Data
### Cabinetmakers and Bench Carpenters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>37K</td>
<td><strong>AVERAGE</strong> 25K 68K</td>
<td>458 Annual Openings Graduates* For Program</td>
</tr>
</tbody>
</table>

### Carpenters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>49K</td>
<td><strong>AVERAGE</strong> 19K 96K</td>
<td>6203 Annual Openings Graduates* For Program</td>
</tr>
</tbody>
</table>

### Construction and Building Inspectors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85K</td>
<td><strong>AVERAGE</strong> 32K 132K</td>
<td>722 Annual Openings Graduates* For Program</td>
</tr>
</tbody>
</table>

### First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
<td><strong>AVERAGE</strong> 30K 121K</td>
<td>3114 Annual Openings Graduates* For Program</td>
</tr>
</tbody>
</table>

### Helpers--Carpenters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>36K</td>
<td><strong>AVERAGE</strong> 28K 51K</td>
<td>129 Annual Openings Graduates* For Program</td>
</tr>
</tbody>
</table>

---

### Apprenticeship Carpentry, Finish Carpentry, CA

Certificate of Achievement

**Control Number:**

21658

**Curriculum Id:**

SCC.ACAFI.CA

The Certificate of Achievement in Apprenticeship Carpentry, Finish Carpentry provides the related and supplemental instruction required in the trade. Finish carpenters cut, shape and assemble wood products, including moldings, panels and furniture. They also fabricate store fixtures, which includes the use of metal, plastics, and glass. Successful completion will result in journeyworker status. Interested apprentices should contact the Carpenter Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.
# Program Courses

**Available Program Courses**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>ACA004C</td>
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<td>2.0</td>
</tr>
<tr>
<td>ACA021A</td>
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<td>Basic Wall Framing</td>
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<tr>
<td>ACA024D</td>
<td>Transit Level/Laser</td>
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</tr>
<tr>
<td>ACA025D</td>
<td>Advanced Print Reading</td>
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<tr>
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<td>Doors and Door Hardware</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA035C</td>
<td>Exit and Electrical Security Devices</td>
<td>1.5</td>
</tr>
</tbody>
</table>

## Program Requirements

**Certificate of Achievement**

Certificate requirements: 25.0 Units

- **ACA004C - Print Reading** 2.0
- **ACA021A - Orientation** 2.0
- **ACA021B - Safety and Health Certifications** 2.0
- **ACA021C - Basic Wall Framing** 1.5
- **ACA024D - Transit Level/Laser** 2.0
- **ACA025D - Advanced Print Reading** 2.0
Certificate requirements: 25.0 Units

AND

ACA033A - Cabinet Millwork and Assembly 1.5

AND

ACA033B - Cabinet Installation 1.5

AND

ACA033C - Show Case/Loose Store Fixtures 1.5

AND

ACA033D - Molding and Trims 1.5

AND

ACA034A - Plastic Laminates 1.5

AND

ACA034B - Solid and Stone Surfaces 1.5

AND

ACA034C - Stair Trim 1.5

AND

ACA034D - Doors and Door Hardware 1.5

AND

ACA035C - Exit and Electrical Security Devices 1.5

Total Units 25.0

Learning Outcomes

Begin a career as a journeyworker carpenter.
Have a basis for further college education.

Labor Market Data

Cabinetmakers and Bench Carpenters

<table>
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<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37K AVERAGE</td>
<td>458 Annual Openings</td>
</tr>
</tbody>
</table>
|            | 25K LOW | Graduates* *
|            | 68K HIGH | For Program |

Carpenters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>49K</td>
<td>6203 Annual</td>
</tr>
</tbody>
</table>
## Construction and Building Inspectors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
<td>722</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>32K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>132K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

## First-Line Supervisors of Construction Trades and Extraction Workers

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<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72K</td>
<td>3114</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>30K</td>
<td>Annual</td>
</tr>
<tr>
<td>LOW</td>
<td>121K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

## Helpers--Carpenters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36K</td>
<td>129</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>28K</td>
<td>Annual</td>
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<tr>
<td>LOW</td>
<td>51K</td>
<td>Openings</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program

### Apprenticeship Carpentry, Framing, AS

**A.S. Degree Major**

**Control Number:**

13232

**Curriculum Id:**

SCC.ACAFR.AS

The Associate of Science degree in Apprenticeship Carpentry, Framing provides related and supplemental instruction including the technical skills and knowledge required in the trade. Framers work primarily on residential sites installing floor joists, interior and exterior walls, and roof trusses. They may also install exterior doors and windows, cornices, outside wall trim, and roof coverings. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA023C</td>
<td>Advanced Roof Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024C</td>
<td>Panelized Roofing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024D</td>
<td>Transit Level/Laser</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA025D</td>
<td>Advanced Print Reading</td>
<td>2.0</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
### Course Code | Course Title | Units
---|---|---
ACA026B | Wall Forming | 1.5
ACA072A | Basic Metal Framing | 1.5

### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA004C</td>
<td>Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA021A</td>
<td>Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA021B</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA021C</td>
<td>Basic Wall Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA021E</td>
<td>Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA022A</td>
<td>Commercial Floor Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA022B</td>
<td>Basic Stairs</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA022D</td>
<td>Exterior Finish Details</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA023B</td>
<td>Basic Roof Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024A</td>
<td>Basic Commercial Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA024B</td>
<td>Advanced Commercial Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA025C</td>
<td>Advanced Stairs</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### Program Requirements

**A.S. Degree Major**

**Major requirements:** 19.5 Units

ACA004C - Print Reading | 2.0

AND

ACA021A - Orientation | 2.0

AND

ACA021B - Safety and Health Certifications | 2.0

AND

ACA021C - Basic Wall Framing | 1.5

AND

ACA021E - Tool/Equipment Applications | 1.5

AND

ACA022A - Commercial Floor Framing | 1.5
<table>
<thead>
<tr>
<th>Major requirements:</th>
<th><strong>19.5 Units</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA022B - Basic Stairs</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA022D - Exterior Finish Details</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA023B - Basic Roof Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA024A - Basic Commercial Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA024B - Advanced Commercial Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ACA025C - Advanced Stairs</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Select four (4) courses from the following:</th>
<th><strong>6.0 - 7.0 Units</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA023C - Advanced Roof Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACA024C - Panelized Roofing</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACA024D - Transit Level/Laser</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACA025D - Advanced Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACA026B - Wall Forming</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACA072A - Basic Metal Framing</td>
<td>1.5</td>
</tr>
</tbody>
</table>

| **Total Units** | **25.5 - 26.5** |

**Learning Outcomes**

- Safely operate tools and equipment used by framers in the carpentry trade.
- Interpret prints to determine the appropriate use of construction methods and materials consistent with carpentry industry standards.

**Labor Market Data**
# Career/Technical Education Teachers, Secondary School

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75K</td>
<td>95 Annual Opennings</td>
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<tr>
<td></td>
<td>AVERAGE</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>65K</td>
<td>LOW</td>
</tr>
<tr>
<td></td>
<td>95K</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

# Carpenters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>49K</td>
<td>6203 Annual Opennings</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>19K</td>
<td>LOW</td>
</tr>
<tr>
<td></td>
<td>96K</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

# Carpet Installers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43K</td>
<td>210 Annual Opennings</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>23K</td>
<td>LOW</td>
</tr>
<tr>
<td></td>
<td>83K</td>
<td>HIGH</td>
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</table>

# Cement Masons and Concrete Finishers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td>54K</td>
<td>1140 Annual Opennings</td>
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<tr>
<td></td>
<td>AVERAGE</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td>33K</td>
<td>LOW</td>
</tr>
<tr>
<td></td>
<td>83K</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

# Civil Engineering Technologists and Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>AVERAGE</td>
<td>Graduates*</td>
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<tr>
<td></td>
<td>43K</td>
<td>LOW</td>
</tr>
<tr>
<td></td>
<td>104K</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

---

**Apprenticeship Carpentry, Framing, CA**

**Certificate of Achievement**

**Control Number:**

21659

**Curriculum Id:**

SCC.ACAFR.CA

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<tr>
<td>ACA072A</td>
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</table>

#### Program Requirements

**Certificate of Achievement**

**Certificate requirements:** 19.5 Units

- **ACA004C - Print Reading** 2.0
- **ACA021A - Orientation** 2.0
- **ACA021B - Safety and Health Certifications** 2.0
Certificate requirements:  
<table>
<thead>
<tr>
<th>Course Description</th>
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Total Units: 19.5

Total Units: 6.0 - 7.0
Total Units
25.5 - 26.5

Learning Outcomes
Safely operate tools and equipment used by framers in the carpentry trade.
Interpret prints to determine the appropriate use of construction methods and materials consistent with carpentry industry standards.

Labor Market Data

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Apply Now Request Info

Apprenticeship Carpentry, Insulator, AS
A.S. Degree Major
Control Number:
35233

Curriculum Id:
SCC.ACAIN.AS

The Associate of Science degree in Apprenticeship Carpentry, Insulator provides the highest quality training to those interested in a
career in the various carpentry fields. This training offers a pathway to career opportunities for the next generation of insulators to meet
the challenges of the rapidly changing technology in our industry, while achieving broadly marketable skills.

Program Courses

Available Program Courses

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Available Program Courses

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Program Requirements

A.S. Degree Major

Major requirements: 19.5 Units
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<td>AIN043</td>
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Select four (4) courses from the following: **6.0 - 7.5 Units**

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Select four (4) courses from the following: 6.0 - 7.5 Units

OR

AIN031 - Green Building and Weatherization 1.5

OR

AIN032 - Specialty Insulation 1.5

OR

AIN033 - Energy Audit 1.5

OR

AIN041 - S/B Crew Lead Training 2.5

Total Units 25.5 - 27.0

Learning Outcomes

Be eligible to work as an Insulator journeyworker.

Labor Market Data

First-Line Supervisors of Construction Trades and Extraction Workers

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*For Program

Insulation Workers, Floor, Ceiling, and Wall

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*For Program

Insulation Workers, Mechanical

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*For Program

Apprenticeship Carpentry, Insulator, CA

Certificate of Achievement

Control Number: 35234

Apply Now Request Info
Curriculum Id:
SCC.ACAIN.CA

The Certificate of Achievement in Apprenticeship Carpentry, Insulator provides the highest quality training to those interested in a career in the various carpentry fields. This training offers a pathway to career opportunities for the next generation of insulators to meet the challenges of the rapidly changing technology in our industry, while achieving broadly marketable skills.

Program Courses
Available Program Courses

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<th>Course Code</th>
<th>Course Title</th>
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Available Program Courses

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Program Requirements
Certificate of Achievement

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<td>AIN034 - Firestop/Fireproofing Procedures</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AIN035 - Infiltration and Moisture Control</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AIN036 - Loose Fill and Spray Insulation</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AIN037 - Rigid Foam and Cellular Glass Insulation Installations</td>
<td>1.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AIN043 - Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
<tr>
<td>Select four (4) courses from the following:</td>
<td>6.0 - 7.5 Units</td>
</tr>
<tr>
<td>ACA021C - Basic Wall Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACA072A - Basic Metal Framing</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AIN025B - Advanced Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
</tbody>
</table>
Select four (4) courses from the following:  

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIN031 - Green Building and Weatherization</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AIN032 - Specialty Insulation</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AIN033 - Energy Audit</td>
<td>1.5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AIN041 - S/B Crew Lead Training</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Total Units: 25.5 - 27.0

Learning Outcomes
Be eligible to work as an Insulator journeyworker.

Labor Market Data

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Line Supervisors of Construction Trades and Extraction Workers</td>
<td>72K</td>
<td>121K</td>
<td>3114 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>30K</td>
<td>121K</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*For Program</td>
</tr>
</tbody>
</table>

| Insulation Workers, Floor, Ceiling, and Wall                              | 46K         | 98K   | 103 Annual Openings |
|                                                                          | 30K         | 98K   | Graduates*          |
|                                                                          | LOW         | HIGH  | *For Program        |

| Insulation Workers, Mechanical                                            | 56K         | 107K  | 23 Annual Openings  |
|                                                                          | 30K         | 107K  | Graduates*          |
|                                                                          | LOW         | HIGH  | *For Program        |

Apprenticeship Carpentry, Millwrighting, AS
A.S. Degree Major

Control Number: 11986

Curriculum Id:
SCC.ACAMI.AS

The Associate of Science degree in Apprenticeship Carpentry Millwrighting provide the required related and supplemental classroom instruction in the technical skills and knowledge required in the trade for state-indentured apprentices. The work of the Millwright involves installing conveyor systems, escalators, gas and steam turbines, and generators. Millwrights install and do maintenance on machinery in factories and do much of the precision work in nuclear power plants. Skilled construction Millwright mechanics study and interpret prints or working drawings, and then apply their knowledge and expertise to move, assemble, and erect machinery and rotating equipment. Interested apprentices should contact the Millwright Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMW033</td>
<td>Conveyor Systems</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW034</td>
<td>Drives, Pulleys and Belts</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW036B</td>
<td>Machinery Installation and Erection - B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW037</td>
<td>Turbine Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW038</td>
<td>Concentrated Photovoltaic Installations</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW039</td>
<td>Compressor Theory and Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW040</td>
<td>Wind Turbine Installations</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW051</td>
<td>Solar Installer Level 1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMW021</td>
<td>Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW022</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW023A</td>
<td>Millwright General Skills - A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW023B</td>
<td>Millwright General Skills - B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW024</td>
<td>S/B Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW025</td>
<td>Welding Fabrication</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW026</td>
<td>Cutting and Burning</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW027</td>
<td>Optics and Machinery Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW028</td>
<td>Machinery Shaft Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW029A</td>
<td>Structural Welding - AWS A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW029B</td>
<td>Structural Welding - AWS B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW030</td>
<td>Rigging Hardware and Procedures</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW031</td>
<td>Turbine Familiarization</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW032</td>
<td>Pumps</td>
<td>1.5</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
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</tr>
<tr>
<td>AMW036A</td>
<td>Machinery Installation and Erection - A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW043</td>
<td>Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Program Requirements**

A.S. Degree Major

**Major requirements:** 25.5 Units

- AMW021 - Orientation 2.0
- AND
- AMW022 - Safety and Health Certifications 2.0
- AND
- AMW023A - Millwright General Skills - A 1.5
- AND
- AMW023B - Millwright General Skills - B 1.5
- AND
- AMW024 - S/B Print Reading 2.0
- AND
- AMW025 - Welding Fabrication 1.5
- AND
- AMW026 - Cutting and Burning 1.5
- AND
- AMW027 - Optics and Machinery Alignment 1.5
- AND
- AMW028 - Machinery Shaft Alignment 1.5
- AND
- AMW029A - Structural Welding - AWS A 1.5
- AND
- AMW029B - Structural Welding - AWS B 1.5
- AND
- AMW030 - Rigging Hardware and Procedures 1.5
- AND
- AMW031 - Turbine Familiarization 1.5
<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>25.5 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>AMW032 - Pumps</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>AMW036A - Machinery Installation and Erection - A</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>AMW043 - Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
<tr>
<td>Select four (4) courses from the following:</td>
<td>6.0 Units</td>
</tr>
<tr>
<td>AMW033 - Conveyor Systems</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW034 - Drives, Pulleys and Belts</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW036B - Machinery Installation and Erection - B</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW037 - Turbine Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW038 - Concentrated Photovoltaic Installations</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW039 - Compressor Theory and Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW040 - Wind Turbine Installations</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>AMW051 - Solar Installer Level 1</td>
<td>1.5</td>
</tr>
</tbody>
</table>

| Total Units | 31.5 |

**Learning Outcomes**
Be eligible to work as a Millwright journeyworker.
Continue their college education, using the units earned.

**Labor Market Data**

<table>
<thead>
<tr>
<th>Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
</table>
### Apprenticeship Carpentry, Millwrighting, CA

**Certificate of Achievement**

**Control Number:**
21662

**Curriculum Id:**
SCC.ACAMI.CA

The Certificate of Achievement in Apprenticeship Carpentry Millwrighting provide the required related and supplemental classroom instruction in the technical skills and knowledge required in the trade for state-indentured apprentices. The work of the Millwright involves installing conveyor systems, escalators, gas and steam turbines, and generators. Millwrights install and do maintenance on machinery in factories and do much of the precision work in nuclear power plants. Skilled construction Millwright mechanics study and
interpret prints or working drawings, and then apply their knowledge and expertise to move, assemble, and erect machinery and rotating equipment. Interested apprentices should contact the Millwright Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College.

### Program Courses

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMW021</td>
<td>Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW022</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW023A</td>
<td>Millwright General Skills - A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW023B</td>
<td>Millwright General Skills - B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW024</td>
<td>S/B Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW025</td>
<td>Welding Fabrication</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW026</td>
<td>Cutting and Burning</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW027</td>
<td>Optics and Machinery Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW028</td>
<td>Machinery Shaft Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW029A</td>
<td>Structural Welding - AWS A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW029B</td>
<td>Structural Welding - AWS B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW030</td>
<td>Rigging Hardware and Procedures</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW031</td>
<td>Turbine Familiarization</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW032</td>
<td>Pumps</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW036A</td>
<td>Machinery Installation and Erection - A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW043</td>
<td>Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW033</td>
<td>Conveyor Systems</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW034</td>
<td>Drives, Pulleys and Belts</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW036B</td>
<td>Machinery Installation and Erection - B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW037</td>
<td>Turbine Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW038</td>
<td>Concentrated Photovoltaic Installations</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW039</td>
<td>Compressor Theory and Maintenance</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW040</td>
<td>Wind Turbine Installations</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW051</td>
<td>Solar Installer Level 1</td>
<td>1.5</td>
</tr>
</tbody>
</table>
## Certificate of Achievement

**Certificate requirements:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMW021</td>
<td>Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW022</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW023A</td>
<td>Millwright General Skills - A</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW023B</td>
<td>Millwright General Skills - B</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW024</td>
<td>S/B Print Reading</td>
<td>2.0</td>
</tr>
<tr>
<td>AMW025</td>
<td>Welding Fabrication</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW026</td>
<td>Cutting and Burning</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW027</td>
<td>Optics and Machinery Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW028</td>
<td>Machinery Shaft Alignment</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW029A</td>
<td>Structural Welding - AWS A</td>
<td>1.5</td>
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<td>AMW030</td>
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<td>AMW031</td>
<td>Turbine Familiarization</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW032</td>
<td>Pumps</td>
<td>1.5</td>
</tr>
<tr>
<td>AMW036A</td>
<td>Machinery Installation and Erection - A</td>
<td>1.5</td>
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</tbody>
</table>
Certificate requirements:

<table>
<thead>
<tr>
<th>AND</th>
<th>25.5 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMW043 - Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Select four (4) courses from the following:

| 6.0 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW033 - Conveyor Systems                                       | 1.5        |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW034 - Drives, Pulleys and Belts                              |            |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW036B - Machinery Installation and Erection - B               |            |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW037 - Turbine Maintenance                                    |            |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW038 - Concentrated Photovoltaic Installations                |            |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW039 - Compressor Theory and Maintenance                      |            |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW040 - Wind Turbine Installations                             |            |

OR

| 1.5 Units                                                        |
|----------------------------------------------------------------|------------|
| AMW051 - Solar Installer Level 1                                |            |

Total Units 31.5

Learning Outcomes

- Be eligible to work as a Millwright journeyworker.
- Continue their college education, using the units earned.

Labor Market Data

<table>
<thead>
<tr>
<th>Calibration Technologists and Technicians and Engineering Technologists and Technicians, Except Drafters, All Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>61K</td>
</tr>
<tr>
<td>34K LOW</td>
</tr>
<tr>
<td>Graduates*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electrical and Electronics Repairers, Commercial and Industrial Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a00669-c6e1-44bc-bed7-d328a6eb18
Apprenticeship Carpentry, Pile Driver, AS
A.S. Degree Major

Control Number:
31588

Curriculum Id:
SCC.ACAPI.AS

The Associate of Science degree in Apprenticeship Carpentry, Pile Driver is designed to provide the required related and supplemental classroom instruction in the technical skills and knowledge required in the trade. Pile drivers work with pile-driving rigs—those big machines that look like cranes, but shake the ground as they drive metal, concrete or wood piling into the earth during the early stages of construction. Usually, pile drivers are the first workers at the construction site. They drive metal sheet piling to hold back the dirt during excavations. They drive concrete and metal piling as part of the foundation system upon which skyscrapers are built, and they drive wood and concrete piling to hold up docks, wharfs and bridges. In some cases they work on off-shore oil rigs and as commercial divers involved in underwater construction. Pile drivers are also required to install heavy timbers and weld or cut large metal beams. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA021C</td>
<td>Basic Wall Framing</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ACA024D</td>
<td>Transit Level/Laser</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA027D</td>
<td>Stairs and Ramp Forming</td>
<td>1.5</td>
</tr>
<tr>
<td>ACA029A</td>
<td>Rigging</td>
<td>1.5</td>
</tr>
<tr>
<td>ACPD028B</td>
<td>Bridge and Deck Forms B</td>
<td>1.5</td>
</tr>
<tr>
<td>ACPD029A</td>
<td>Structural Welding-AWS A</td>
<td>1.5</td>
</tr>
<tr>
<td>ACPD029B</td>
<td>Structural Welding-AWS B</td>
<td>1.5</td>
</tr>
<tr>
<td>ACPD030</td>
<td>Print Reading</td>
<td>2.0</td>
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<tr>
<td>ACPD031A</td>
<td>Welding Fabrication A</td>
<td>1.5</td>
</tr>
<tr>
<td>ACPD031B</td>
<td>Welding Fabrication B</td>
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</tr>
<tr>
<td>AMW026</td>
<td>Cutting and Burning</td>
<td>1.5</td>
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Available Program Courses

<table>
<thead>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACPD021</td>
<td>Orientation</td>
<td>2.0</td>
</tr>
<tr>
<td>ACPD022</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>ACPD023</td>
<td>Tool/Equipment Applications</td>
<td>1.5</td>
</tr>
<tr>
<td>ACPD024A</td>
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<tr>
<td>ACPD028A</td>
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Program Requirements

A.S. Degree Major

**Major requirements:** 16.0 Units

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<th>Course Title</th>
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## Major requirements:

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<td>OR</td>
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<tr>
<td>ACA024D - Transit Level/Laser</td>
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<tr>
<td>ACA027D - Stairs and Ramp Forming</td>
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<td>OR</td>
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<tr>
<td>ACA029A - Rigging</td>
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<tr>
<td>OR</td>
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<tr>
<td>OR</td>
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<tr>
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<td>OR</td>
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<td>OR</td>
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<td>OR</td>
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<tr>
<td>AMW026 - Cutting and Burning</td>
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Total Units: 22.0 - 23.0

Learning Outcomes

Be eligible to work as a Pile Driver journeyworker.
Continue their college education, using the units earned.

Labor Market Data

### Crane and Tower Operators

- **Job Growth**
- **Wages**
  - AVERAGE: 74K
  - LOW: 34K
  - HIGH: 119K
- **Competition:** 208 Annual Openings

### Operating Engineers and Other Construction Equipment Operators

- **Job Growth**
- **Wages**
  - AVERAGE: 82K
  - LOW: 48K
  - HIGH: 110K
- **Competition:** 942 Annual Openings

Apply Now Request Info

Apprenticeship Carpentry, Pile Driver, CA

Certificate of Achievement

**Control Number:**
31589

**Curriculum Id:**
SCC.ACAPI.CA

The Certificate of Achievement in Apprenticeship Carpentry, Pile Driver is designed to provide the required related and supplemental classroom instruction in the technical skills and knowledge required in the trade. Pile drivers work with pile-driving rigs—those big machines that look like cranes, but shake the ground as they drive metal, concrete or wood piling into the earth during the early stages of construction. Usually, pile drivers are the first workers at the construction site. They drive metal sheet piling to hold back the dirt during excavations. They drive concrete and metal piling as part of the foundation system upon which skyscrapers are built, and they drive wood and concrete piling to hold up docks, wharfs and bridges. In some cases they work on off-shore oil rigs and as commercial
Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<td>Safety and Health Certifications</td>
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<td>ACPD023</td>
<td>Tool/Equipment Applications</td>
<td>1.5</td>
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<tr>
<td>ACPD024A</td>
<td>Piles and Hammers A</td>
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<tr>
<td>ACPD026A</td>
<td>Falsework A</td>
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<tr>
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<td>Abutment A</td>
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<td>Abutment B</td>
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<tr>
<td>ACPD028A</td>
<td>Bridge and Deck Forms A</td>
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Available Program Courses

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<th>Course Title</th>
<th>Units</th>
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<tr>
<td>ACA024D</td>
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<td>ACA027D</td>
<td>Stairs and Ramp Forming</td>
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<td>AMW026</td>
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Program Requirements
Certificate of Achievement

Certificate requirements: 16.0 Units

ACPD021 - Orientation 2.0
<table>
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<td>ACPD023 - Tool/Equipment Applications</td>
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<td><strong>AND</strong></td>
<td></td>
</tr>
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<td>ACPD024A - Piles and Hammers A</td>
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<td><strong>AND</strong></td>
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</tr>
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<td><strong>AND</strong></td>
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<td><strong>AND</strong></td>
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<td><strong>AND</strong></td>
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<tr>
<td>ACPD028A - Bridge and Deck Forms A</td>
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Select four (4) courses from the following: **6.0 - 7.0 Units**

- ACA021C - Basic Wall Framing | 1.5

- OR

- ACA024D - Transit Level/Laser | 2.0

- OR

- ACA027D - Stairs and Ramp Forming | 1.5

- OR

- ACA029A - Rigging | 1.5

- OR

- ACPD028B - Bridge and Deck Forms B | 1.5
Select four (4) courses from the following:  6.0 - 7.0 Units

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACPD030 - Print Reading</td>
<td>2.0</td>
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<tr>
<td>OR</td>
<td></td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>ACPD031B - Welding Fabrication B</td>
<td>1.5</td>
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<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>AMW026 - Cutting and Burning</td>
<td>1.5</td>
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Total Units  22.0 - 23.0

Learning Outcomes

Be eligible to work as a Pile Driver journeyworker.
Continue their college education, using the units earned.

Labor Market Data

### Crane and Tower Operators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td>Job Growth</td>
<td>74K AVERAGE</td>
<td>208 Annual Openings Graduates*</td>
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<td>LOW 34K</td>
<td>119K HIGH</td>
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### Operating Engineers and Other Construction Equipment Operators

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<th>Wages</th>
<th>Competition</th>
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<td>Job Growth</td>
<td>82K AVERAGE</td>
<td>942 Annual Openings Graduates*</td>
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<tr>
<td>LOW 48K</td>
<td>110K HIGH</td>
<td>*For Program</td>
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</table>

Apply Now  Request Info

Apprenticeship Carpentry, Plastering, AS
A.S. Degree Major

Control Number:
31705

Curriculum Id:
The Associate of Science degree in Apprenticeship Carpentry, Plastering provides the required related and supplemental instruction for apprentice plasterers in the technical skills and knowledge required in the trade. Plasterers apply various wet materials over surfaces on both exterior and interior walls, ceilings and other surfaces in the construction industry. Successful completion may result in journeyworker status. Those interested should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>ACA082B</td>
<td>S/B Firestop/Fireproofing Procedures</td>
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<td>ACPL034</td>
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<tr>
<td>AMF030</td>
<td>Crew Lead Customer Service Training</td>
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**Available Program Courses**

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<td>Dot and Screed Techniques</td>
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<td>ACPL028</td>
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**Program Requirements**

**A.S. Degree Major**

**Major requirements:** 19.5 Units

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<td>ACPL029 - Tender and Plastering Equipment</td>
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Select four (4) courses from the following: 6.0 - 7.5 Units

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<td>ACPL033</td>
<td>Finish Applications</td>
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<td>OR</td>
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<td>ACPL034</td>
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<td>OR</td>
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<tr>
<td>AMF030</td>
<td>Crew Lead Customer Service Training</td>
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Total Units 25.5 - 27.0

Learning Outcomes

Safely operate tools and equipment used by plasterers in the construction industry.
Interpret prints to determine the appropriate use of construction methods and materials consistent with plastering industry standards.

Labor Market Data

### Drywall and Ceiling Tile Installers

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
<th>Annual Openings</th>
<th>Graduates*</th>
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<tr>
<td>AVERAGE</td>
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<tr>
<td>95K HIGH</td>
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</table>

### First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
<th>Annual Openings</th>
<th>Graduates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
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<td>3114</td>
<td>For Program</td>
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<tr>
<td>121K HIGH</td>
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</table>

Apprenticeship Carpentry, Plastering, CA

Certificate of Achievement

Control Number: 31706

Curriculum Id: SCC.ACAPL.CA

The Certificate of Achievement in Apprenticeship Carpentry, Plastering provides the required related and supplemental instruction for apprentice plasterers in the technical skills and knowledge required in the trade. Plasterers apply various wet materials over surfaces on both exterior and interior walls, ceilings and other surfaces in the construction industry. Successful completion may result in journeyworker status. Those interested should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32fa9ebf18
## Program Courses

### Available Program Courses

<table>
<thead>
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<th>Units</th>
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<tr>
<td>ACA071B</td>
<td>Safety and Health Certifications</td>
<td>2.0</td>
</tr>
<tr>
<td>ACA074A</td>
<td>Print Reading</td>
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</tr>
<tr>
<td>ACPL023</td>
<td>Tool/Equipment Applications</td>
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<tr>
<td>ACPL025</td>
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<td>1.5</td>
</tr>
<tr>
<td>ACPL026</td>
<td>Exterior Plastering</td>
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<td>Dot and Screed Techniques</td>
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<td>ACPL028</td>
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<td>1.5</td>
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<tr>
<td>ACPL030</td>
<td>Exterior Insulation Finish Systems (EIFS)</td>
<td>1.5</td>
</tr>
<tr>
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### Available Program Courses

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<th>Course Title</th>
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<td>ACA082B</td>
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<tr>
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<td>Finish Applications</td>
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<tr>
<td>AMF030</td>
<td>Crew Lead Customer Service Training</td>
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## Program Requirements

### Certificate of Achievement

**Certificate requirements:** 19.5 Units

- ACA071A - Orientation 2.0
  
- **AND**
  
- ACA071B - Safety and Health Certifications 2.0
  
- **AND**
  
- ACA074A - Print Reading 2.0
Certificate requirements: 19.5 Units

AND

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<tr>
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<tr>
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<td>ACPL026</td>
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Select four (4) courses from the following: 6.0 - 7.5 Units

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<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACA072B</td>
<td>Basic Lathing</td>
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<tr>
<td>OR</td>
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<td>ACA074B</td>
<td>Advanced Print Reading</td>
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<tr>
<td>ACA074C</td>
<td>Air, Moisture, and Thermal Barriers</td>
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<tr>
<td>OR</td>
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<tr>
<td>ACA082B</td>
<td>S/B Firestop/Fireproofing Procedures</td>
<td>1.5</td>
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<td>OR</td>
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<tr>
<td>ACPL033</td>
<td>Finish Applications</td>
<td>1.5</td>
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<tr>
<td>OR</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbb-bed7-d32ba26e18b18
Select four (4) courses from the following:

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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
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<td>OR</td>
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<tr>
<td>AMF030</td>
<td>Crew Lead Customer Service Training</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Total Units: 25.5 - 27.0

Learning Outcomes

- Safely operate tools and equipment used by plasterers in the construction industry.
- Interpret prints to determine the appropriate use of construction methods and materials consistent with plastering industry standards.

Labor Market Data

### Drywall and Ceiling Tile Installers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
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<tr>
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<td>AVERAGE 95K</td>
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### First-Line Supervisors of Construction Trades and Extraction Workers

<table>
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<th>Job Growth</th>
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<th>Competition</th>
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<td>72K</td>
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<td>AVERAGE 121K</td>
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<tr>
<td></td>
<td>HIGH 121K</td>
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Apply Now Request Info

Apprenticeship Carpentry, Tilt-Up, AS

A.S. Degree Major

Control Number:

13233

Curriculum Id:

SCC.ACATT.AS

The Associate of Science degree in Apprenticeship Carpentry, Tilt-Up is designed to provide related and supplemental instruction including the technical skills and knowledge required in the trade. Tilt-up apprentices work with slabs of concrete which, after attaining proper strength, are lifted (tilted) with a crane and set on prepared foundations to form the exterior walls of a building. The erected panels are temporarily braced, connected, and the joints between them caulked. Tilt-up workers may construct and attach the roof structure to the walls to complete the building shell. Tilt-up construction is used for nearly every type of one- to four-story building. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACA004B</td>
<td>Poured-in-Place Wall Forms</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<tr>
<td>-------------</td>
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<tr>
<td>ACA005B</td>
<td>Site Work/Curb and Gutter</td>
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<tr>
<td>ACA021C</td>
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<td>1.5</td>
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<tr>
<td>ACA022A</td>
<td>Commercial Floor Framing</td>
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<td>ACA022E</td>
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<td>ACA025A</td>
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<td>ACA026B</td>
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<td>Rigging</td>
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**Available Program Courses**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACA002B</td>
<td>Slabs/Interior-Exterior Footings</td>
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<td>ACA003A</td>
<td>Tilt-Up Introduction</td>
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<td>ACA005C</td>
<td>Specialized Forms and Rigging</td>
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<tr>
<td>ACA021A</td>
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<tr>
<td>ACA024D</td>
<td>Transit Level/Laser</td>
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<tr>
<td>ACA027D</td>
<td>Stairs and Ramp Forming</td>
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**Program Requirements**

**A.S. Degree Major**

Major requirements: 15.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACA002B</td>
<td>Slabs/Interior-Exterior Footings</td>
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<td>ACA005A</td>
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<tr>
<td>ACA005C</td>
<td>Specialized Forms and Rigging</td>
<td>1.5</td>
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</tbody>
</table>
Major requirements:

AND

ACA021A - Orientation 2.0

AND

ACA021B - Safety and Health Certifications 2.0

AND

ACA024D - Transit Level/Laser 2.0

AND

ACA027D - Stairs and Ramp Forming 1.5

Select six (6) units from the following: 6.0 Units

ACA004B - Poured-in-Place Wall Forms 1.5

OR

ACA005B - Site Work/Curb and Gutter 1.5

OR

ACA021C - Basic Wall Framing 1.5

OR

ACA022A - Commercial Floor Framing 1.5

OR

ACA022E - Commercial Roof Framing 1.5

OR

ACA025A - Foundations and Flatwork 1.5

OR

ACA026B - Wall Forming 1.5

OR

ACA029A - Rigging 1.5

Total Units 21.0

Learning Outcomes

- Safely operate tools and equipment used by carpenters in the tilt-up construction industry.
- Interpret prints to determine the appropriate use of construction methods and materials consistent with tilt-up construction standards.

Labor Market Data
Cement Masons and Concrete Finishers

Job Growth
Wages
54K
AVERAGE
33K 83K
LOW  HIGH

Competition
1140 Annual Openings
Graduates*
*For Program

First-Line Supervisors of Construction Trades and Extraction Workers

Job Growth
Wages
72K
AVERAGE
30K 121K
LOW  HIGH

Competition
3114 Annual Openings
Graduates*
*For Program

Miscellaneous Construction and Related Workers

Job Growth
Wages
43K
AVERAGE
27K 84K
LOW  HIGH

Competition
195 Annual Openings
Graduates*
*For Program

Apprenticeship Carpentry, Tilt-Up, CA

Certificate of Achievement

Control Number:
21660

Curriculum Id:
SCC.ACATT.CA

The Certificate of Achievement in Apprenticeship Carpentry, Tilt-Up is designed to provide related and supplemental instruction including the technical skills and knowledge required in the trade. Tilt-up apprentices work with slabs of concrete which, after attaining proper strength, are lifted (tilted) with a crane and set on prepared foundations to form the exterior walls of a building. The erected panels are temporarily braced, connected, and the joints between them caulked. Tilt-up workers may construct and attach the roof structure to the walls to complete the building shell. Tilt-up construction is used for nearly every type of one- to four-story building. Successful completion may result in journeyworker status. Interested apprentices should contact the Carpentry Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

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<th>Course Code</th>
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<td>ACA005B</td>
<td>Site Work/Curb and Gutter</td>
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<td>ACA021C</td>
<td>Basic Wall Framing</td>
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<tr>
<td>ACA022A</td>
<td>Commercial Floor Framing</td>
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<td>ACA022E</td>
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<td>Slabs/Interior-Exterior Footings</td>
<td>1.5</td>
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<td>ACA003A</td>
<td>Tilt-Up Introduction</td>
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<td>Lifting, and Bracing Safety</td>
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<td>Wall-Column Forms/Cutting and Burning</td>
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<td>Transit Level/Laser</td>
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<tr>
<td>ACA027D</td>
<td>Stairs and Ramp Forming</td>
<td>1.5</td>
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### Program Requirements

**Certificate of Achievement**

Certificate requirements: 15.0 Units

- ACA002B - Slabs/Interior-Exterior Footings  1.5
- ACA003A - Tilt-Up Introduction  1.5
- ACA004A - Lifting, and Bracing Safety  1.5
- ACA005A - Wall-Column Forms/Cutting and Burning  1.5
- ACA005C - Specialized Forms and Rigging  1.5
- ACA021A - Orientation  2.0
- ACA021B - Safety and Health Certifications  2.0
Certificate requirements:

15.0 Units

AND

ACA024D - Transit Level/Laser

2.0

AND

ACA027D - Stairs and Ramp Forming

1.5

Select six (6) units from the following: 6.0 Units

ACA004B - Poured-in-Place Wall Forms

1.5

OR

ACA005B - Site Work/Curb and Gutter

1.5

OR

ACA021C - Basic Wall Framing

1.5

OR

ACA022A - Commercial Floor Framing

1.5

OR

ACA022E - Commercial Roof Framing

1.5

OR

ACA025A - Foundations and Flatwork

1.5

OR

ACA026B - Wall Forming

1.5

OR

ACA029A - Rigging

1.5

Total Units 21.0

Learning Outcomes

Safely operate tools and equipment used by carpenters in the tilt-up construction industry.

Interpret prints to determine the appropriate use of construction methods and materials consistent with tilt-up construction standards.

Labor Market Data

Cement Masons and Concrete Finishers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<table>
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*For Program
First-Line Supervisors of Construction Trades and Extraction Workers

<table>
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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
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<td></td>
<td>AVERAGE</td>
<td>Annual Opennings</td>
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<td>30K</td>
<td>Graduates*</td>
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<td>LOW</td>
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Miscellaneous Construction and Related Workers

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<tr>
<td>LOW</td>
<td>84K</td>
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Apprenticeship Electricity, Industrial, AS

A.S. Degree Major

Control Number:

11985

Curriculum Id:

SCC.AELIN.AS

The Associate of Science degree in Apprenticeship Electricity Industrial provides the required related and supplemental instruction for state-indentured electrical inside wiremen apprentices. They install conduit, electrical wiring, fixtures and electrical apparatus inside commercial buildings and in a multitude of industrial settings. They use many different kinds of tools, ranging from simple one- and two-hand tools to power-assisted tools. Interested apprentices should contact the Orange County Electrical Apprenticeship Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status. Meets the state requirements as an electrician trainee program.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
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<td>Course Title</td>
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**Program Requirements**

**A.S. Degree Major**

**Major requirements:**  

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**Total Units**  

46.5

**Learning Outcomes**

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

**Labor Market Data**
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<tr>
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<th>Wages</th>
<th>Competition</th>
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<td>Openings</td>
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**Apprenticeship Electricity, Industrial, CA**

Certificate of Achievement

**Control Number:**

21661

**Curriculum Id:**

SCC.AELIN.CA

The Certificate of Achievement in Apprenticeship Electricity, Industrial provides the required related and supplemental instruction for state-indentured electrical inside wiremen apprentices. They install conduit, electrical wiring, fixtures and electrical apparatus inside commercial buildings and in a multitude of industrial settings. They use many different kinds of tools, ranging from simple one- and
two-hand tools to power-assisted tools. Interested apprentices should contact the Orange County Electrical Apprenticeship Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status. Meets the state requirements as an electrician trainee program.

### Program Courses

#### Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
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### Program Requirements

#### Certificate of Achievement

Certificate requirements: 46.5 Units

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</table>
Certificate requirements: 46.5 Units

AND

AEL058 - Inside Wireman 8 4.5

AND

AEL059 - Inside Wireman 9 4.5

AND

AEL060 - Inside Wireman 10 4.5

AND

AEL061 - Electrical Safety and First Aid 1.5

Total Units 46.5

Learning Outcomes

Begin a career as a journeyworker electrician.
Have a basis for further college education.

Labor Market Data

**Electrical and Electronics Repairers, Commercial and Industrial Equipment**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
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**Electrical and Electronics Repairers, Powerhouse, Substation, and Relay**

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<thead>
<tr>
<th>Job Growth</th>
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**Electrical Power-Line Installers and Repairers**

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<th>Competition</th>
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**Electricians**

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Apprenticeship Electricity, Intelligent Transportation Systems Electrician, AS
A.S. Degree Major

Control Number:
22271

Curriculum Id:
SCC.AELIT.AS

The Associate of Science degree in Apprenticeship Electricity Intelligent Transportation Systems Electrician provides related and supplemental instruction for electrical apprentices. The program is designed to train apprentices in the process of planning, installing and maintaining intelligent transportation signal systems beginning with the rudimentary elements of construction housekeeping and safety, and then continuing on through the more advanced techniques of job planning, layout, installation and start-up. Apprentices will learn to use the National Electrical Safety codes, Caltrans installation plans and specifications and IMSA standards and practices. Apprentices will receive hand-on training as well as instruction in electrical theory. Apprentices who successfully complete this program will be eligible for Intelligent Transportation Systems Electrician Journeyworker status. They will have the skills necessary to work for signatory Intelligent Transportation/Traffic Signal contractors and will be qualified to train apprentices.

Program Courses
Available Program Courses

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Program Requirements
A.S. Degree Major
Major requirements: 45.0 Units

AEL031 - Intelligent Transportation Systems Electrician Apprentice 1 4.5

AND

AEL032 - Intelligent Transportation Systems Electrician Apprentice 2 4.5

AND

AEL033 - Intelligent Transportation Systems Electrician Apprentice 3 4.5

AND

AEL034 - Intelligent Transportation Systems Electrician Apprentice 4 4.5

AND

AEL035 - Intelligent Transportation Systems Electrician Apprentice 5 4.5

AND

AEL036 - Intelligent Transportation Systems Electrician Apprentice 6 4.5

AND

AEL037 - Intelligent Transportation Systems Electrician Apprentice 7 4.5

AND

AEL038 - Intelligent Transportation Systems Electrician Apprentice 8 4.5

AND

AEL039 - Intelligent Transportation Systems Electrician Apprentice 9 4.5

AND

AEL040 - Intelligent Transportation Systems Electrician Apprentice 10 4.5

Total Units 45.0

Learning Outcomes

Begin a career as a journey worker intelligent transportation systems electrician and practice motivation and leadership skills on the job. Research, identify and implement codes, standards, and specifications to install an electrical transportation system. Recognize and install devices for controlling equipment operation. Recognize and identify safe work practices described in OSHA 30 training. Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Electricians</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321a6e18b18
# First-Line Supervisors of Construction Trades and Extraction Workers

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# First-Line Supervisors of Mechanics, Installers, and Repairers

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# Helpers--Electricians

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# Security and Fire Alarm Systems Installers

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<td>79K</td>
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**Apprenticeship Electricity, Intelligent Transportation Systems Electrician, CA**

Certificate of Achievement

**Control Number:**

22270

**Curriculum Id:**

SCC.AELIT.CA

The Certificate of Achievement in Apprenticeship Electricity, Intelligent Transportation Systems Electrician provides related and supplemental instruction for electrical apprentices. The program is designed to train apprentices in the process of planning, installing and maintaining intelligent transportation signal systems beginning with the rudimentary elements of construction housekeeping and safety, and then continuing on through the more advanced techniques of job planning, layout, installation and start-up. Apprentices will learn to use the National Electrical Safety codes, Caltrans installation plans and specifications and IMSA standards and practices. Apprentices will receive hand-on training as well as instruction in electrical theory. Apprentices who successfully complete this program will be eligible for Intelligent Transportation Systems Electrician Journeyworker status. They will have the skills necessary to work for signatory Intelligent Transportation/Traffic Signal contractors and will be qualified to train apprentices.

**Program Courses**

Available Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEL031</td>
<td>Intelligent Transportation Systems Electrician Apprentice 1</td>
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<tr>
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<td>AEL037</td>
<td>Intelligent Transportation Systems Electrician Apprentice 7</td>
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<tr>
<td>AEL038</td>
<td>Intelligent Transportation Systems Electrician Apprentice 8</td>
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<tr>
<td>AEL039</td>
<td>Intelligent Transportation Systems Electrician Apprentice 9</td>
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<tr>
<td>AEL040</td>
<td>Intelligent Transportation Systems Electrician Apprentice 10</td>
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Program Requirements
Certificate of Achievement

Certificate requirements: 45.0 Units

AEL031 - Intelligent Transportation Systems Electrician Apprentice 1 4.5

AND

AEL032 - Intelligent Transportation Systems Electrician Apprentice 2 4.5

AND

AEL033 - Intelligent Transportation Systems Electrician Apprentice 3 4.5

AND

AEL034 - Intelligent Transportation Systems Electrician Apprentice 4 4.5

AND

AEL035 - Intelligent Transportation Systems Electrician Apprentice 5 4.5

AND

AEL036 - Intelligent Transportation Systems Electrician Apprentice 6 4.5

AND

AEL037 - Intelligent Transportation Systems Electrician Apprentice 7 4.5

AND

AEL038 - Intelligent Transportation Systems Electrician Apprentice 8 4.5

AND

AEL039 - Intelligent Transportation Systems Electrician Apprentice 9 4.5
Certificate requirements:  

AND

AEL040 - Intelligent Transportation Systems Electrician Apprentice 10  

Total Units  

Learning Outcomes

Begin a career as a journeyworker intelligent transportation systems electrician.  
Have a basis for further college education.

Apprenticeship Electricity, Sound Installer, AS

A.S. Degree Major

Control Number:
19588

Curriculum Id:
SCC.AESI.AS

The Associate of Science degree in Apprenticeship Electricity Sound Installer provides related and supplemental instruction for electrical apprentices who have been recommended by the Joint Apprenticeship Committee. Interested apprentices should contact the committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may lead to state journeyworker certification.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEL021</td>
<td>Sound and Communication Apprentice 1</td>
<td>4.5</td>
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<tr>
<td>AEL022</td>
<td>Sound and Communication Apprentice 2</td>
<td>4.5</td>
</tr>
<tr>
<td>AEL023</td>
<td>Sound and Communication Apprentice 3</td>
<td>4.5</td>
</tr>
<tr>
<td>AEL024</td>
<td>Sound and Communication Apprentice 4</td>
<td>4.5</td>
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<tr>
<td>AEL025</td>
<td>Sound and Communication Apprentice 5</td>
<td>4.5</td>
</tr>
<tr>
<td>AEL026</td>
<td>Sound and Communication Apprentice 6</td>
<td>4.5</td>
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</table>

Program Requirements

A.S. Degree Major

Major requirements:  

AND

AEL021 - Sound and Communication Apprentice 1  

AND

AEL022 - Sound and Communication Apprentice 2  

AND

AEL023 - Sound and Communication Apprentice 3  

AND
Major requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AEL024 - Sound and Communication Apprentice 4</td>
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<td>AND</td>
<td></td>
</tr>
<tr>
<td>AEL025 - Sound and Communication Apprentice 5</td>
<td>4.5</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AEL026 - Sound and Communication Apprentice 6</td>
<td>4.5</td>
</tr>
<tr>
<td>Total Units</td>
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</table>

Learning Outcomes

- Begin a career as a journeyworker electrician
- Have a basis for further college education.

Labor Market Data

**Electricians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>63K</td>
<td>34K</td>
<td>3903 Annual Openings</td>
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<tr>
<td>AVERAGE</td>
<td>105K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**First-Line Supervisors of Construction Trades and Extraction Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td>72K</td>
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<td>121K</td>
<td>Graduates*</td>
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<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
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</table>

**First-Line Supervisors of Mechanics, Installers, and Repairers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>84K</td>
<td>48K</td>
<td>1469 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>125K</td>
<td>Graduates*</td>
</tr>
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<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
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</table>

**Helpers--Electricians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>37K</td>
<td>26K</td>
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<tr>
<td>AVERAGE</td>
<td>62K</td>
<td>Graduates*</td>
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**Security and Fire Alarm Systems Installers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
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Apprenticeship Electricity, Sound Installer, CA

Certificate of Achievement

Control Number:
19587

Curriculum Id:
SCC.AESI.CA

The Certificate of Achievement in Apprenticeship Electricity, Sound Installer provides related and supplemental instruction for electrical apprentices who have been recommended by the Joint Apprenticeship Committee. Interested apprentices should contact the committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may lead to state journeyworker certification.

Program Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
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<td>AEL021</td>
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<td>AEL022</td>
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Program Requirements

Certificate of Achievement

Certificate requirements: 27.0 Units

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<thead>
<tr>
<th>Course Code</th>
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<tr>
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<td>AND</td>
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<tr>
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Certificate requirements:

AND

AEL026 - Sound and Communication Apprentice 6

Total Units

Learning Outcomes

Begin a career as a journeyworker electrician.
Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Electricians</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td></td>
<td></td>
<td>Openings</td>
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</tr>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>*For Program</td>
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</table>

<table>
<thead>
<tr>
<th>First-Line Supervisors of Mechanics, Installers, and Repairers</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tr>
<td></td>
<td>LOW</td>
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<td>AVERAGE</td>
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<td>HIGH</td>
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<td>Openings</td>
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<td></td>
<td></td>
<td>Graduates*</td>
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<tr>
<th>Helpers--Electricians</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td>AVERAGE</td>
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<td>LOW</td>
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<td></td>
<td></td>
<td>Graduates*</td>
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<thead>
<tr>
<th>Security and Fire Alarm Systems Installers</th>
<th>Job Growth</th>
<th>Wages</th>
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<td>Graduates*</td>
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</table>
Apprenticeship Electricity, Sound Technician, AS
A.S. Degree Major

Control Number:
19590

Curriculum Id:
SCC.AEST.AS

The Associate of Science degree in Apprenticeship Electricity Sound Technician provides related and supplemental instruction for electrical apprentices who have been recommended by the Joint Apprenticeship Committee. Interested apprentices should contact the committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may lead to state journeyworker certification.

Program Courses
Available Program Courses

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<thead>
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<th>Course Title</th>
<th>Units</th>
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<td>AEL022</td>
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<td>AEL023</td>
<td>Sound and Communication Apprentice 3</td>
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<td>AEL024</td>
<td>Sound and Communication Apprentice 4</td>
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<td>AEL025</td>
<td>Sound and Communication Apprentice 5</td>
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<td>AEL026</td>
<td>Sound and Communication Apprentice 6</td>
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<td>AEL027</td>
<td>Sound and Communication Apprentice 7</td>
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<td>AEL028</td>
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</table>

Program Requirements
A.S. Degree Major

Major requirements: 36.0 Units

AEL021 - Sound and Communication Apprentice 1 4.5

AND

AEL022 - Sound and Communication Apprentice 2 4.5

AND

AEL023 - Sound and Communication Apprentice 3 4.5

AND

AEL024 - Sound and Communication Apprentice 4 4.5

AND

AEL025 - Sound and Communication Apprentice 5 4.5

AND
Major requirements: 36.0 Units

AEL026 - Sound and Communication Apprentice 6 4.5
AND
AEL027 - Sound and Communication Apprentice 7 4.5
AND
AEL028 - Sound and Communication Apprentice 8 4.5

Total Units 36.0

Learning Outcomes
Begin a career as a journeyworker electrician.
Have a basis for further college education.

Labor Market Data

Electricians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>63K</td>
<td>3903 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>34K AVERAGE</td>
<td>Graduates*</td>
</tr>
<tr>
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<td>LOW 105K</td>
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<td>HIGH 34K</td>
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First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>72K AVERAGE</td>
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<td></td>
<td>30K LOW 121K</td>
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<td>HIGH 121K</td>
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</tbody>
</table>

First-Line Supervisors of Mechanics, Installers, and Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
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<tr>
<td></td>
<td>84K AVERAGE</td>
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Helpers--Electricians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
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<tbody>
<tr>
<td></td>
<td>37K AVERAGE</td>
<td>324 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>26K LOW 62K</td>
<td>Graduates*</td>
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<td>HIGH 62K</td>
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</table>

Security and Fire Alarm Systems Installers

<table>
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<tr>
<th>Job Growth</th>
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<tr>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
Apprenticeship Electricity, Sound Technician, CA

Certificate of Achievement

Control Number:
19589

Curriculum Id:
SCC.AEST.CA

The Certificate of Achievement in Apprenticeship Electricity, Sound Technician provides related and supplemental instruction for electrical apprentices who have been recommended by the Joint Apprenticeship Committee. Interested apprentices should contact the committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may lead to state journeyworker certification.

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<td>Sound and Communication Apprentice 8</td>
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</tbody>
</table>

Program Requirements

Certificate of Achievement

Certificate requirements: 36.0 Units

AEL021 - Sound and Communication Apprentice 1 4.5
AND
AEL022 - Sound and Communication Apprentice 2 4.5
AND
AEL023 - Sound and Communication Apprentice 3 4.5
AND
AEL024 - Sound and Communication Apprentice 4 4.5
Certificate requirements:

**36.0 Units**

**AND**

AEL025 - Sound and Communication Apprentice 5  
4.5

**AND**

AEL026 - Sound and Communication Apprentice 6  
4.5

**AND**

AEL027 - Sound and Communication Apprentice 7  
4.5

**AND**

AEL028 - Sound and Communication Apprentice 8  
4.5

Total Units  
36.0

**Learning Outcomes**

Begin a career as a journeyworker electrician.
Have a basis for further college education.

**Labor Market Data**

**Electricians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>63K</td>
<td>34K - 105K</td>
<td>3903 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

**First-Line Supervisors of Construction Trades and Extraction Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
<td>30K - 121K</td>
<td>3114 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

**First-Line Supervisors of Mechanics, Installers, and Repairers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>84K</td>
<td>48K - 125K</td>
<td>1469 Annual Openings Graduates*</td>
</tr>
</tbody>
</table>

**Helpers--Electricians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>37K</td>
<td></td>
<td>324 Annual Openings</td>
</tr>
</tbody>
</table>
Apprenticeship Operating Engineers, Construction Safety Inspector, AS

A.S. Degree Major

Control Number:
31503

Curriculum Id:
SCC.AOESA.AS

The Associate of Science degree in Apprenticeship Operating Engineers, Construction Safety Inspector provides the related and supplemental instruction required for state-indentured operating engineer apprentices. Construction Safety Inspectors perform the equipment and jobsite inspections that ensure safe and proper procedures and regulations are being followed. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status, and OSHA 10, OSHA 30, CPR and First Aid certification.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE011</td>
<td>Construction Safety Inspector Apprentice 1</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE012</td>
<td>Construction Safety Inspector Apprentice 2</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE013</td>
<td>Construction Safety Inspector Apprentice 3</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE014</td>
<td>Construction Safety Inspector Apprentice 4</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE015</td>
<td>Construction Safety Inspector Apprentice 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE016</td>
<td>Construction Safety Inspector Apprentice 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.S. Degree Major

Major requirements: 24.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE011</td>
<td>Construction Safety Inspector Apprentice 1</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>AOE012</td>
<td>Construction Safety Inspector Apprentice 2</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td><strong>AND</strong></td>
<td></td>
</tr>
<tr>
<td>AOE013</td>
<td>Construction Safety Inspector Apprentice 3</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*For Program

Graduates*

- Security and Fire Alarm Systems Installers
  
<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26K LOW</td>
<td>62K HIGH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For Program
Major requirements: 24.0 Units

AND

AOE014 - Construction Safety Inspector Apprentice 4 4.0

AND

AOE015 - Construction Safety Inspector Apprentice 5 4.0

AND

AOE016 - Construction Safety Inspector Apprentice 6 4.0

Total Units 24.0

Learning Outcomes
Meet the related and supplemental instruction requirements for operating engineer apprentices to become journeyworkers. Have a foundation for furthering their college education.

Labor Market Data

### Construction and Building Inspectors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
<td>722</td>
</tr>
<tr>
<td>32K</td>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>132K</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Fire Inspectors and Investigators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>137K</td>
<td>26</td>
</tr>
<tr>
<td>86K</td>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td>165K</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Apply Now Request Info

Apprenticeship Operating Engineers, Construction Safety Inspector, CA

Certificate of Achievement

Control Number: 31574

Curriculum Id: SCC.AOESA.CA

The Certificate of Achievement in Apprenticeship Operating Engineers, Construction Safety Inspector provides the related and supplemental instruction required for state-indentured operating engineer apprentices. Construction Safety Inspectors perform the equipment and jobsite inspections that ensure safe and proper procedures and regulations are being followed. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status; and, OSHA 10, OSHA 30, CPR and First Aid certification.

Program Courses
## Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE011</td>
<td>Construction Safety Inspector Apprentice 1</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE012</td>
<td>Construction Safety Inspector Apprentice 2</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE013</td>
<td>Construction Safety Inspector Apprentice 3</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE014</td>
<td>Construction Safety Inspector Apprentice 4</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE015</td>
<td>Construction Safety Inspector Apprentice 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE016</td>
<td>Construction Safety Inspector Apprentice 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

## Program Requirements

**Certificate of Achievement**

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>24.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE011 - Construction Safety Inspector Apprentice 1</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE012 - Construction Safety Inspector Apprentice 2</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE013 - Construction Safety Inspector Apprentice 3</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE014 - Construction Safety Inspector Apprentice 4</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE015 - Construction Safety Inspector Apprentice 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE016 - Construction Safety Inspector Apprentice 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units**

24.0

## Learning Outcomes

Meet the related and supplemental instruction requirements for operating engineers apprentices to become journeyworkers.

Have a foundation for furthering their college education.

## Labor Market Data

### Construction and Building Inspectors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85K AVERAGE</td>
<td>32K LOW</td>
<td>722 Annual Openings</td>
</tr>
<tr>
<td></td>
<td>132K HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

*For Program
Apprenticeship Operating Engineers, Heavy Duty Repairer, AS

A.S. Degree Major

Control Number:
17687

Curriculum Id:
SCC.AOERE.AS

The Associate of Science degree in Apprenticeship Operating Engineers Heavy Duty Repairer provides the required related and supplemental instruction for state-indentured operating engineer apprentices. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE031</td>
<td>Heavy Duty Repairer 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE032</td>
<td>Heavy Duty Repairer 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE033</td>
<td>Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE034</td>
<td>Advanced Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE035</td>
<td>Heavy Duty Repairer 5</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE036</td>
<td>Disassembly and Assembly</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.S. Degree Major

Major requirements: 18.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE031</td>
<td>Heavy Duty Repairer 1</td>
<td>3.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE032</td>
<td>Heavy Duty Repairer 2</td>
<td>3.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE033</td>
<td>Hydraulics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE034</td>
<td>Advanced Hydraulics</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Major requirements: 18.0 Units

AOE035 - Heavy Duty Repairer 5 3.0

AND

AOE036 - Disassembly and Assembly 3.0

Total Units 18.0

Learning Outcomes
Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

Labor Market Data

**Bus and Truck Mechanics and Diesel Engine Specialists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>58K</td>
<td>34K</td>
<td>944 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>88K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Electrical and Electronics Installers and Repairers, Transportation Equipment**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>89K</td>
<td>58K</td>
<td>51 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>106K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Farm Equipment Mechanics and Service Technicians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>43K</td>
<td>25K</td>
<td>56 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>81K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Helpers--Installation, Maintenance, and Repair Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>33K</td>
<td>25K</td>
<td>563 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>51K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

**Maintenance Workers, Machinery**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>56K</td>
<td>34K</td>
<td>194 Annual Openings</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>86K</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>
Apprenticeship Operating Engineers, Heavy Duty Repairer, CA

Certificate of Achievement

Control Number:
21654

Curriculum Id:
SCC.AOERE.CA

The Certificate of Achievement in Apprenticeship Operating Engineers, Heavy Duty Repairer provides the required related and supplemental instruction for state-indentured operating engineer apprentices. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE031</td>
<td>Heavy Duty Repairer 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE032</td>
<td>Heavy Duty Repairer 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE033</td>
<td>Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE034</td>
<td>Advanced Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE035</td>
<td>Heavy Duty Repairer 5</td>
<td>3.0</td>
</tr>
<tr>
<td>AOE036</td>
<td>Disassembly and Assembly</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>18.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE031 - Heavy Duty Repairer 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE032 - Heavy Duty Repairer 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE033 - Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE034 - Advanced Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE035 - Heavy Duty Repairer 5</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE036 - Disassembly and Assembly</td>
<td>3.0</td>
</tr>
</tbody>
</table>
## Learning Outcomes

Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

## Labor Market Data

### Bus and Truck Mechanics and Diesel Engine Specialists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>58K</td>
<td>8K</td>
<td>944 Annual Openings</td>
</tr>
<tr>
<td>34K</td>
<td>8K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Electrical and Electronics Installers and Repairers, Transportation Equipment

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>89K</td>
<td>106K</td>
<td>51 Annual Openings</td>
</tr>
<tr>
<td>58K</td>
<td>106K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Farm Equipment Mechanics and Service Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>43K</td>
<td>81K</td>
<td>56 Annual Openings</td>
</tr>
<tr>
<td>25K</td>
<td>81K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Helpers--Installation, Maintenance, and Repair Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>33K</td>
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<td>563 Annual Openings</td>
</tr>
<tr>
<td>25K</td>
<td>51K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

### Maintenance Workers, Machinery

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>56K</td>
<td>86K</td>
<td>194 Annual Openings</td>
</tr>
<tr>
<td>34K</td>
<td>86K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>*For Program</td>
</tr>
</tbody>
</table>

*For Program

---

**Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, AS**

A.S. Degree Major
Control Number:
11983

Curriculum Id:
SCC.AOEOP.AS

The Associate of Science degree in Apprenticeship Operating Engineers Heavy Equipment/Landscape Operator Engineer provides the related and supplemental instruction required for state-indentured apprentices. Heavy equipment/landscape operator engineers are highly trained, skilled professionals who operate heavy construction equipment on high-rise buildings, roads, and freeways. Interested apprentices should contact the Operating Engineers Apprenticeship Training Trust and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE041</td>
<td>Introduction to Apprenticeship</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE042</td>
<td>Grade Checking</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE043</td>
<td>Equipment Operator 3</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE044</td>
<td>Plan Reading</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE045</td>
<td>Equipment Operator 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE046</td>
<td>Hazmat 6</td>
<td>4.0</td>
</tr>
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</table>

Program Requirements
A.S. Degree Major

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>24.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE041 - Introduction to Apprenticeship</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE042 - Grade Checking</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE043 - Equipment Operator 3</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE044 - Plan Reading</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE045 - Equipment Operator 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE046 - Hazmat 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Units 24.0

Learning Outcomes
Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

## Labor Market Data

### Continuous Mining Machine Operators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48K</td>
<td>22</td>
</tr>
<tr>
<td>AVERAGE</td>
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<td>Annual</td>
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<tr>
<td></td>
<td>28K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>94K</td>
<td>Graduates*</td>
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<tr>
<td>LOW</td>
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<td>*For Program</td>
</tr>
<tr>
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</table>

### Crane and Tower Operators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tr>
<td></td>
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<td>AVERAGE</td>
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<td>Annual</td>
</tr>
<tr>
<td></td>
<td>34K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>119K</td>
<td>Graduates*</td>
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<td>LOW</td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
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</table>

### Dredge Operators

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>LOW</td>
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<td>*For Program</td>
</tr>
<tr>
<td>HIGH</td>
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</table>

### Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>49K</td>
<td>135</td>
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<tr>
<td></td>
<td>84K</td>
<td>Graduates*</td>
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<tr>
<td>LOW</td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
<td>HIGH</td>
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### Excavating and Loading Machine and Dragline Operators, Surface Mining

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>Annual</td>
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<tr>
<td></td>
<td>40K</td>
<td>Openings</td>
</tr>
<tr>
<td></td>
<td>82K</td>
<td>Graduates*</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>*For Program</td>
</tr>
<tr>
<td>HIGH</td>
<td></td>
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</table>

---

**Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, CA**

**Certificate of Achievement**

**Control Number:**

21655

**Curriculum Id:**

Apply Now Request Info
The Certificate of Achievement in Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer provides the related and supplemental instruction required for state-indentured apprentices. Heavy Equipment/Landscape Operator Engineers are highly trained, skilled professionals who operate heavy construction equipment on high-rise buildings, roads, and freeways. Interested apprentices should contact the Operating Engineers Apprenticeship Training Trust and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE041</td>
<td>Introduction to Apprenticeship</td>
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</tr>
<tr>
<td>AOE042</td>
<td>Grade Checking</td>
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</tr>
<tr>
<td>AOE043</td>
<td>Equipment Operator 3</td>
<td>4.0</td>
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<tr>
<td>AOE044</td>
<td>Plan Reading</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE045</td>
<td>Equipment Operator 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE046</td>
<td>Hazmat 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>24.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE041 - Introduction to Apprenticeship</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE042 - Grade Checking</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE043 - Equipment Operator 3</td>
<td>4.0</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>AOE045 - Equipment Operator 5</td>
<td>4.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE044 - Plan Reading</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE046 - Hazmat 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Units 24.0

Learning Outcomes
Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

Labor Market Data
### Continuous Mining Machine Operators

Job Growth: 

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>48K AVERAGE</td>
<td>22 Annual Openings Graduates*</td>
</tr>
<tr>
<td>28K LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>94K HIGH</td>
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</tr>
</tbody>
</table>

### Crane and Tower Operators

Job Growth: 

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>74K AVERAGE</td>
<td>208 Annual Openings Graduates*</td>
</tr>
<tr>
<td>34K LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>119K HIGH</td>
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</tr>
</tbody>
</table>

### Dredge Operators

Job Growth: 

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>53K AVERAGE</td>
<td>10 Annual Openings Graduates*</td>
</tr>
<tr>
<td>28K LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>110K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Earth Drillers, Except Oil and Gas; and Explosives Workers, Ordnance Handling Experts, and Blasters

Job Growth: 

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>49K AVERAGE</td>
<td>135 Annual Openings Graduates*</td>
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<tr>
<td>35K LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>84K HIGH</td>
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</tbody>
</table>

### Excavating and Loading Machine and Dragline Operators, Surface Mining

Job Growth: 

<table>
<thead>
<tr>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>55K AVERAGE</td>
<td>108 Annual Openings Graduates*</td>
</tr>
<tr>
<td>40K LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td>82K HIGH</td>
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</tr>
</tbody>
</table>

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**Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, AS**

A.S. Degree Major

**Control Number:**

17686

**Curriculum Id:**

SCC.AOEPE.AS
The Associate of Science degree in Apprenticeship Operating Engineers Plant Equipment/Rock, Sand and Gravel provides the required related and supplemental instruction for state-indentured operating engineer apprentices. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE021</td>
<td>Plant Equipment Operator 1</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE022</td>
<td>Plant Equipment Operator 2</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE023</td>
<td>Plant Equipment Operator 3</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE024</td>
<td>Plant Equipment Operator 4</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE025</td>
<td>Plant Equipment Operator 5</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE026</td>
<td>Plant Equipment Operator 6</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### Program Requirements

**A.S. Degree Major**

Major requirements: 24.0 Units

- AOE021 - Plant Equipment Operator 1  4.0
- AOE022 - Plant Equipment Operator 2  4.0
- AOE023 - Plant Equipment Operator 3  4.0
- AOE024 - Plant Equipment Operator 4  4.0
- AOE025 - Plant Equipment Operator 5  4.0
- AOE026 - Plant Equipment Operator 6  4.0

Total Units 24.0

### Learning Outcomes

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

### Labor Market Data

**Computer and Information Systems Managers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbe-bed7-d032b0eb18
### Construction Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>1898</td>
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</tbody>
</table>

### First-Line Supervisors of Mechanics, Installers, and Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
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### First-Line Supervisors of Production and Operating Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60K</td>
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</table>

### General and Operations Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

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Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, CA

Certificate of Achievement

**Control Number:**

21656

**Curriculum Id:**

SCC.AOEPE.CA

The Certificate of Achievement in Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel provides the required related and supplemental instruction for state-indentured operating engineer apprentices. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.
Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE021</td>
<td>Plant Equipment Operator 1</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE022</td>
<td>Plant Equipment Operator 2</td>
<td>4.0</td>
</tr>
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<td>AOE023</td>
<td>Plant Equipment Operator 3</td>
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<td>4.0</td>
</tr>
<tr>
<td>AOE025</td>
<td>Plant Equipment Operator 5</td>
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</tr>
<tr>
<td>AOE026</td>
<td>Plant Equipment Operator 6</td>
<td>4.0</td>
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Program Requirements
Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>24.0 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE021 - Plant Equipment Operator 1</td>
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</tr>
<tr>
<td>AND</td>
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<tr>
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<tr>
<td>AND</td>
<td></td>
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<td>4.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>AOE026 - Plant Equipment Operator 6</td>
<td>4.0</td>
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</table>

Total Units 24.0

Learning Outcomes
Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Computer and Information Systems Managers</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td>AVERAGE</td>
<td>LOW 90K</td>
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<td>283K</td>
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<td></td>
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<td>*For Program</td>
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https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6e1b18
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<table>
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<tr>
<th>Job Growth</th>
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<th>Competition</th>
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<tbody>
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<td></td>
<td>79K</td>
<td>1898</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
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<tr>
<td></td>
<td>23K</td>
<td>Openings</td>
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<tr>
<td></td>
<td>177K</td>
<td>Graduates*</td>
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<td></td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
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</table>

## First-Line Supervisors of Mechanics, Installers, and Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>84K</td>
<td>1469</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
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<tr>
<td></td>
<td>48K</td>
<td>Openings</td>
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<td></td>
<td>125K</td>
<td>Graduates*</td>
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<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
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</table>

## First-Line Supervisors of Production and Operating Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60K</td>
<td>2236</td>
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<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
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<tr>
<td></td>
<td>34K</td>
<td>Openings</td>
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<tr>
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<td>106K</td>
<td>Graduates*</td>
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<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
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</table>

## General and Operations Managers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>108K</td>
<td>10027</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>51K</td>
<td>Openings</td>
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<td></td>
<td>269K</td>
<td>Graduates*</td>
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<td></td>
<td>LOW</td>
<td>*For Program</td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td></td>
</tr>
</tbody>
</table>

### Apprenticeship Operating Engineers, Special Inspector, AS

**A.S. Degree Major**

**Control Number:**
17688

**Curriculum Id:**
SCC.AOESP.AS

The Associate of Science degree in Apprenticeship Operating Engineers Special Inspector provides the required related and supplemental instruction for state-indentured operating engineer apprentices. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE075A</td>
<td>Soils Inspection and Testing</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE076A</td>
<td>Structural Plan Reading for Inspectors</td>
<td>4.0</td>
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</tbody>
</table>
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE071A</td>
<td>Reinforced Concrete</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE072A</td>
<td>Prestressed Concrete</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE073A</td>
<td>Structural Steel/Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE074A</td>
<td>Structural Masonry</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE077A</td>
<td>ICC Soils Special Inspector</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.S. Degree Major

Major requirements: 8.0 Units

AOE075A - Soils Inspection and Testing 4.0

AND

AOE076A - Structural Plan Reading for Inspectors 4.0

Select four (4) courses from the following: 16.0 Units

AOE071A - Reinforced Concrete 4.0

AND

AOE072A - Prestressed Concrete 4.0

AND

AOE073A - Structural Steel/Welding 4.0

AND

AOE074A - Structural Masonry 4.0

AND

AOE077A - ICC Soils Special Inspector 4.0

Total Units 24.0

Learning Outcomes

Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Architectural and Civil Drafters</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth</td>
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<td>42K</td>
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<tr>
<td>Graduates*</td>
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</table>
Apprenticeship Operating Engineers, Special Inspector, CA

Certificate of Achievement

Control Number:
21665

Curriculum Id:
SCC.AOESP.CA

The Certificate of Achievement in Operating Engineers Special Inspector provides the required related and supplemental instruction for state-indentured operating engineer apprentices. Interested apprentices should contact the Operating Engineers Joint Apprenticeship and Training Committee and the Apprenticeship Office at Santiago Canyon College. Successful completion may result in journeyworker status.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AOE075A</td>
<td>Soils Inspection and Testing</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE071A</td>
<td>Reinforced Concrete</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE072A</td>
<td>Prestressed Concrete</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE073A</td>
<td>Structural Steel/Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE074A</td>
<td>Structural Masonry</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE077A</td>
<td>ICC Soils Special Inspector</td>
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Program Requirements

Certificate of Achievement

Certificate requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE075A</td>
<td>Soils Inspection and Testing</td>
<td>4.0</td>
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<tr>
<td>AOE076A</td>
<td>Structural Plan Reading for Inspectors</td>
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</table>

AND

Select four (4) courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOE071A</td>
<td>Reinforced Concrete</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE072A</td>
<td>Prestressed Concrete</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE073A</td>
<td>Structural Steel/Welding</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE074A</td>
<td>Structural Masonry</td>
<td>4.0</td>
</tr>
<tr>
<td>AOE077A</td>
<td>ICC Soils Special Inspector</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Units 24.0

Learning Outcomes

Begin a career as a journeyworker operating engineer.
Have a basis for further college education.

Labor Market Data

Architectural and Civil Drafters
Apprenticeship Power Lineman, AS

A.S. Degree Major

Control Number:
11981

Curriculum Id:
SCC.APLAS

The Associate of Science degree in Apprenticeship Power Lineman provides the required related and supplemental instruction for power lineman apprentices. The work of the power lineman involves installing and maintaining power poles, erecting steel towers, stringing wire, building substations, climbing power poles and installing underground and street lighting systems. It’s highly skilled work that
requires a great deal of concentration, dexterity, and knowledge. Interested apprentices should contact the California-Nevada Joint Apprentice Training Committee and the Apprenticeship Office at Santiago Canyon College.

## Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APL020</td>
<td>Orientation</td>
<td>3.0</td>
</tr>
<tr>
<td>APL021</td>
<td>Power Lineman Apprentice 1</td>
<td>3.0</td>
</tr>
<tr>
<td>APL022</td>
<td>Power Lineman Apprentice 2</td>
<td>3.0</td>
</tr>
<tr>
<td>APL023</td>
<td>Power Lineman Apprentice 3</td>
<td>3.0</td>
</tr>
<tr>
<td>APL024</td>
<td>Power Lineman Apprentice 4</td>
<td>3.0</td>
</tr>
<tr>
<td>APL025</td>
<td>Power Lineman Apprentice 5</td>
<td>3.0</td>
</tr>
<tr>
<td>APL026</td>
<td>Power Lineman Apprentice 6</td>
<td>3.0</td>
</tr>
<tr>
<td>APL041</td>
<td>Work Methods Training</td>
<td>1.0</td>
</tr>
<tr>
<td>APL042</td>
<td>Rubber Gloves Training</td>
<td>1.0</td>
</tr>
<tr>
<td>APL043</td>
<td>Hot Sticks Training</td>
<td>1.0</td>
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## Program Requirements
A.S. Degree Major

Major requirements: 24.0 Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APL020</td>
<td>Orientation</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL021</td>
<td>Power Lineman Apprentice 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL022</td>
<td>Power Lineman Apprentice 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL023</td>
<td>Power Lineman Apprentice 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL024</td>
<td>Power Lineman Apprentice 4</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL025</td>
<td>Power Lineman Apprentice 5</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APL026</td>
<td>Power Lineman Apprentice 6</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
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Major requirements:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APL041 - Work Methods Training</td>
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<td>AND</td>
<td></td>
</tr>
<tr>
<td>APL042 - Rubber Gloves Training</td>
<td>1.0</td>
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<td>AND</td>
<td></td>
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<tr>
<td>APL043 - Hot Sticks Training</td>
<td>1.0</td>
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</tbody>
</table>

Total Units: 24.0

Learning Outcomes  
Begin a career as a journeyworker power lineman.  
Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Job Growth</th>
<th>Wages (Annual)</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Power-Line Installers and Repairers</td>
<td></td>
<td></td>
<td>273</td>
</tr>
<tr>
<td>First-Line Supervisors of Mechanics, Installers, and Repairers</td>
<td></td>
<td>84K AVERAGE</td>
<td>1469</td>
</tr>
<tr>
<td>Telecommunications Line Installers and Repairers</td>
<td></td>
<td></td>
<td>694</td>
</tr>
</tbody>
</table>

Apply Now Request Info

Apprenticeship Power Lineman, CA
Certificate of Achievement

Control Number: 21652

Curriculum Id: SCC.AELPO.CA
The Certificate of Achievement in Apprenticeship Power Lineman provides the required related and supplemental instruction for power lineman apprentices. The work of the power lineman involves installing and maintaining power poles, erecting steel towers, stringing wire, building substations, climbing power poles and installing underground and street lighting systems. It's highly skilled work that requires a great deal of concentration, dexterity, and knowledge. Interested apprentices should contact the California-Nevada Joint Apprentice Training Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APL020</td>
<td>Orientation</td>
<td>3.0</td>
</tr>
<tr>
<td>APL021</td>
<td>Power Lineman Apprentice 1</td>
<td>3.0</td>
</tr>
<tr>
<td>APL022</td>
<td>Power Lineman Apprentice 2</td>
<td>3.0</td>
</tr>
<tr>
<td>APL023</td>
<td>Power Lineman Apprentice 3</td>
<td>3.0</td>
</tr>
<tr>
<td>APL024</td>
<td>Power Lineman Apprentice 4</td>
<td>3.0</td>
</tr>
<tr>
<td>APL025</td>
<td>Power Lineman Apprentice 5</td>
<td>3.0</td>
</tr>
<tr>
<td>APL026</td>
<td>Power Lineman Apprentice 6</td>
<td>3.0</td>
</tr>
<tr>
<td>APL041</td>
<td>Work Methods Training</td>
<td>1.0</td>
</tr>
<tr>
<td>APL042</td>
<td>Rubber Gloves Training</td>
<td>1.0</td>
</tr>
<tr>
<td>APL043</td>
<td>Hot Sticks Training</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Achievement

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.0 Units</td>
<td></td>
</tr>
</tbody>
</table>

| APL020 - Orientation      | 3.0   |
| AND                       |       |
| APL021 - Power Lineman Apprentice 1 | 3.0 |
| AND                       |       |
| APL022 - Power Lineman Apprentice 2 | 3.0 |
| AND                       |       |
| APL023 - Power Lineman Apprentice 3 | 3.0 |
| AND                       |       |
| APL024 - Power Lineman Apprentice 4 | 3.0 |
| AND                       |       |
| APL025 - Power Lineman Apprentice 5 | 3.0 |
| AND                       |       |
| APL026 - Power Lineman Apprentice 6 | 3.0 |
Certificate requirements:  

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AND</td>
<td></td>
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<tr>
<td>APL041 - Work Methods Training</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>APL042 - Rubber Gloves Training</td>
<td>1.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>APL043 - Hot Sticks Training</td>
<td>1.0</td>
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<tr>
<td>Total Units</td>
<td>24.0</td>
</tr>
</tbody>
</table>

Learning Outcomes

- Begin a career as a journeyworker power lineman.
- Have a basis for further college education.

Labor Market Data

<table>
<thead>
<tr>
<th>Industry</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical Power-Line Installers and Repairers</strong></td>
<td>100K</td>
<td>134K (Average)</td>
<td>273 Annual Openings Graduates*</td>
</tr>
<tr>
<td></td>
<td>37K (Low)</td>
<td>134K (High)</td>
<td></td>
</tr>
<tr>
<td><strong>First-Line Supervisors of Mechanics, Installers, and Repairers</strong></td>
<td>84K (Average)</td>
<td>125K (High)</td>
<td>1469 Annual Openings Graduates*</td>
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<tr>
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<td>48K (Low)</td>
<td>125K (High)</td>
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</tr>
<tr>
<td><strong>Telecommunications Line Installers and Repairers</strong></td>
<td>57K (Average)</td>
<td>97K (High)</td>
<td>694 Annual Openings Graduates*</td>
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<tr>
<td></td>
<td>32K (Low)</td>
<td>97K (High)</td>
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Apprenticeship Surveying, Chainman, AS

A.S. Degree Major

Control Number: 13230

Curriculum Id: SCC.ASVCN.AS
The Associate of Science degree in Apprenticeship Surveying Chainman prepares students for a career in surveying and provides the related and supplemental instruction required for apprentice surveyors. Successful completion leads to journeyworker certification. Employers include land surveying and civil engineering firms, and general construction contractors throughout Southern California. Those interested should contact the Southern California Surveying Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ASV030</td>
<td>Labor Relations</td>
<td>0.5</td>
</tr>
<tr>
<td>ASV040</td>
<td>Standard First Aid</td>
<td>0.1</td>
</tr>
<tr>
<td>ASV101</td>
<td>Chainman Apprentice 1</td>
<td>5.0</td>
</tr>
<tr>
<td>ASV102</td>
<td>Chainman Apprentice 2</td>
<td>5.0</td>
</tr>
<tr>
<td>ASV103</td>
<td>Chainman Apprentice 3</td>
<td>5.0</td>
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<td>ASV104</td>
<td>Chainman Apprentice 4</td>
<td>5.0</td>
</tr>
<tr>
<td>ASV105</td>
<td>Chainman Apprentice 5</td>
<td>5.0</td>
</tr>
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Program Requirements
A.S. Degree Major

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>25.6 Units</th>
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</thead>
<tbody>
<tr>
<td>ASV030 - Labor Relations</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV040 - Standard First Aid</td>
<td>0.1</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV101 - Chainman Apprentice 1</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
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</tr>
<tr>
<td>ASV102 - Chainman Apprentice 2</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ASV103 - Chainman Apprentice 3</td>
<td>5.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV104 - Chainman Apprentice 4</td>
<td>5.0</td>
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<tr>
<td>AND</td>
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<td>ASV105 - Chainman Apprentice 5</td>
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<td>Total Units</td>
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Learning Outcomes
Begin a career as a journeyworker chainman surveyor.
Labor Market Data

Cartographers and Photogrammetrists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>85K</td>
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<tr>
<td>AVERAGE</td>
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<tr>
<td>24K</td>
<td>122K</td>
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<td>LOW</td>
<td>HIGH</td>
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Surveying and Mapping Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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Surveyors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<td>40K</td>
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Apprenticeship Surveying, Chainman, CA

Certificate of Achievement

Control Number:
21667

Curriculum Id:
SCC.ASVCN.CA

The Certificate of Achievement in Apprenticeship Surveying, Chainman prepares students for a career in surveying and provides the related and supplemental instruction required for apprentice surveyors. Successful completion leads to journeyworker certification. Employers include land surveying and civil engineering firms, and general construction contractors throughout Southern California. Those interested should contact the Southern California Surveying Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASV030</td>
<td>Labor Relations</td>
<td>0.5</td>
</tr>
<tr>
<td>ASV040</td>
<td>Standard First Aid</td>
<td>0.1</td>
</tr>
<tr>
<td>ASV101</td>
<td>Chainman Apprentice 1</td>
<td>5.0</td>
</tr>
<tr>
<td>ASV102</td>
<td>Chainman Apprentice 2</td>
<td>5.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>ASV103</td>
<td>Chainman Apprentice 3</td>
<td>5.0</td>
</tr>
<tr>
<td>ASV104</td>
<td>Chainman Apprentice 4</td>
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</tr>
<tr>
<td>ASV105</td>
<td>Chainman Apprentice 5</td>
<td>5.0</td>
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</table>

**Program Requirements**

**Certificate of Achievement**

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>25.6 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASV030 - Labor Relations</td>
<td>0.5</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
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<td>0.1</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ASV101 - Chainman Apprentice 1</td>
<td>5.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ASV102 - Chainman Apprentice 2</td>
<td>5.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV103 - Chainman Apprentice 3</td>
<td>5.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV104 - Chainman Apprentice 4</td>
<td>5.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV105 - Chainman Apprentice 5</td>
<td>5.0</td>
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</tbody>
</table>

**Total Units** 25.600000381469727

**Learning Outcomes**

Begin a career as a journeyworker chainman surveyor.
Have a basis for further college education.

**Labor Market Data**

**Cartographers and Photogrammetrists**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>85K</td>
<td>28</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>24K</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>122K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
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</table>

**Surveying and Mapping Technicians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>
Apprenticeship Surveying, Chief of Party, AS
A.S. Degree Major

Control Number: 11990

Curriculum Id: SCC.ASVCF.AS

The Associate of Science degree in Apprenticeship Surveying, Chief of Party prepares students for career advancement in surveying. If combined with appropriate field experience, completion of the program may lead to employment as party chief and eventually to professional California state licensing as a land surveyor. The Chief of Party leads the work of a survey party in surveying Earth’s surface to determine precise locations and measurements. They are responsible for checking the accuracy of the survey party’s work, making accurate measurements, and solving survey problems. Those interested should contact the Southern California Surveying Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASV121</td>
<td>Plane Surveying and Coordinate Geometry</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV122</td>
<td>Advanced Coordinate Geometry</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV123</td>
<td>Laptop Surveying/Aerial Photogrammetry</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV124</td>
<td>Plan Reading and Subdivision Surveying</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV125</td>
<td>Major Project Plans and Survey Layout</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV126</td>
<td>Control and Geodetic Surveying</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV127</td>
<td>U.S. Public Land Surveys</td>
<td>3.0</td>
</tr>
<tr>
<td>ASV128</td>
<td>Property Surveys and Legal Descriptions</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Program Requirements

A.S. Degree Major

Major requirements: 24.0 Units

ASV121 - Plane Surveying and Coordinate Geometry 3.0
Major requirements: 24.0 Units

ASV122 - Advanced Coordinate Geometry 3.0

AND

ASV123 - Laptop Surveying/Aerial Photogrammetry 3.0

AND

ASV124 - Plan Reading and Subdivision Surveying 3.0

AND

ASV125 - Major Project Plans and Survey Layout 3.0

AND

ASV126 - Control and Geodetic Surveying 3.0

AND

ASV127 - U.S. Public Land Surveys 3.0

AND

ASV128 - Property Surveys and Legal Descriptions 3.0

Total Units 24.0

Learning Outcomes

- Begin a career as a journeyworker party chief surveyor.
- Have a basis for further college education.

Labor Market Data

Cartographers and Photogrammetrists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85K</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>24K</td>
<td>122K</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

Surveying and Mapping Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>77K</td>
<td></td>
<td>202</td>
</tr>
<tr>
<td>30K</td>
<td>120K</td>
<td>Annual Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
</tr>
</tbody>
</table>

Surveyors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>100K</td>
<td></td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>Annual Openings</td>
</tr>
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</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6e6b18

711/2244
Apprenticeship Surveying, Chief of Party, CA

Certificate of Achievement

Control Number:

21666

Curriculum Id:

SCC.ASVCF.CA

The Certificate of Achievement in Apprenticeship Surveying, Chief of Party prepares students for career advancement in surveying. If combined with appropriate field experience, completion of the program may lead to employment as party chief and eventually to professional California state licensing as a land surveyor. The Chief of Party leads the work of a survey party in surveying Earth’s surface to determine precise locations and measurements. They are responsible for checking the accuracy of the survey party’s work, making accurate measurements, and solving survey problems. Those interested should contact the Southern California Surveying Apprenticeship Committee and the Apprenticeship Office at Santiago Canyon College.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASV121</td>
<td>Plane Surveying and Coordinate Geometry</td>
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<tr>
<td>ASV126</td>
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<td>ASV127</td>
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</tr>
<tr>
<td>ASV128</td>
<td>Property Surveys and Legal Descriptions</td>
<td>3.0</td>
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</tbody>
</table>

Program Requirements

Certificate of Achievement

<table>
<thead>
<tr>
<th>Major requirements:</th>
<th>24.0 Units</th>
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</thead>
<tbody>
<tr>
<td>ASV121 - Plane Surveying and Coordinate Geometry</td>
<td>3.0</td>
</tr>
<tr>
<td>AND</td>
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</tr>
<tr>
<td>ASV122 - Advanced Coordinate Geometry</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>ASV123 - Laptop Surveying/Aerial Photogrammetry</td>
<td>3.0</td>
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<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>ASV124 - Plan Reading and Subdivision Surveying</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Major requirements: 24.0 Units

AND

ASV125 - Major Project Plans and Survey Layout 3.0

AND

ASV126 - Control and Geodetic Surveying 3.0

AND

ASV127 - U.S. Public Land Surveys 3.0

AND

ASV128 - Property Surveys and Legal Descriptions 3.0

Total Units 24.0

Learning Outcomes

Begin a career as a journeyworker party chief surveyor.
Have a basis for further college education.

Labor Market Data

Cartographers and Photogrammetrists

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>85K</td>
<td>AVERAGE</td>
<td>28</td>
</tr>
<tr>
<td>24K LOW</td>
<td>122K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Surveying and Mapping Technicians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>77K</td>
<td>AVERAGE</td>
<td>202</td>
</tr>
<tr>
<td>30K LOW</td>
<td>120K HIGH</td>
<td></td>
</tr>
</tbody>
</table>

Surveyors

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>100K</td>
<td>AVERAGE</td>
<td>105</td>
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<tr>
<td>40K LOW</td>
<td>130K HIGH</td>
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</tbody>
</table>

Basic Employment Skills, CC

Certificate of Completion

Control Number:
Curriculum Id:
OEC.BES.CC

The Certificate of Completion in Basic Employment Skills is designed to provide strategies to reinforce and maintain money handling, reading, and writing skills necessary for entry-level employment.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR012</td>
<td>Applying Reading Skills on the Job</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR013</td>
<td>Applying Writing Skills on the Job</td>
<td>60.0</td>
</tr>
<tr>
<td>WKPR017</td>
<td>Applying Math Skills on the Job</td>
<td>60.0</td>
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</table>

Program Requirements
Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate Requirements: 180 hours (credits are in hours)</th>
<th>180.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR012 - Applying Reading Skills on the Job</td>
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</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR013 - Applying Writing Skills on the Job</td>
<td>60.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR017 - Applying Math Skills on the Job</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Total Hours
180.0

Learning Outcomes
Demonstrate proficient money handling, reading, and writing skills that are used in the workplace.

Apply Now Request Info

Carpenter, CC
Certificate of Completion

Control Number:
24097

Curriculum Id:
OEC.CPNTR.CC

The Certificate of Completion in Carpenter prepares students for entry-level employment in companies that manufacture kitchen and bathroom cabinets, music/media furniture, book shelves, and other furniture items using a variety of finishes.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCNST859</td>
<td>Introduction to Cabinetry/Furniture Refinishing Pre-Apprentice</td>
<td>180.0</td>
</tr>
<tr>
<td>VCNST953</td>
<td>Fundamentals of Cabinetry/Furniture Refinishing, Pre-Apprentice</td>
<td>180.0</td>
</tr>
</tbody>
</table>
Program Requirements

Certificate of Completion

Certificate requirements: 360 hours (credits are in hours) 360.0 Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCNST859</td>
<td>Introduction to Cabinetry/Furniture Refinishing Pre-Apprentice</td>
<td>180.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCNST953</td>
<td>Fundamentals of Cabinetry/Furniture Refinishing, Pre-Apprentice</td>
<td>180.0</td>
</tr>
</tbody>
</table>

Total Hours: 360.0

Learning Outcomes

Apply the concepts and skills of safe cabinetry in the design and construction of a project.

Labor Market Data

Cabinetmakers and Bench Carpenters

<table>
<thead>
<tr>
<th></th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td>458</td>
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<td>Graduates*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*For Program</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td></td>
</tr>
<tr>
<td></td>
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<td>HIGH</td>
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</table>

Carpenters

<table>
<thead>
<tr>
<th></th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>49K</td>
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<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>19K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>96K</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
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</tbody>
</table>

Construction and Building Inspectors

<table>
<thead>
<tr>
<th></th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>85K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>32K</td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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</table>

First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
<th></th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>72K</td>
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<td></td>
<td></td>
<td>AVERAGE</td>
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<tr>
<td></td>
<td></td>
<td>30K</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
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<td>HIGH</td>
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</table>

Helpers--Carpenters

<table>
<thead>
<tr>
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<th>Competition</th>
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</thead>
<tbody>
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<td></td>
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<td>36K</td>
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<tr>
<td></td>
<td></td>
<td>AVERAGE</td>
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</tbody>
</table>

Annual Openings Graduates* *For Program
Construction Laborer, CC

Certificate of Completion

Control Number:
24037

Curriculum Id:
OEC.CONST.CC

The Certificate of Completion in Construction Laborer prepares students for entry-level employment in the construction industry by providing basic knowledge and skills in construction with a focus on welding.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCNST608</td>
<td>Introduction to Welding, Pre-Apprentice</td>
<td>180.0</td>
</tr>
<tr>
<td>VCNST611</td>
<td>Fundamentals of Welding, Pre-Apprentice</td>
<td>180.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate requirements: 360 hours (credits are in hours)

VCNST608 - Introduction to Welding, Pre-Apprentice 180.0

AND

VCNST611 - Fundamentals of Welding, Pre-Apprentice 180.0

Total Hours 360.0

Learning Outcomes
Apply the concepts and skills of safe welding in the design and construction of a project.

Labor Market Data

<table>
<thead>
<tr>
<th>Carpenters</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>49K</td>
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<td>19K</td>
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<td>96K</td>
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<td></td>
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<td>Graduates*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
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</table>

<table>
<thead>
<tr>
<th>Chief Executives</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
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<td></td>
<td>141K</td>
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<td>446K</td>
<td>Openings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LOW</td>
<td>Graduates*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIGH</td>
<td></td>
<td></td>
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</tbody>
</table>
Custodial Technician, CC
Certificate of Completion

Control Number:
36900

Curriculum Id:
OEC.CUSTT.CC

The Certificate of Completion in Custodial Technician is designed to give students the necessary knowledge and skills to hold a custodial technician position. Students will learn safety standards and basic training of hazard materials (HAZMAT) set by California's Occupational Safety and Health Administration (CAL-OSHA) and Department of Transportation (DOT).

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCST101</td>
<td>Custodial Technician</td>
<td>60.0</td>
</tr>
<tr>
<td>VCST102</td>
<td>Basic Hazmat Safety Standards</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirements: 96 hours (credits are in hours) 96.0 Units

VCST101 - Custodial Technician 60.0
Certificate Requirements: 96 hours (credits are in hours)  

96.0 Units

**AND**

VCST102 - Basic Hazmat Safety Standards  

36.0

**Total Units**  

96.0

### Learning Outcomes

Apply the concepts of safety standards and hazardous materials used for custodial work in a private and public facility.

### Labor Market Data

#### First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
<td></td>
<td>3114</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>30K</td>
<td></td>
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<tr>
<td>LOW</td>
<td>121K</td>
<td></td>
</tr>
<tr>
<td></td>
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</table>

#### First-Line Supervisors of Housekeeping and Janitorial Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</tr>
<tr>
<td></td>
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</tbody>
</table>

#### First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>46K</td>
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<tr>
<td><strong>AVERAGE</strong></td>
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<td>LOW</td>
<td>92K</td>
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</tr>
<tr>
<td></td>
<td>HIGH</td>
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</tbody>
</table>

#### First-Line Supervisors of Mechanics, Installers, and Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<td><strong>AVERAGE</strong></td>
<td>48K</td>
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<td>LOW</td>
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</tr>
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#### Janitors and Cleaners, Except Maids and Housekeeping Cleaners

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
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<tr>
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</table>

*For Program
General Electrician, AS
A.S. Degree Major

Control Number:
18791

Curriculum Id:
SCC.GELCT.AS

The Associate of Science degree in General Electrician provides instruction for those seeking a career as an electrician. This meets the state requirements as an electrician trainee program.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT041</td>
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</tr>
<tr>
<td>ELCT051</td>
<td>Quality Safety Program and First Aid</td>
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Program Requirements
A.S. Degree Major

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>AND</td>
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<tr>
<td>AND</td>
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Major requirements:

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<td>AND</td>
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<td>ELCT047</td>
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<tr>
<td>ELCT048</td>
<td>General Electrician 8</td>
<td>3.0</td>
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<td>ELCT049</td>
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<tr>
<td>ELCT050</td>
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<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ELCT051</td>
<td>Quality Safety Program and First Aid</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total Units: 31.5

Learning Outcomes
Recertify health and safety, first aid and legally mandated electrical training required to maintain journeyworker status.

Labor Market Data

### Electricians

- **Wages**
  - AVERAGE: 63K
  - LOW: 34K
  - HIGH: 105K

- **Competition**: 3903
- **Annual Openings**
- **Graduates**: 63K
- *For Program

### First-Line Supervisors of Construction Trades and Extraction Workers

- **Wages**
  - AVERAGE: 72K
  - LOW: 30K
  - HIGH: 121K

- **Competition**: 3114
- **Annual Openings**
- **Graduates**: 72K
- *For Program

### First-Line Supervisors of Mechanics, Installers, and Repairers

- **Wages**
  - AVERAGE: 84K
  - LOW: 48K
  - HIGH: 179K

- **Competition**: 1469
- **Annual Openings**
Helpers--Electricians

Job Growth Wages Competition

37K
AVERAGE
26K 62K
LOW HIGH

Security and Fire Alarm Systems Installers

Job Growth Wages Competition

52K
AVERAGE
29K 79K
LOW HIGH

General Electrician, CA
Certificate of Achievement

Control Number:
18790

Curriculum Id:
SCC.GELCT.CA

The Certificate of Achievement in General Electrician provides instruction for those seeking a career as an electrician. This meets the state requirements as an electrician trainee program.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>ELCT041</td>
<td>General Electrician 1</td>
<td>3.0</td>
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<td>General Electrician 2</td>
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<td>3.0</td>
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<td>ELCT050</td>
<td>General Electrician 10</td>
<td>3.0</td>
</tr>
<tr>
<td>ELCT051</td>
<td>Quality Safety Program and First Aid</td>
<td>1.5</td>
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</tbody>
</table>
# Program Requirements

**Certificate of Achievement**

<table>
<thead>
<tr>
<th>Certificate requirements:</th>
<th>31.5 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT041 - General Electrician 1</td>
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<td>ELCT048 - General Electrician 8</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>ELCT051 - Quality Safety Program and First Aid</td>
<td>1.5</td>
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<tr>
<td>AND</td>
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<tr>
<td>ELCT050 - General Electrician 10</td>
<td>3.0</td>
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<tr>
<td>AND</td>
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</tr>
<tr>
<td>ELCT049 - General Electrician 9</td>
<td>3.0</td>
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</tbody>
</table>

**Total Units** 31.5

## Learning Outcomes

Recertify health and safety, first aid and legally mandated electrical training required to maintain journeyworker status.

## Labor Market Data

<table>
<thead>
<tr>
<th>Electricians</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>63K</td>
<td>3903 Annual Openings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVERAGE 34K 105K</td>
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</table>
General Medical Office Clerk, CC
Certificate of Completion

Control Number:
36208

Curriculum Id:
OEC.GMOC.CC

The Certificate of Completion in General Medical Office Clerk is designed to prepare students in acquiring or improving critical thinking, communications skills, and basic clerical skills necessary to work in a variety of hospital departments.

Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
</table>

Apply Now Request Info
Course Code | Course Title | Hours
---|---|---
WKPR007 | Social Skills and Necessary Etiquette | 60.0
WKPR010 | Customer Service for the Medical Field | 60.0
WKPR016 | Long Term Competitive Employment Training | 180.0

**Program Requirements**

Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate of Completion: 300 hours (credits are in hours)</th>
<th>300.0 Hours</th>
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</thead>
<tbody>
<tr>
<td>WKPR007 - Social Skills and Necessary Etiquette</td>
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</tbody>
</table>
AND |
| WKPR010 - Customer Service for the Medical Field | 60.0 |
AND |
| WKPR016 - Long Term Competitive Employment Training | 180.0 |

**Total Hours** 300.0

**Learning Outcomes**

Demonstrate knowledge of providing basic clerical support.

**Labor Market Data**

**Data Entry Keyers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<tbody>
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<td><strong>Annual Openings</strong></td>
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<td><strong>HIGH</strong></td>
<td><strong>Graduates</strong>*</td>
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</table>

*For Program

**File Clerks**

<table>
<thead>
<tr>
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<th>Competition</th>
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<td><strong>Annual Openings</strong></td>
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<tr>
<td><strong>LOW</strong></td>
<td><strong>HIGH</strong></td>
<td><strong>Graduates</strong>*</td>
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</tbody>
</table>

*For Program

**First-Line Supervisors of Office and Administrative Support Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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</thead>
<tbody>
<tr>
<td>60K</td>
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<td><strong>LOW</strong></td>
<td><strong>HIGH</strong></td>
<td><strong>Graduates</strong>*</td>
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</tbody>
</table>

*For Program

**Medical Assistants**
Maintenance Electrician, AS
A.S. Degree Major

Control Number:
11982

Curriculum Id:
SCC.AMME.AS

The Associate of Science degree in Maintenance Electrician provides the related and supplemental instruction required for the Metropolitan Water District (MWD) Maintenance Electrician apprentices who have been selected by the apprenticeship committee. Those interested should contact the Maintenance Electrician apprenticeship committee or the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AME021</td>
<td>Period 1</td>
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</tr>
<tr>
<td>AME052</td>
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<td>Period 3</td>
<td>4.5</td>
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<td>AME054</td>
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<tr>
<td>AME058</td>
<td>Period 8</td>
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</tbody>
</table>

Program Requirements
A.S. Degree Major

Major Requirements: 36.0 Units

AME021 - Period 1 4.5
Major Requirements:

AND

AME052 - Period 2
4.5

AND

AME053 - Period 3
4.5

AND

AME054 - Period 4
4.5

AND

AME055 - Period 5
4.5

AND

AME056 - Period 6
4.5

AND

AME057 - Period 7
4.5

AND

AME058 - Period 8
4.5

Total Units
36.0

Learning Outcomes

Begin a career as a journeyworker maintenance electrician.
Have a basis for further college education.

Labor Market Data

Electricians

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>Graduates*</td>
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First-Line Supervisors of Construction Trades and Extraction Workers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
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<tr>
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<tr>
<td>AVERAGE</td>
<td>121K</td>
<td>Openings</td>
</tr>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>Graduates*</td>
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</table>

First-Line Supervisors of Mechanics, Installers, and Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
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<th>Competition</th>
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### Maintenance Electrician, CA

**Certificate of Achievement**

**Control Number:**

21653

**Curriculum Id:**

SCC.AME.CA

The Certificate of Achievement in Maintenance Electrician provides the related and supplemental instruction required for the Metropolitan Water District (MWD) Maintenance Electrician apprentices who have been selected by the apprenticeship committee. Those interested should contact the Maintenance Electrician apprenticeship committee or the Apprenticeship Office at Santiago Canyon College.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AME021</td>
<td>Period 1</td>
<td>4.0</td>
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<tr>
<td>AME052</td>
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<td>4.0</td>
</tr>
<tr>
<td>AME058</td>
<td>Period 8</td>
<td>4.5</td>
</tr>
</tbody>
</table>
Program Requirements
Certificate of Achievement

Certificate Requirements: 36.0 Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Period</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AME021</td>
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<td>AND</td>
<td></td>
</tr>
<tr>
<td>AME058</td>
<td>Period 8</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Total Units: 36.0

Learning Outcomes
Begin a career as a journeyworker maintenance electrician.
Have a basis for further college education.

Labor Market Data

**Electricians**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>63K</td>
<td>63K</td>
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<tr>
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</tr>
<tr>
<td>Annual Openings</td>
<td>Graduates*</td>
<td>For Program</td>
</tr>
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</table>

**First-Line Supervisors of Construction Trades and Extraction Workers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>72K</td>
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<td>AVERAGE</td>
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<tr>
<td>30K LOW</td>
<td>121K HIGH</td>
<td></td>
</tr>
<tr>
<td>Annual Openings</td>
<td>Graduates*</td>
<td>For Program</td>
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</table>
Maintenance Mechanic, AS
A.S. Degree Major

Control Number:
16839

Curriculum Id:
SCC.AMMM.AS

The Associate of Science degree in Maintenance Mechanic provides the related and supplemental instruction required for the Metropolitan Water District (MWD) Maintenance Mechanic apprentices who have been selected by the apprenticeship committee. Those interested should contact the Maintenance Mechanic apprenticeship committee or the Apprenticeship Office at Santiago Canyon College.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<tr>
<td>AMM022</td>
<td>Period 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AMM023</td>
<td>Period 3</td>
<td>3.0</td>
</tr>
<tr>
<td>AMM024</td>
<td>Period 4</td>
<td>3.0</td>
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<td>AMM025</td>
<td>Period 5</td>
<td>3.0</td>
</tr>
<tr>
<td>AMM026</td>
<td>Period 6</td>
<td>3.0</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>AMM027</td>
<td>Period 7</td>
<td>3.0</td>
</tr>
<tr>
<td>AMM028</td>
<td>Period 8</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Program Requirements**

A.S. Degree Major

**Major Requirements:** 36.0 Units

- AMM021 - Period 1 4.5
- AND
- AMM022 - Period 2 4.5
- AND
- AMM023 - Period 3 4.5
- AND
- AMM024 - Period 4 4.5
- AND
- AMM025 - Period 5 4.5
- AND
- AMM026 - Period 6 4.5
- AND
- AMM027 - Period 7 4.5
- AND
- AMM028 - Period 8 4.5

**Total Units** 36.0

**Learning Outcomes**

- Begin a career as a journeyworker maintenance mechanic.
- Have a basis for further college education.

**Labor Market Data**

**Audiovisual Equipment Installers and Repairers**

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>41K</td>
<td>124</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>13K LOW</td>
<td>76K HIGH</td>
</tr>
</tbody>
</table>

**Camera and Photographic Equipment Repairers**

*For Program
## Maintenance Mechanic, CA

Certificate of Achievement

**Control Number:**
21651

**Curriculum Id:**
SCC.AMM.CA

The Certificate of Achievement in Maintenance Mechanic provides the related and supplemental instruction required for the Metropolitan Water District (MWD) Maintenance Mechanic apprentices who have been selected by the apprenticeship committee. Those interested should contact the Maintenance Mechanic apprenticeship committee or the Apprenticeship Office at Santiago Canyon College.

### Program Courses

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMM021</td>
<td>Period 1</td>
<td>4.5</td>
</tr>
<tr>
<td>AMM022</td>
<td>Period 2</td>
<td>4.5</td>
</tr>
<tr>
<td>AMM023</td>
<td>Period 3</td>
<td>4.5</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>AMM024</td>
<td>Period 4</td>
<td>4.5</td>
</tr>
<tr>
<td>AMM025</td>
<td>Period 5</td>
<td>4.5</td>
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<tr>
<td>AMM026</td>
<td>Period 6</td>
<td>4.5</td>
</tr>
<tr>
<td>AMM027</td>
<td>Period 7</td>
<td>4.5</td>
</tr>
<tr>
<td>AMM028</td>
<td>Period 8</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Achievement

Certificate Requirements: 36.0 Units

AMM021 - Period 1 4.5
AND
AMM022 - Period 2 4.5
AND
AMM023 - Period 3 4.5
AND
AMM024 - Period 4 4.5
AND
AMM025 - Period 5 4.5
AND
AMM026 - Period 6 4.5
AND
AMM027 - Period 7 4.5
AND
AMM028 - Period 8 4.5

Total Units 36.0

Learning Outcomes
Begin a career as a journeyworker maintenance mechanic.
Have a basis for further college education.

Labor Market Data
Audiovisual Equipment Installers and Repairers

<table>
<thead>
<tr>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>41K</td>
<td></td>
<td>124 Annual</td>
</tr>
</tbody>
</table>

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32baa61eb18
## Camera and Photographic Equipment Repairers

- **Job Growth**:
- **Wages**: AVERAGE 13K, LOW 7K, HIGH 76K
- **Competition**: AVERAGE 4K

## Coil Winders, Tapers, and Finishers

- **Job Growth**:
- **Wages**: AVERAGE 26K, LOW 6K, HIGH 63K
- **Competition**: AVERAGE 26K, LOW 6K, HIGH 63K

## Computer, Automated Teller, and Office Machine Repairers

- **Job Growth**:
- **Wages**: AVERAGE 25K, LOW 6K, HIGH 62K
- **Competition**: AVERAGE 25K, LOW 6K, HIGH 62K

## Electric Motor, Power Tool, and Related Repairers

- **Job Growth**:
- **Wages**: AVERAGE 30K, LOW 6K, HIGH 63K
- **Competition**: AVERAGE 30K, LOW 6K, HIGH 63K

## Understanding and Supporting Employees with Disabilities, CC

### Certificate of Completion

**Control Number:** 36369

**Curriculum Id:** OEC.UEWD.CC

Designed for employers, the Certificate of Completion in Understanding and Supporting Employees with Disabilities provides strategies to create and maintain an inclusive, equitable, and compliant workplace successfully integrating employees with disabilities.

### Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

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Program Requirements
Certificate of Completion

Certificate Requirements: 80 hours (credits are in hours) 80.0 Hours

WKPR100 - Understanding Employees with Disabilities in the Workplace 40.0
AND
WKPR101 - Strategies for Working with Employees with Disabilities 40.0

Total Hours 80.0

Learning Outcomes
Demonstrate proactive strategies to increase disability awareness and success for all employees in the workplace.

Workforce Skills, CC
Certificate of Completion

Control Number: 37825

Curriculum Id: OEC.WKFS.CC

This program provides students with classroom discussion and information about discovering/accepting responsibility for attitudes and behaviors (past, present and future), and making choices based on principles that influence success in their personal, educational, and career development. It also prepares the student for the world of financial management by developing sound decision-making skills in personal and household money matters.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR600</td>
<td>Attitudes for Success</td>
<td>36.0</td>
</tr>
<tr>
<td>WKPR601</td>
<td>Money Matters</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Program Requirements
Certificate of Completion

Certificate Requirements: 72 hours (credits are in hours) 72.0 Hours

WKPR600 - Attitudes for Success 36.0
AND
WKPR601 - Money Matters 36.0

Total Hours 72.0
Learning Outcomes

Explain how to achieve wellness through physical, emotional, social, intellectual and occupational development.

Create a personal budget.

Working with Students with Disabilities, CC

Certificate of Completion

Control Number:
38400

Curriculum Id:
OEC.WSD.CC

This program provides students with classroom discussion about creating an inclusive classroom for students with disabilities by developing an understanding of different approaches in teaching. It also provides students with in-class strategies to help all students succeed.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR102</td>
<td>Understanding Students with Disabilities</td>
<td>40.0</td>
</tr>
<tr>
<td>WKPR103</td>
<td>Strategies for Instructing Students with Disabilities</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Program Requirements

Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate Requirement: 80 hours (credits are in hours)</th>
<th>80.0 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR102 - Understanding Students with Disabilities</td>
<td>40.0</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>WKPR103 - Strategies for Instructing Students with Disabilities</td>
<td>40.0</td>
</tr>
</tbody>
</table>

Total Hours

80.0

Learning Outcomes

Develop an understanding of different instructional strategies to support a diverse classroom.

Apply Now Request Info

Credit Courses

COURSE DESCRIPTIONS

Course descriptions include the course discipline, number, title, units, class hours, requisites, and any applicable additional information such as cross-listings, C-ID, field trips, material fees, open-entry/open-exit, pass/no pass, repeatability, transferability, and credit by exam.

Course Number

100-299:

Courses numbered 100-299 are transferable to California State University (CSU) or the University of California (UC) and are applicable to the associate degree. See Transferability of Courses on page 46 for additional information.
Honors: Courses numbered 100 and above followed by the letter "H" are offered as part of the Santiago Canyon College Honors Program.

001-099:
Courses numbered 001-099 are not transferable to California State University (CSU) or the University of California (UC). They are applicable to the associate degree unless the course number is preceded by the letter "N".

N01-N99:
Courses numbered N01-N99 are not transferable to California State University (CSU) or the University of California (UC) and are not applicable to the associate degree. These courses count toward the course load.

California State University (CSU) or University of California (CSU/ UC): Identifies courses that are transferable to California State University (CSU) or University of California (UC). A credit limitation may exist for some courses that transfer to UC. See page 46 for additional information. Course Identification Numbering System (C-ID): Identifies a lower-division, transferable course commonly articulated between California Community Colleges and four-year universities.

Credit by Exam

Experimental Courses

Grade Pass/No Pass

Prerequisites, Corequisites, and Advisories

Repeatable Courses

Accounting*

Mission
Prepare Accounting students for jobs in the field OR transfer to four-year institutions.

Department Chair
Steven Deeley
(714) 628-4739
Deeley_Steven@sccollege.edu

Course

ACCT035 - QuickBooks
ACCT100 - Accounting for Small Business
ACCT101 - Financial Accounting
ACCT102 - Managerial Accounting
ACCT204 - Managerial Cost Accounting
ACCT205 - Intermediate Accounting I
Programs

American College English*

Mission

The courses in the ACE Department develop greater fluency in English as a second language students so that they can succeed in their academic, career and personal pursuits.

Department Chair

Pam Hilburn
(714) 628-4782
Hilburn_Pamela@sccollege.edu

Course

ACE091 - Improving Oral Expression and Pronunciation
ACE094 - Academic Listening and Speaking 1
ACE095 - Academic Listening and Speaking 2
ACE104 - Academic Reading and Writing 1
ACE106 - Academic Reading and Writing 2
ACE116 - Introduction to Academic Composition

American Sign Language*

Mission

The Languages Department at Santiago Canyon College offers quality languages experiences to expand awareness and understanding of cultural diversity, and of other worldviews through languages learning. The department is dedicated to providing timely university transfer courses, associate degree programs, certificates and community services learning activities. The Languages Department directs its efforts to help students be better world citizens.

Department Chair

Charlie Malone
(714) 628-5068
Malone_Charlie@sccollege.edu

Course

ASL110 - American Sign Language I
ASL111 - American Sign Language II
ASL113 - Introduction to Interpreting for the Deaf
ASL116 - Introduction to Deaf Studies
ASL210 - American Sign Language III

Anthropology*

Programs

American Sign Language, CA
Apply Now

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Mission

The Department of Anthropology will offer a variety of courses catering to the needs of students pursuing degrees at SCC, students intending to transfer to four year institutions, and community members interested in personal enrichment. (Reviewed 09/30/2019)

Department Chair

Yanina Valdos

(714) 628-5078

Valdos_Yanina@sccollege.edu

Course

ANTH100 - Introduction to Cultural Anthropology
ANTH100H - Honors Introduction to Cultural Anthropology
ANTH101 - Introduction to Physical Anthropology
ANTH101L - Physical Anthropology Laboratory
ANTH103 - Introduction to Archaeology
ANTH104 - Language and Culture

Programs

Anthropology, AA
Anthropology, AA-T
Apply Now

Carpentry - Apprenticeship*

Department Chair

Alana Gates

(714) 628-5912

Gates_Alana@sccollege.edu

Director of Special Programs

Estela Cuellar

(714) 628-5070

Cuellar_Estela@sccollege.edu

Dean of Business and Career Education Programs

Elizabeth Arteaga

(714) 628-5051

Arteaga_Elizabeth@sccollege.edu

Course

ACA002B - Slabs/Interior-Exterior Footings
ACA003A - Tilt-Up Introduction
ACA004A - Lifting and Bracing Safety
ACA004B - Poured-in-Place Wall Forms
ACA004C - Print Reading
ACA005A - Wall-Column Forms/Cutting and Burning
ACA005B - Site Work/Curb and Gutter
ACA005C - Specialized Forms and Rigging
ACA021A - Orientation
ACA021B - Safety and Health Certifications
ACA021C - Basic Wall Framing
ACA021E - Tool/Equipment Applications
ACA022A - Commercial Floor Framing
ACA022B - Basic Stairs
ACA022D - Exterior Finish Details
ACA022E - Commercial Roof Framing
ACA023B - Basic Roof Framing
ACA023C - Advanced Roof Framing
ACA023D - Basic Commercial Framing
ACA023E - Advanced Commercial Framing
ACA024A - Panelized Roofing
ACA024B - Transit Level/Laser
ACA024C - Total Station I
ACA025 - Welding Fabrication
ACA025A - Foundations and Flatwork
ACA025B - Advanced Stairs
ACA025D - Advanced Print Reading
ACA026A - Tilt-Up Panel Construction
ACA026B - Wall Forming
ACA026C - Gang Forms/Columns
ACA026D - Abutments
ACA027A - Beam and Deck Forming
ACA027B - Stairs and Ramp Forming
ACA027C - Bridge Construction
ACA027D - Bridge Falsework
ACA028A - Bridge Falsework
ACA029A - Rigging
ACA029B - Rigging Qualification Studies - Journeyworker
ACA029C - Solar Installer Level 1
ACA030A - Standard First Aid
ACA030B - Cabinet Millwork and Assembly
ACA031A - Cabinet Installation
ACA031B - Show Case and Loose Store Fixtures
ACA031C - Molding and Trims
ACA031D - Plastic Laminates
ACA031E - Solid and Stone Surfaces
ACA031F - Stair Trim
ACA032A - Doors and Door Hardware
ACA032B - Exit and Electrical Security Devices
ACA032C - Scaffold Erector, Standard 40 Hour - Journeyworker
ACA032D - Scaffold Erector, Systems Scaffold - Journeyworker
ACA032E - Powered Industrial Truck Operator - Rough Terrain
ACA032F - Powered Industrial Truck Operator - Industrial Terrain
ACA033A - Acoustical Ceilings
ACA033B - Standard Acoustical Grids
ACA033C - Suspended Ceilings
ACA033D - Concealed/Glue-Up/Staple-Up Systems
ACA033E - Designer and Specialty Trims
ACA033F - Metal Pan and Security Systems
ACA034A - Standard Acoustical Grids
ACA034B - Solid and Stone Surfaces
ACA034C - Stair Trim
ACA034D - Door and Door Hardware
ACA034E - Exit and Electrical Security Devices
ACA034F - Scaffold Erector, Standard 40 Hour - Journeyworker
ACA035A - Scaffold Erector, Systems Scaffold - Journeyworker
ACA035B - Powered Industrial Truck Operator - Rough Terrain
ACA035C - Powered Industrial Truck Operator - Industrial Terrain
ACA035D - Acoustical Ceilings
ACA035E - Standard Acoustical Grids
ACA035F - Suspended Ceilings
ACA036A - Concealed/Glue-Up/Staple-Up Systems
ACA036B - Designer and Specialty Trims
ACA036C - Metal Pan and Security Systems
ACA036D - Orientation
ACA036E - Safety and Health Certifications
ACA036F - Tool/Equipment Applications
ACA037A - Basic Metal Framing
ACA037B - Basic Lathing
ACA037C - Advanced Lathing
ACA037D - Advanced Metal Framing
ACA037E - Advanced Lathing
ACA073A - Framing Ceilings and Soffits
ACA073B - Framing Suspended Ceilings
ACA073C - Framing Curves and Arches
ACA074A - Print Reading
ACA074B - Advanced Print Reading
ACA074C - Air, Moisture, and Thermal Barriers
ACA075A - Light Gage Welding AWS - A
ACA075B - Light Gage Welding LAC
ACA075C - Light Gage Welding AWS - B
ACA076A - Basic Hand Finishing
ACA076B - Automatic Finishing Tools
ACA077A - Drywall Installation/Finish Trims
ACA077B - Advanced Hand Finishing
ACA077C - Advanced Automatic Finishing Tools
ACA078A - Basic Hand Finishing
ACA078B - Advanced Metal Framing
ACA078C - Wet Wall Finishes
ACA078D - Ceiling and Soffit Finishing
ACA079A - Drywall and Acoustical Ceilings
ACA079B - Drywall Applications
ACA079C - Drywall Applications
ACA079D - Drywall Applications
ACA082A - S/B Firestop/Fireproofing Procedures
ACA082B - Decorative Trims and Textures
ACA082C - Door and Door Frames
ACA082D - Door/Door Frame
ACA086A - Exterior Insulation Finish Systems (EIFS)
ACA089 - Freeform Lathing
ACA090 - Residential Steel Stud Framing
ACA094J - Confined Space - Journeyworker
ACA095 - Water Treatment Facilities
ACPD021 - Orientation
ACPD022 - Safety and Health Certifications
ACPD023 - Tool/Equipment Applications
ACPD024A - Piles and Hammers A
ACPD024B - Piles and Hammers B
ACPD026A - Falsework A
ACPD026B - Falsework B
ACPD027A - Abutment A
ACPD027B - Abutment B
ACPD028A - Bridge and Deck Forms A
ACPD028B - Bridge and Deck Forms B
ACPD029A - Structural Welding - AWS A
ACPD029B - Structural Welding - AWS B
ACPD030 - Print Reading
ACPD031A - Welding Fabrication A
ACPD031B - Welding Fabrication B
ACPL023 - Tool/Equipment Applications
ACPL025 - Basic Plastering
ACPL026 - Exterior Plastering
ACPL027 - Dot and Screed Techniques
ACPL028 - Interior Plastering
ACPL029 - Tender and Plastering Equipment
ACPL030 - Exterior Insulation Finish Systems (EIFS)
ACPL031 - Ornamental Plastering
ACPL032 - Plastering Equipment Application
ACPL033 - Finish Applications
ACPL034 - Theme Plastering
AIN021 - Orientation
AIN022 - Safety and Health Certifications
AIN023 - Insulation Basics
AIN024 - Construction Methods
AIN025A - Print Reading
AIN025B - Advanced Print Reading
AIN026 - Sound Control and Weatherstripping
AIN027 - Flexible Foam Insulation
AIN031 - Green Building and Weatherization
AIN032 - Specialty Insulation
AIN033 - Energy Audit
AIN034 - Firestop/Fireproofing Procedures
AIN035 - Infiltration and Moisture Control
AIN036 - Loose Fill and Spray Insulation
AIN037 - Rigid Foam and Cellular Glass Insulation Installations
AIN041 - S/B Crew Lead Training
AIN043 - Tool/Equipment Applications
AMF021 - Orientation
AMF022 - Safety and Health Certifications
AMF023 - Modular Cabinets, Doors and Drawers
AMF023C - Tool/Equipment Applications
AMF024 - Introduction to Modular Furnishing
AMF025 - Educational and Seismic Installations
AMF026 - Hospital Modular Installations
AMF029 - Wall and Overhead Attachments
AMF030 - Crew Lead Customer Service Training
AMF031 - S/B Modular Pre-Cut Glass: Handling and Installation
AMF032 - Basic Framing and Retro-Fits
AMF034 - Solid Surface and Stone Countertops
AMW021 - Orientation
AMW022 - Safety and Health Certifications
AMW023A - Millwright General Skills - A
AMW023B - Millwright General Skills - B
AMW024 - S/B Print Reading
AMW025 - Welding Fabrication
AMW026 - Cutting and Burning
AMW027 - Optics and Machinery Alignment
AMW028 - Machinery Shaft Alignment
AMW029A - Structural Welding - AWS A
AMW029B - Structural Welding - AWS B
AMW030 - Rigging Hardware and Procedures
AMW031 - Turbine Familiarization
AMW032 - Pumps
AMW033 - Conveyor Systems
AMW034 - Drives, Pulleys and Belts
AMW036A - Machinery Installation and Erection - A
AMW036B - Machinery Installation and Erection - B
AMW037 - Turbine Maintenance
AMW039 - Compressor Theory and Maintenance
AMW043 - Tool/Equipment Applications
AMW051 - Solar Installer Level 1

Programs
Apprenticeship Carpentry, Acoustical Installer, AS
Apprenticeship Carpentry, Acoustical Installer, CA
Apprenticeship Carpentry, Concrete, AS
Apprenticeship Carpentry, Concrete, CA
Apprenticeship Carpentry, Drywall/Lather, AS
Apprenticeship Carpentry, Drywall/Lather, CA
Apprenticeship Carpentry, Drywall Finisher, AS
Apprenticeship Carpentry, Drywall Finisher, CA
Apprenticeship Carpentry, Finish Carpentry, AS
Apprenticeship Carpentry, Finish Carpentry, CA
Apprenticeship Carpentry, Framing, AS
Apprenticeship Carpentry, Framing, CA
Apprenticeship Carpentry, Insulator, AS
Apprenticeship Carpentry, Insulator, CA

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741/2244
Apprenticeship Carpentry, Millwrighting, AS
Apprenticeship Carpentry, Millwrighting, CA
Apprenticeship Carpentry, Pile Driver, AS
Apprenticeship Carpentry, Pile Driver, CA
Apprenticeship Carpentry, Plastering, AS
Apprenticeship Carpentry, Plastering, CA
Apprenticeship Carpentry, Tilt-Up, AS
Apprenticeship Carpentry, Tilt-Up, CA
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Cosmetology - Apprenticeship*

Department Chair
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Dean of Business and Career Education Programs
Elizabeth Arteaga
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Course
ACS035 - Cosmetology Apprentice

Programs
Apprenticeship Cosmetology, CA
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Electrician - Apprenticeship*

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Dean of Business and Career Education Programs

Elizabeth Arteaga
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Course

- AEL021 - Sound and Communication Apprentice 1
- AEL022 - Sound and Communication Apprentice 2
- AEL023 - Sound and Communication Apprentice 3
- AEL024 - Sound and Communication Apprentice 4
- AEL025 - Sound and Communication Apprentice 5
- AEL026 - Sound and Communication Apprentice 6
- AEL027 - Sound and Communication Apprentice 7
- AEL028 - Sound and Communication Apprentice 8
- AEL031 - Intelligent Transportation Systems Electrician Apprentice 1
- AEL032 - Intelligent Transportation Systems Electrician Apprentice 2
- AEL033 - Intelligent Transportation Systems Electrician Apprentice 3
- AEL034 - Intelligent Transportation Systems Electrician Apprentice 4
- AEL035 - Intelligent Transportation Systems Electrician Apprentice 5
- AEL036 - Intelligent Transportation Systems Electrician Apprentice 6
- AEL037 - Intelligent Transportation Systems Electrician Apprentice 7
- AEL038 - Intelligent Transportation Systems Electrician Apprentice 8
- AEL039 - Intelligent Transportation Systems Electrician Apprentice 9
- AEL040 - Intelligent Transportation Systems Electrician Apprentice 10
- AEL051 - Inside Wireman 1
- AEL052 - Inside Wireman 2
- AEL053 - Inside Wireman 3
- AEL054 - Inside Wireman 4
- AEL055 - Inside Wireman 5
- AEL056 - Inside Wireman 6
- AEL057 - Inside Wireman 7
- AEL058 - Inside Wireman 8
- AEL059 - Inside Wireman 9
- AEL060 - Inside Wireman 10
- AEL061 - Electrical Safety and First Aid

Programs

- Apprenticeship Electricity, Industrial, AS
- Apprenticeship Electricity, Industrial, CA
- Apprenticeship Electricity, Intelligent Transportation Systems Electrician, AS
- Apprenticeship Electricity, Intelligent Transportation Systems Electrician, CA
- Apprenticeship Electricity, Sound Installer, AS
- Apprenticeship Electricity, Sound Installer, CA
- Apprenticeship Electricity, Sound Technician, AS
- Apprenticeship Electricity, Sound Technician, CA

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Maintenance Mechanic - Apprenticeship*

Department Chair
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Cuellar_Estela@sccollege.edu

Dean of Business and Career Education Programs

Elizabeth Arteaga  
(714) 628-5051  
Arteaga_Elizabeth@sccollege.edu

Course
AME021 - Period 1  
AME052 - Period 2  
AME053 - Period 3  
AME054 - Period 4  
AME055 - Period 5  
AME056 - Period 6  
AME057 - Period 7  
AME058 - Period 8  
AMM021 - Period 1  
AMM022 - Period 2  
AMM023 - Period 3  
AMM024 - Period 4  
AMM025 - Period 5  
AMM026 - Period 6  
AMM027 - Period 7  
AMM028 - Period 8

Programs
Maintenance Electrician, AS  
Maintenance Electrician, CA  
Maintenance Mechanic, AS  
Maintenance Mechanic, CA  
Apply Now

Operating Engineers - Apprenticeship*

Department Chair  
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(714) 628-5912  
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Director of Special Programs  
Estela Cuellar  
(714) 628-5070  
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Dean of Business and Career Education Programs  
Elizabeth Arteaga
Course

AOE011 - Construction Safety Inspector Apprentice 1
AOE012 - Construction Safety Inspector Apprentice 2
AOE013 - Construction Safety Inspector Apprentice 3
AOE014 - Construction Safety Inspector Apprentice 4
AOE015 - Construction Safety Inspector Apprentice 5
AOE016 - Construction Safety Inspector Apprentice 6
AOE021 - Plant Equipment Operator 1
AOE021J - Plant Equipment Operator 1 - Journeyworker
AOE022 - Plant Equipment Operator 2
AOE022J - Plant Equipment Operator 2 - Journeyworker
AOE023 - Plant Equipment Operator 3
AOE023J - Plant Equipment Operator 3 - Journeyworker
AOE024 - Plant Equipment Operator 4
AOE024J - Plant Equipment Operator 4 - Journeyworker
AOE025 - Plant Equipment Operator 5
AOE025J - Plant Equipment Operator 5 - Journeyworker
AOE026 - Plant Equipment Operator 6
AOE026J - Plant Equipment Operator 6 - Journeyworker
AOE031 - Heavy Duty Repairer 1
AOE032 - Heavy Duty Repairer 2
AOE033 - Hydraulics
AOE034 - Advanced Hydraulics
AOE035 - Heavy Duty Repairer 5
AOE036 - Disassembly and Assembly
AOE041 - Introduction to Apprenticeship
AOE042 - Grade Checking
AOE043 - Equipment Operator 3
AOE044 - Plan Reading
AOE045 - Equipment Operator 5
AOE046 - Hazmat 6
AOE047 - Operating Engineers Hazmat 40
AOE048 - Disaster Site Worker
AOE054 - Tower Crane
AOE061 - Concrete Transportation Construction Inspector
AOE062 - Asphalt Inspection
AOE063A - ACI Laboratory Testing Technician I
AOE064A - ACI Laboratory Testing Technician II
AOE071A - Reinforced Concrete
AOE072A - Prestressed Concrete
AOE073A - Structural Steel/Welding
AOE073B - Structural Steel/Bolting
AOE074A - Structural Masonry
AOE075A - Soils Inspection and Testing
AOE076A - Structural Plan Reading for Inspectors
AOE077A - ICC Soils Special Inspector
AOE079 - Certified Welding Inspector
AOE080 - Structural Concrete Plan Reading
AOE081 - Structural Reinforced Concrete for Inspectors
AOE082 - Non-Destructive Testing

Programs

Apprenticeship Operating Engineers, Construction Safety Inspector, AS
Apprenticeship Operating Engineers, Construction Safety Inspector, CA
Apprenticeship Operating Engineers, Heavy Duty Repairer, AS
Apprenticeship Operating Engineers, Heavy Duty Repairer, CA
Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, AS
Apprenticeship Operating Engineers, Heavy Equipment/Landscape Operator Engineer, CA
Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, AS
Apprenticeship Operating Engineers, Plant Equipment/Rock, Sand and Gravel, CA
Apprenticeship Operating Engineers, Special Inspector, AS
Apprenticeship Operating Engineers, Special Inspector, CA
Apply Now

Power Lineman - Apprenticeship*

Department Chair
Alana Gates
(714) 628-5912
Gates_Alana@sccollege.edu

Director of Special Programs
Estela Cuellar
(714) 628-5070
Cuellar_Estela@sccollege.edu

Dean of Business and Career Education Programs
Elizabeth Arteaga
(714) 628-5051
Arteaga_Elizabeth@sccollege.edu

Course
APL020 - Orientation
APL021 - Power Lineman Apprentice 1
APL022 - Power Lineman Apprentice 2
APL023 - Power Lineman Apprentice 3
APL024 - Power Lineman Apprentice 4
APL025 - Power Lineman Apprentice 5
APL026 - Power Lineman Apprentice 6
APL041 - Work Methods Training
APL042 - Rubber Gloves Training
APL043 - Hot Sticks Training

Programs
Apprenticeship Power Lineman, AS
Apprenticeship Power Lineman, CA
Apply Now

Surveying - Apprenticeship*

Department Chair
Alana Gates
(714) 628-5912
Gates_Alana@sccollege.edu
Director of Special Programs

Estela Cuellar
(714) 628-5070
Cuellar_Estela@sccollege.edu

Dean of Business and Career Education Programs

Elizabeth Arteaga
(714) 628-5051
Arteaga_Elizabeth@sccollege.edu

Course

ASV030 - Labor Relations
ASV031 - Supplemental Math for Chainman Apprentices
ASV040 - Standard First Aid
ASV101 - Chainman Apprentice 1
ASV102 - Chainman Apprentice 2
ASV103 - Chainman Apprentice 3
ASV104 - Chainman Apprentice 4
ASV105 - Chainman Apprentice 5
ASV121 - Plane Surveying and Coordinate Geometry
ASV122 - Advanced Coordinate Geometry
ASV123 - Laptop Surveying/Aerial Photogrammetry
ASV124 - Plan Reading and Subdivision Surveying
ASV125 - Major Project Plans and Survey Layout
ASV126 - Control and Geodetic Surveying
ASV127 - U.S. Public Land Surveys
ASV128 - Property Surveys and Legal Descriptions

Programs

Apprenticeship Surveying, Chainman, AS
Apprenticeship Surveying, Chainman, CA
Apprenticeship Surveying, Chief of Party, AS
Apprenticeship Surveying, Chief of Party, CA
Apply Now

Art*

Mission

The Santiago Canyon College Art Department is committed to creating a student-centered learning environment that encourages the development of students' aesthetic vision, knowledge of historical and contemporary art developments, awareness of the current art climate on a regional, national and international scale, and technical skills in all disciplines of the visual arts. The Department prepares students for further study and/or employment in the visual arts and related fields. (Reviewed Fall 2011)

Department Chair

Robbie Miller
(714) 628-4834
Miller_Robbie@sccollege.edu

Course

ART100 - Introduction to Art Concepts
ART100H - Honors Introduction to Art Concepts
ART101 - Survey of Western Art History I: Prehistory Through the Middle Ages
ART101H - Honors Survey of Western Art History I: Prehistory Through the Middle Ages
ART102 - Survey of Western Art History II: Renaissance Through the Twentieth Century
ART102H - Honors Survey of Western Art History II: Renaissance Through the Twentieth Century
ART110 - Two-Dimensional Design
ART111 - Three-Dimensional Design
ART122 - Graphic Design I
ART128 - Introduction to Illustration
ART129 - Introduction to Web Design
ART130 - Introduction to Drawing
ART131 - Beginning Life Drawing
ART141 - Beginning Painting
ART149 - Introduction to Digital Photography
ART159 - Introduction to Mobile Application Development and Design
ART195 - Introduction to Digital Media Arts
ART221 - Graphic Design II
ART228 - Intermediate Illustration
ART229 - Multimedia Applications for the Web
ART230 - Intermediate Drawing
ART231 - Intermediate Life Drawing
ART232 - Advanced Life Drawing
ART233 - Advanced Drawing
ART241 - Intermediate Painting
ART242 - Advanced Painting
ART249 - Intermediate Digital Photography
ART250 - Advanced Studio Concepts
ART259 - Advanced Mobile Application Development and Design

Programs

Art, AA
Digital Media Arts: Graphic Design, CA
Digital Media Arts: Mobile Application Development and Design, CA
Graphic Design, AS
Studio Arts, AA-T
Apply Now

Astronomy*

Mission

The Astronomy program is here to help students understand and appreciate the universe by promoting scientific literacy and encourage curiosity, involvement, and enthusiasm in astronomy through a variety of modalities including lecture, group discussions, lab work, and field studies.

Department Chair

Morrie Barembaum
(714) 628-8495
Barembaum_Morrie@sccollege.edu

Danielle Martino
(714) 628-4705
Martino_Danielle@sccollege.edu

Course

ASTR100L - Astronomy Laboratory
Programs

Astronomy, AS
Apply Now

Biology*

Mission

The mission of the Santiago Canyon College Department of Biology is to offer a comprehensive program of courses that promote interest in and understanding of the biological sciences. We will aid students in achieving their educational and career goals as they relate to the field of biology through excellent teaching and innovative laboratories. We will strive to provide numerous, diverse, and engaging opportunities for students to explore the science of life in all its complexity and diversity. It is our intention to enable students to acquire a basic knowledge of the theories of biology and to be able to critically evaluate scientific information.

Department Chair
Denise Foley
(714) 628-4920
Foley_Denise@sccollege.edu

Mark Smith
(714) 628-4959
Smith_Mark@sccollege.edu

Course

BIOL097 - Introduction to Work Experience
BIOL109 - Fundamentals of Biology
BIOL109H - Honors Fundamentals of Biology
BIOL109HL - Honors Fundamentals of Biology Laboratory
BIOL109L - Fundamentals of Biology Laboratory
BIOL115 - Concepts in Biology for Educators
BIOL139 - Health Microbiology
BIOL149 - Human Anatomy and Physiology
BIOL190 - Introduction to Biotechnology
BIOL190L - Introduction to Biotechnology Lab
BIOL191 - Biotech A: Basic Lab Skills
BIOL192 - Biotech B: Proteins
BIOL193 - Biotech C: Nucleic Acids
BIOL194 - Quality and Regulatory Compliance in Biosciences
BIOL196 - Food Safety
BIOL197 - Science, Technology, Engineering and Mathematics (STEM) Internship
BIOL202 - Cell Culture Techniques
BIOL211 - Cellular and Molecular Biology
BIOL221 - Animal Diversity and Evolution
BIOL229 - General Microbiology
BIOL231 - Plant Diversity and Ecology
BIOL239 - General Human Anatomy
BIOL249 - Human Physiology
BIOL259 - Environmental Biology
BIOL290 - Biochemistry and Molecular Biology

Programs
Biology, AS
Biology, AS-T
Biotechnology, AS
Biotechnology Biomanufacturing Technician, CA
Biotechnology Lab Assistant, CA
Biotechnology Laboratory Technician: Food Safety, CA
General Biotechnology Technician, CA

Apply Now

Business*

Mission

Provide courses that will aid students in completing their academic goals.

Department Chair

Steven Deeley

(714) 628-4739

Deeley_Steven@sccollege.edu

Course

BUS090 - Principles of Project Management
BUS100 - Fundamentals of Business
BUS105 - Legal Environment of Business
BUS120 - Principles of Management
BUS121 - Human Relations and Organizational Behavior
BUS127 - Introduction to E-Commerce
BUS130 - Personal Finance
BUS150 - Introduction to Information Systems and Applications
BUS170 - Principles of Small Business Management
BUS171 - Business Plan for Small Business
BUS175 - Online Entrepreneurship
BUS222 - Business Writing

Programs

Business Administration, AS
Business Administration, AS-T
Business Information Worker, CERT
Business Management, AS
Business Management, CERT
Entrepreneurship, AS
Entrepreneurship, CA

Apply Now

Chemistry*

Mission

Chemistry department offers a comprehensive general education and transfer program for students in chemistry. The mission is to help students understand and appreciate chemistry by promoting scientific literacy and encouraging curiosity.

Department Chair

Nahla El Said

(714) 628-4955

ElSaid_Nahla@sccollege.edu

Jeffrey Wada
Course

CHEM100 - Introductory Chemistry
CHEM200A - General Chemistry A
CHEM200AH - Honors General Chemistry A
CHEM200B - General Chemistry B
CHEM280A - Organic Chemistry A
CHEM280B - Organic Chemistry B

Programs

Chemistry, AS
Apply Now

Child Development*

Mission

The mission of the Child Development program at SCC is to offer beginning students a comprehensive educational program to learn about the development of young children from conception through the elementary school years, and provide opportunities for students to integrate theories with practice to meet the emotional, physical, social, and educational needs of infants and young children.

Department Chair

Regina Lamourelle

(714) 628-4708
Lamourelle_Regina@sccollege.edu

Course

CDEV107 - Child Growth and Development (DS1)
CDEV108 - Observation and Assessment for Early Learning and Development (DS3)
CDEV110 - Child, Family and Community (DS2)
CDEV111A - Principles and Practices of Teaching Young Children
CDEV111B - Introduction to Curriculum for Young Children
CDEV112 - Health, Safety and Nutrition for Children
CDEV116A - Infant/Toddler Growth and Development (DS4)
CDEV116B - Care and Education for Infants and Toddlers (DS3)
CDEV120A - Development of the School-Age Child (DS5)
CDEV120B - School-Age Child Care and Recreation Activities (DS5)
CDEV200 - Introduction to Technology in Early Childhood Education
CDEV205 - Introduction to Children with Special Needs
CDEV206 - Curriculum and Intervention Strategies for Children with Special Needs
CDEV207 - Supporting and Empowering Families of Children with Special Needs
CDEV215 - Administration I: Programs in Early Childhood Education (DS6)
CDEV216 - Administration II: Personnel and Leadership in Early Childhood Education (DS6)
CDEV217 - Creative Music and Performing Arts for Early Learners
CDEV218 - Visual Art Experiences for Early Learning Environments
CDEV220 - The Child As Victim
CDEV221 - Living and Teaching in a Diverse Society
CDEV229 - Brain Development and Learning
CDEV230 - Child Guidance and Classroom Management
CDEV234 - Brain Compatible Guidance and Classroom Management for Early Learning Settings
CDEV236 - Engineering, Math and Science Strategies for Early Learning Environments
CDEV250 - Adult Supervision and Mentoring in Early Care and Education
CDEV297 - Analyzing and Applying Teacher Strategies in the Classroom
Programs

Child and Adolescent Development, AA-T
Early Childhood Education, AS-T
Early Childhood Leadership and Administration, CERT
Infant/Toddler, CERT
Level I - Early Childhood Exceptional Needs, CERT
Level II - Early Childhood Exceptional Needs, CERT
Preschool, CERT
The School-Age Child, CERT

Apply Now

Cinema Studies*

Mission

The Cinema Studies program will provide a broad and complete education to assist the SCC student in deciding on a future career in a media-related field or to transfer to an appropriate four-year institution.

Department Chair

David Echols (Facilitator)

(714) 628-4883

Echols_David@sccollege.edu

Course

CINE103 - History of Film to 1945
CINE104 - History of Film From 1945 to Present
CINE105 - Mass Media and Society
CINE107 - Great Directors
CINE108 - Film Genres
CINE122 - Screenwriting for Digital Media
CINE124 - Introduction to Digital Media Production
CINE130 - Film Appreciation
CINE150A - Film/TV Producing I
CINE150B - Film/TV Producing II

Programs

Apply Now

Communication*

Mission

“The Santiago Canyon College Department of Communication offers comprehensive communication classes for all students and community members. The curriculum is designed to assist all students in meeting their individual educational goals ranging from preparatory to life enrichment to certificates and degrees. The department provides two primary areas of emphasis; interpersonal skills and the presentation of Self in public. The department provides students who desire a competitive environment the opportunity to participate in the nationally recognized SCC Forensic team. Forensics offers competitive opportunities to eligible students in the areas of individual public address, readers' theatre, oral interpretation of literature and parliamentary debate.”

Department Chair

Tara Kubicka-Miller

(714) 628-4708

Kubicka_Tara@sccollege.edu
Course
COMM100 - Introduction to Interpersonal Communication
COMM100H - Honors Introduction to Interpersonal Communication
COMM101 - Group Dynamics
COMM110 - Public Speaking
COMM111 - Argumentation and Debate
COMM120 - Intercultural Communication
COMM120H - Honors Introduction to Intercultural Communication
COMM130 - Forensics Team
COMM134 - Oral Interpretation
COMM135 - Readers’ Theatre
COMM225 - Gender Communication
COMM225H - Honors Gender Communication
COMM230 - Advanced Forensics Team

Programs
Communication, AA
Communication Studies, AA-T
Apply Now

Computer Information Systems*
Department Chair
Steven Deeley
(714) 628-4739
Deeley_Steven@sccollege.edu

Course
CIS101 - Introduction to Microsoft Office
CIS103 - Microsoft Word
CIS105 - Introduction to Microsoft Excel
CIS106 - Microsoft Excel
CIS108 - Microsoft Access
CIS110 - Introduction to Microsoft Project
CIS111 - Python Programming
CIS159 - Introduction to iOS/iPhone Mobile App Development
CIS259 - Advanced iOS/iPhone Mobile App Development

Programs
Computer Information Systems, AS
Computer Information Systems, CA
Apply Now

Computer Science*
Department Chair
Steven Deeley
(714) 628-4739
Deeley_Steven@sccollege.edu

Course
CMRP100 - The Computer and Society
CMRP105 - Visual BASIC Programming
CMPR112 - Java Programming  
CMPR120 - Introduction to Programming  
CMPR121 - Programming Concepts  
CMPR122 - Programming Concepts and Methodology I  
CMPR129 - Introduction to Computer Organization  
CMPR131 - Data Structures Concepts  
CMPR132 - Programming Concepts and Methodology II  
CMPR149 - Discrete Structures for Computer Science  
CMPR154 - Computer Architecture and Organization  
CMPR157 - Introduction to Robotics  
CMPR213 - C# Programming

Programs

Applied Robotics and Embedded Programming, CERT  
Computer Retail Sales and Support, CA  
Computer Science, AS  
Computer Science, AS-T  
Computer Science, CA  
Apply Now

Cosmetology*

Mission

The Cosmetology program will make available to all eligible students program entry and training in accordance with the regulations of the college and the California Board of Barbering and Cosmetology. The program strives to provide the most up to date and hands on instructions available.

Department Chair

This department does not have a department chair.

(714) 628-4883

Course

COSM005 - Health and Safety  
COSM040 - Cosmetology  
COSM050 - Manicuring  
COSM070 - Barbering  
COSM080 - Esthetician

Programs

Apprenticeship Cosmetology, CA  
Cosmetology, AS  
Cosmetology, CA  
Esthetician, CA  
Apply Now

Counseling*

Mission

To provide the educational and personal counseling support and information that will enable students to strategically plan for success as they set goals that directly focus and align with their visualized educational, career, and personal outcomes. In addition, counseling faculty guide students through the transformational process that occurs once they have taken the steps forward in selecting a major and beginning the journey towards the desired career of their dreams by developing the habits of a self managed and self driven individual where balancing school and work come naturally in an increasingly complex world.

Department Chair

Song Graham
Course

CNSL101 - Educational, Personal, Cultural, and Career Exploration
CNSL106 - Inquiries Into Higher Education
CNSL110 - University Transfer Research
CNSL111 - Learning Skills Development
CNSL113 - Learning Strategies for College Success
CNSL116 - Career/Life Planning and Personal Exploration
CNSL118 - Self Exploration and the Teaching Profession
CNSL150 - Introduction to Human Services
CNSL152 - Philosophy of Helping
CNSL160 - Fieldwork Experience for the Helping Professions

Programs

California State University General Education Breadth (CSU), CA
Intersegmental General Education Transfer Curriculum (IGETC), CA
Liberal Arts: Arts, Humanities, and Communication, AA
Liberal Arts: Mathematics and Sciences, AA
Liberal Arts: Multi-Cultural Studies, AA
Liberal Arts: Social and Behavioral Sciences, AA
Social Work and Human Services, AA-T

Apply Now

Earth Science*

Mission

The Department of Earth Sciences offers a comprehensive general education and transfer program for both students interested in becoming geoscientists as well as students with career interests outside of the Earth sciences. The study of Earth promotes an interest in the planet that encourages curiosity, scientific literacy, life-long learning, and strengthens students’ critical thinking skills. Critical thinking developed throughout our program will help our students make informed choices about their future interactions with the world around them.

Department Chair

Angela Daneshmand
(714) 628-5002

Daneshmand_Angela@sccollege.edu

Course

ERTH100 - Physical Geology
ERTH100L - Physical Geology Laboratory
ERTH111 - Historical Geology
ERTH120 - Earth Sciences
ERTH121 - Earth Sciences for Educators
ERTH130 - Environmental Geology
ERTH160 - Oceanography
ERTH200 - Geology of California  
ERTH212 - San Andreas Fault System Geology Field Study  
ERTH214 - Orange County Geology Field Study

Programs
Earth Sciences, AS  
Apply Now

Economics*
Mission
The Department’s mission is to offer core lower division courses in Microeconomics and Macroeconomics and to motivate students to strengthen the communication, critical thinking, problem solving, and analytical reasoning skills that will assist them in their further studies and careers. The Department further aims to develop responsible citizens who are aware of and informed about a variety of differing views on current economic events and policy issues and how they impact our lives. (Reviewed Fall 2018)

Department Chair
Alex Taber  
(714) 628-4847  
Taber_Alex@sccollege.edu

Course
ECON101 - Principles/Micro  
ECON102 - Principles/Macro

Programs
Economics, AA  
Economics, AA-T  
Apply Now

Education*
Mission
The [Teacher] Education Department at Santiago Canyon College provides seamless TK-12 education pathways to high school and community college students through a robust integrated academic and field based learning curriculum of coursework, certificate and degrees. The Department's curriculum reflects entry-level preparation for students pursuing a career in TK-12 teaching with special emphasis on Special Education, Bilingual Education, CTE teaching and STEM teaching. All curriculum is designed with the end result in mind through partnerships with local high schools for CTAP articulation and pathway development for students matriculating students to SCC as well as partnerships and up to date articulation with local university teacher education programs. We are committed to providing students with culturally relevant coursework for certificate and degree pathways that are current in the field of teacher preparation and that lead to successful completion, gainful employment and/or transfer to the university.

Department Chair
Amy Freese  
(714) 628-4946  
Freese_Amy@sccollege.edu

Alisia Thompson (Facilitator)  
(714) 628-4873

Course
EDUC101 - American Schools and Society
EDUC110 - The Teaching Experience: Exploration
EDUC113 - Educational Strategies for Tutors and Instructional Aides
EDUC200 - Introduction to Elementary Classroom Teaching
EDUC204 - Proficiency in Educational Technologies for Teachers
EDUC209 - Roles and Responsibilities of the Special Education Paraprofessional
EDUC210 - The Teaching Experience: Secondary Education
EDUC211 - Classroom Practices for Diverse Learners

Programs

After School Program Assistant, CA
After School Program Associate Teacher, CA
Bilingual Instructional Aide: Spanish, CA
Elementary Education, AA
Elementary Teacher Education, AA-T
Special Education Paraprofessional, CA
Apply Now

Electrician*

Department Chair
Jerome Thomas (Facilitator)
(714) 628-4883
CareerEducation@sccollege.edu

Course

ELCT041 - General Electrician 1
ELCT042 - General Electrician 2
ELCT043 - General Electrician 3
ELCT044 - General Electrician 4
ELCT045 - General Electrician 5
ELCT046 - General Electrician 6
ELCT047 - General Electrician 7
ELCT048 - General Electrician 8
ELCT049 - General Electrician 9
ELCT050 - General Electrician 10
ELCT051 - Quality Safety Program and First Aid

Programs

General Electrician, AS
General Electrician, CA
Apply Now

Electronics Technology*

Department Chair
Jeffry Dennis
(714) 628-5907
Dennis_Jeffry@sccollege.edu

Course

ETEC110 - DC Circuits
ETEC120 - AC Circuits  
ETEC130 - Programmable Logic Controllers

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Applying Now

Engineering*

Mission
The mission is to help students understand and appreciate the physical universe by promoting scientific literacy and encouraging curiosity, involvement, and enthusiasm in science and to apply that knowledge to future technology.

Department Chair

Course
ENGR220 - Statics  
ENGR225 - Dynamics  
ENGR230 - Network Analysis

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Applying Now

English*

Mission
Santiago Canyon College English Department is a mutually supportive community of teachers rooted in our commitment to students, dedicated to imparting the value and power of language and literature, teaching the process of writing, and helping students to develop the cognitive and affective tools that lead to success and wisdom. Our department arms students with the knowledge, communication skills, and self-awareness to participate creatively and confidently in an ever-changing world. As educators, we remain life-long learners—people who grow, change, and share new knowledge and perspectives with our college community.

Department Chair

Corinna Evett  
(714) 628-4829  
Evett_Corinna@sccollege.edu

Maureen Roe (Facilitator)  
(714) 628-4746  
Roe_Maureen@sccollege.edu

Course
ENGL099 - Introduction to Composition with Integrated Support  
ENGL100 - Freshman Composition with Integrated Support  
ENGL101 - Freshman Composition  
ENGL101H - Honors Freshman Composition  
ENGL102 - Literature and Composition  
ENGL102H - Honors Literature and Composition  
ENGL103 - Critical Thinking and Writing  
ENGL103H - Honors Critical Thinking and Writing
ENGL213 - Creative Writing  
ENGL220 - Survey of the Bible As Literature  
ENGL231 - Survey of English Literature I  
ENGL232 - Survey of English Literature II  
ENGL233A - Shakespeare’s Comedies and Romances  
ENGL233B - Shakespeare’s Tragedies and History Plays  
ENGL241 - Survey of American Literature, 1600-1865  
ENGL242 - Survey of American Literature, 1865-Present  
ENGL243 - The Modern American Novel  
ENGL246 - Survey of Chicano Literature  
ENGL270 - Children's Literature  
ENGL271 - Survey of World Literature I  
ENGL272 - Survey of World Literature II  
ENGL278 - Survey of Literature by Women  

Programs

English, AA  
English, AA-T  

Apply Now  

Ethnic Studies*

Mission

The mission of the Santiago Canyon College Ethnic Studies program is to provide an engaging education that promotes awareness and understanding of the historical and cultural experiences of the Euro-American, Native American, Asian Pacific American, African American, and Mexican Americans/Latinos populations.

Department Chair

Tiffany Gause  
(714) 628-4870  
Gause_Tiffany@sccollege.edu

Course

ETHN101 - Introduction to Ethnic Studies  
ETHN110 - Introduction to Asian Pacific American Studies  
ETHN120 - Introduction to African American Studies  
ETHN130 - Introduction to Chicano Studies  
ETHN140 - Introduction to Native American Studies

Programs

Ethnic Studies, AA  

Apply Now

Gemology*

Mission

The Gemology program is to provide a rigorous study of theoretical, technical and practical of precious stones and jewelry. The program offers both an associate degree and a certificate. Courses cover the identification of colored stones, grading diamonds by using established standards, appraising gems and jewelry, recognizing historical and antique values and applying fundamental business practices to create a successful career.

Department Chair

Diana Sanders Cinamon (Facilitator)  
(714) 628-5070
Course

- GEM011 - Introductory Colored Stones
- GEM012 - Advanced Colored Stones
- GEM015 - Colored Stones and Diamond Lab
- GEM020 - Diamonds
- GEM030 - Antique and Period Jewelry
- GEM050 - Pearls

Programs

- Gemology, AS
- Gemology, CA

Apply Now

Gender Sexuality Women Studies*

Department Chair

Tiffany Gause

(714) 628-4870

Gause_Tiffany@sccollege.edu

Course

- GSWS101 - Introduction to Women's Studies
- GSWS102 - Money, Sex, and Power
- GSWS103 - Men and Masculinities

Programs

- Gender, Sexuality, and Women's Studies, AA

Apply Now

Geography and the Environment*

Mission

“The Geography Department is committed to creating a learning environment that allows students to examine the environmental and spatial science of geography including both physical and cultural landscapes across the Earth. Furthermore, courses in Geography prepare students interested in careers in environmental studies, education, urban planning, and geospatial technologies.”

Department Chair

Vanessa Engstrom

(714) 628-4996

Engstrom_Vanessa@sccollege.edu

Course

- GEOG100 - World Regional Geography
- GEOG100H - Honors World Regional Geography
- GEOG101 - Introduction to the Natural Environment
- GEOG101H - Honors Introduction to the Natural Environment
- GEOG101L - Introduction to the Natural Environment Laboratory
- GEOG102 - Cultural Geography
- GEOG102H - Honors Cultural Geography
GEOG130 - Introduction to Weather and Climate
GEOG130H - Honors Introduction to Weather and Climate
GEOG140 - California Geography
GEOG150 - Exploring Maps and Geographic Technologies
GEOG155 - Introduction to Geographic Information Systems
GEOG160 - Regional Field Studies

Programs
Geography, AA-T
Apply Now

Geology*
Department Chair
Angela Daneshmand
(714) 628-5002

Programs
Geology, AS-T
Apply Now

History*
Mission
The mission of SCC history is to equip students with a foundational knowledge of the people and events that have shaped American history and the story of world civilizations. We seek to inculcate an appreciation for the drama and adventure of history and it's value as a means to appreciate diverse peoples and cultures, become engaged and thoughtful citizens and empathetic observers. The study of history builds cultural literacy and academic skills such as critical thinking, research, and academic writing.

Department Chair
Rachel Petrocelli
(714) 682-5090
Petrocelli_Rachel@sccollege.edu

Course
HIST101 - World Civilizations to the 16th Century
HIST101H - Honors World Civilizations to the 16th Century
HIST102 - World Civilizations Since the 16th Century
HIST102H - Honors World Civilizations Since the 16th Century
HIST118 - Social and Cultural History of the United States
HIST120 - The United States to 1877
HIST120H - Honors The United States to 1877
HIST121 - The United States Since 1865
HIST121H - Honors the United States Since 1865
HIST122 - American History-Dynamics of Change
HIST124 - Mexican-American History in the United States
HIST126 - United States since 1945
HIST127 - Women in U.S. History
HIST132 - Modern African History
HIST133 - History of California
HIST142 - History of the Modern Middle East
HIST152 - Latin American History
HIST162 - Asian Civilizations
HIST240 - Introduction to Peace and Conflict Studies
Interdisciplinary Studies*

Mission

No Mission available in DPP

Department Chair
Tiffany Gause
(714) 628-4870
Gause_Tiffany@sccollege.edu

Course
IDS155 - Human Sexuality

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Kinesiology - Health Education*

Mission

The Department of Kinesiology is committed to improving the lives of our diverse community through the cultivation of the knowledge and skills necessary to advance personal awareness, health, and fitness. Our department offers rigorous degree and certificate programs and course offerings in Kinesiology, Nutrition, Fitness, Health, and Sport Studies that effectively prepare students for university transfer and employment/career opportunities. The Intercollegiate Athletics Program at Santiago Canyon College is dedicated to the advancement of this mission through a holistic approach to student-athlete development that empowers individuals to thrive athletically, academically, and as leaders within the community.

Department Chair
Ian Woodhead
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Lisa Camarco
(714) 628-4992
Camarco_Lisa@sccollege.edu

Course
KIN100 - Introduction to Kinesiology
KIN101 - First Aid and CPR
KIN102 - Nutrition and Fitness
KIN104 - Healthful Living
KIN109 - Sport in US Society
KIN110 - Women's Health Issues
KIN111 - Sports Psychology
KIN119 - Personal Fitness Evaluation
KIN121A - Basic Step Aerobics
KIN125A - Basic Cardio Kickboxing
KIN125B - Intermediate Cardio Kickboxing
KIN126A - Basic Spin
KIN126B - Intermediate Spin
KIN127A - Basic Yoga
KIN127B - Intermediate Yoga
KIN127C - Advanced Yoga
KIN128A - Basic Tai Chi
KIN140A - Basic Circuit Weight Training
KIN140B - Intermediate Circuit Weight Training
KIN140C - Advanced Circuit Weight Training
KIN146B - Intermediate Strength Training
KIN146C - Advanced Strength Training
KIN160A - Basic Basketball
KIN160B - Intermediate Basketball
KIN163A - Basic Indoor Soccer
KIN168A - Basic Volleyball
KIN168B - Intermediate Volleyball
KIN170A - Basic Golf
KIN185A - Basic Swimming
KIN185B - Intermediate Swimming
KIN185C - Advanced Swimming
KIN189A - Basic Aqua Aerobics
KIN200 - Conditioning for Athletes-Men
KIN201 - Conditioning for Athletes-Co-Ed
KIN202 - Conditioning for Athletes-Women
KIN203 - Speed and Agility-Men
KIN204 - Speed and Agility-Women
KIN240 - Basketball Team-Men
KIN242 - Basketball Team Off-Season Men
KIN245 - Volleyball Team-Men
KIN246 - Volleyball Team-Women
KIN247 - Volleyball Team Off-Season-Men
KIN248 - Volleyball Team Off-Season-Women
KIN255 - Cross Country Team-Men
KIN256 - Cross Country Team-Women
KIN257 - Cross Country Team-Off Season
KIN270 - Soccer Team-Men
KIN271 - Soccer Team-Women
KIN272 - Soccer Team Off Season-Men
KIN273 - Soccer Team Off Season-Women
KIN274 - Theory of Soccer
KIN281 - Softball Team-Women
KIN283 - Softball Team Off Season-Women
KIN284 - Theory of Softball

Programs
Kinesiology, AA-T
Kinesiology - Fitness and Active Lifestyle, AS
Kinesiology - Fitness and Active Lifestyle, CA
Kinesiology - Health Promotion, AS
Kinesiology - Health Promotion, CA
Kinesiology - Sport Studies, AS
Kinesiology - Sport Studies, CA

Apply Now

Management*
Department Chair
Steven Deeley
Course

MGMT120 - Principles of Management
MGMT121 - Human Relations and Organizational Behavior
MGMT122 - Business Communications
MGMT123 - Supervision
MGMT135 - Human Resource Management

Programs

General Management, AS
Human Resource Management, CERT
Supervision, CERT
Apply Now

Marketing*

Department Chair

Steven Deeley
(714) 628-4739
Deeley_Steven@sccollege.edu

Course

MKTG112 - Principles of Advertising
MKTG113 - Principles of Marketing
MKTG114 - Professional Selling
MKTG115 - Consumer Behavior
MKTG135 - Web Marketing and Promotion
MKTG172 - Small Business Marketing and Advertising

Programs

Advertising, CERT
General Marketing, AS
General Marketing, CERT
Web Marketing, CERT
Apply Now

Modern Languages*

Mission

The Languages Department at Santiago Canyon College offers quality languages experiences to expand awareness and understanding of cultural diversity, and of other worldviews through languages learning. The department is dedicated to providing timely university transfer courses, associate degree programs, and community services learning activities. The Languages Department directs its efforts to help students be better world citizens.

Department Chair

Charlie Malone
(714) 628-5068
Malone_Tom@sccollege.edu
Course

Programs

Modern Languages, AA
Apply Now

Nutrition & Food*

Department Chair
Ian Woodhead
(714) 628-4906
Woodhead_Ian@sccollege.edu

Lisa Camarco
(714) 628-4992
Camarco_Lisa@sccollege.edu

Course

Nutrition
NUTR115 - Nutrition
NUTR120 - Food and Culture

Programs

Nutrition and Dietetics, AS-T
Apply Now

Philosophy*

Mission
The philosophy department is dedicated to instruction that supports genuine student learning and intellectual and personal growth. Our purpose is to sustain and nurture student-centered learning environments that foster the development of critical thinking, reading and writing skills. Our curriculum will support and lead to one or more of the following: an AAT degree; a strong, critical and creative foundation for future studies in the arts, humanities, law and sciences.

Department Chair
Marcel Pimentel
(714) 628-4785
Pimentel_Marcelo@sccollege.edu

Course

Philosophy

PHIL106 - Introduction to Philosophy
PHIL106H - Honors Introduction to Philosophy
PHIL108 - Ethics
PHIL110 - Critical Thinking
PHIL111 - Introductory Logic
PHIL112 - World Religions
PHIL115 - Philosophy of Religion
PHIL118 - History of Philosophy
PHIL120 - Introduction to Social and Political Philosophy
Programs

Philosophy, AA-T

Apply Now

Physical Science*

Department Chair

Cynthia Swift

(714) 628-4707

Swift_Cynthia@sccollege.edu

Course

PSC100 - Survey of Chemistry and Physics

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Physics*

Mission

The mission is to help students understand and appreciate the physical universe by promoting scientific literacy and encouraging curiosity, involvement, and enthusiasm in science and to apply that knowledge to future technology.

Department Chair

Cynthia Swift

(714) 628-4707

Swift_Cynthia@sccollege.edu

Course

PHYS100 - Conceptual Physics

PHYS150A - Introductory Physics I

PHYS150AC - Introductory Physics I – Calculus

PHYS150B - Introductory Physics II

PHYS150BC - Introductory Physics II – Calculus

PHYS250A - Physics for Scientists and Engineers I

PHYS250B - Physics for Scientists and Engineers II

PHYS250C - Physics for Scientists and Engineers III

Programs

Physics, AS-T

Apply Now

Political Science*

Mission

The Political Science Department’s mission is to offer introductory courses in American Government and a variety of other political science courses to fulfill SCC GE requirements, to prepare students for success at four-year institutions, and to train students to develop critical thinking and analytical skills. Lastly, the department is committed to create responsible citizens who are informed and participate in the political system, while developing an appreciation for the science of politics and the state of our system.
Department Chair  
Nooshan Shekarabi  
(714) 628-4744  
Shekarabi_Nooshan@sccollege.edu

Course  
POLT101 - American Government and Politics  
POLT101H - Honors American Government and Politics  
POLT110 - Introduction to Political Science  
POLT150 - Model United Nations  
POLT200 - American Political Thought  
POLT201 - Introduction to Comparative Politics  
POLT220 - International Politics  
POLT221 - Women in American Politics  
POLT230 - Political Theory  
POLT250 - Advanced Model United Nations

Programs  
Political Science, AA-T  
Apply Now

Psychology*  
Mission  
Our mission is to promote psychology as an empirical science and to develop skills and competencies that include writing, computer literacy, quantitative and qualitative research methods, critical analysis of complex problems, knowledge of human behavior and characteristics, increased self-understanding and insight into the behavior of others.

Department Chair  
Christine Umali Kopp  
(714) 628-4768  
UmaliKopp_Christine@sccollege.edu

Course  
PSYC100 - Introduction to Psychology  
PSYC100H - Honors Introduction to Psychology  
PSYC157 - Introduction to Child Psychology  
PSYC160 - Introduction to Lifespan Psychology  
PSYC170 - Multicultural Psychology  
PSYC180 - Psychology of Gender  
PSYC190 - Psychology of Human Sexuality  
PSYC200 - Introduction to Biological Psychology  
PSYC220 - Introduction to Research Methods in Psychology  
PSYC230 - Psychology of Adjustment  
PSYC240 - Introduction to Social Psychology  
PSYC250 - Introduction to Abnormal Psychology

Programs  
Psychology, AA-T  
Apply Now

Public Works*
Mission

This department strives to meet the student needs for degree, certificate completion and successful employment in their chosen field. The department will provide current technology, the resources for learning, and an excellent faculty, all for the purpose of quality instruction.

Department Chair
Carlos Castellanos (Facilitator)
(714) 628-4883
Castellanos_Carlos@sccollege.edu

Course
PBLCO50 - Fundamentals of Public Works
PBLCO51 - Infrastructure Construction and Maintenance
PBLCO61 - Plan Interpretation and Cost Estimating
PBLCO63 - Construction Materials and Testing
PBLCO67 - Environmental Management
PBLCO68 - Fundamentals of Storm Water Management
PBLCO69 - Green Infrastructure Construction
PBLCO70 - Construction Inspection
PBLCO74 - Contract Administration
PBLCO80 - Principles of Project Management
PBLCO85 - Code Enforcement Officer
PBLCO86 - Basic Code Enforcement Officer Module 1
PBLCO87 - Intermediate Code Enforcement Officer Module 2
PBLCO88 - Advanced Code Enforcement Officer Module 3
PBLCO89 - Code Enforcement Officer-Supervision Module 4
PBLC110 - Introduction to Microsoft Project
PBLC150 - Introduction to Public Administration
PBLC151 - Ethics and Professionalism: The High Calling of Public Service
PBLC152 - Preparing for Supervision Public Sector
PBLC153 - Public Sector Budgeting Fundamentals
PBLC154 - Public Sector Human Resources Fundamentals
PBLC155 - The Art of Politics and Policymaking
PBLC199 - Cooperative Work Experience Education

Programs
Code Enforcement and Compliance, AS
Code Enforcement and Compliance, CA
Code Enforcement Officer, CERT
Construction Inspection, AS
Construction Inspection, CA
Construction Management, AS
Construction Management, CA
Environmental Management, AS
Environmental Management, CA
Public Administration and Policy, CERT

Real Estate*

Mission

The mission of the Real Estate Program at Santiago Canyon College is to respond to the educational needs of students who are interested in a career in real estate, appraisal, or a real estate related career, by providing programs and services that reflect this need. The core courses are approved by the Department of Real Estate and satisfy licensing requirements for the Salesperson and Broker.
licenses. Our Appraisal classes are also approved by the Bureau of Real Estate Appraisers for Appraisal licensing. We will strive to provide numerous, diverse, and engaging opportunities for students to explore the real estate field and the many career paths that can be followed.

Department Chair
Alana Gates
(714) 628-5912
Gates_Alana@sccollege.edu

Course
RE102 - Real Estate Principles
RE103 - Legal Aspects of Real Estate
RE105 - Real Estate Practice
RE106 - Real Estate Finance
RE110 - Real Estate Economics
RE112 - Real Property Management
RE114 - Appraisal Principles and Procedures
RE116 - Residential Real Estate Appraisal
RE117 - Residential Report Writing and Case Studies
RE151 - Fundamentals of Escrow
RE153 - Real Estate License Preparation
RE160 - Real Estate Soft Skills
RE171 - Real Estate Cooperative Work Experience/Career Internship

Programs
Real Estate, AS
Real Estate, CA
Real Estate Appraisal, CERT
Real Estate Salesperson, CERT
Apply Now

Sociology*

Mission
Sociology at SCC helps students better understand the process and importance of group dynamics and to function in an ever increasingly integrated world. The coursework assists students to develop research and analytical skills and the ability to utilize abstract thought and problem solving. (Reviewed 2/2010)

Department Chair
Tiffany Gause
(714) 628-4870
Gause_Tiffany@sccollege.edu

Course
SOC100 - Introduction to Sociology
SOC100H - Honors Introduction to Sociology
SOC115 - Death and Dying
SOC116 - Social Problems
SOC120 - Introduction to Sociological Research Methods
SOC125 - Introduction to Statistics in Sociology
SOC125H - Honors Introduction to Statistics in Sociology
SOC130 - Relationships, Marriages, and Family Dynamics
SOC150 - Introduction to Race and Ethnicity
SOC220 - Introduction to Gender and Sexualities
SOC240 - Introduction to Social Psychology
SOC240H - Honors Introduction to Social Psychology
SOC286 - Introduction to LGBTQ Studies

Programs
Social Justice Studies: Chicano, AA-T
Social Justice Studies: Ethnic, AA-T
Social Justice Studies: Gender, AA-T
Social Justice Studies: General, AA-T
Sociology, AA
Sociology, AA-T
Apply Now

Spanish*

Mission
The Santiago Canyon College Spanish Department is committed to offering courses which provide quality language and cultural experiences which expand awareness and understanding of cultural diversity and other world views. In addition, all Spanish courses foster students’ acquisition of the language and progress in reading, writing, speaking and listening skills. It is also our commitment to offer an array of transfer level and enrichment courses to support students in meeting their educational, career or personal goals. Furthermore, our department takes pride in promoting opportunities for learning beyond the classroom by offering extracurricular cultural enrichment events and activities which also allow students to cultivate connections in and outside the classroom.

Department Chair
Charlie Malone
(714) 628-5068
Malone_Charlie@sccollege.edu

Course
SPAN101 - Elementary Spanish I
SPAN101A - Elementary Spanish IA
SPAN101B - Elementary Spanish IB
SPAN101H - Honors Elementary Spanish I
SPAN102 - Elementary Spanish II
SPAN110 - Spanish for Spanish Speakers 1
SPAN111 - Spanish for Spanish Speakers 2
SPAN115 - Practical Communication in Spanish for Teachers
SPAN194 - Beginning Conversational Spanish
SPAN195A - Advanced Conversational Spanish
SPAN195B - Advanced Conversational Spanish
SPAN201 - Intermediate Spanish I
SPAN202 - Intermediate Spanish II
SPAN213 - College Spanish Composition

Programs
Spanish, AA-T
Apply Now

Survey/Mapping Sciences*

Mission
To provide a well-rounded education in the Survey/Mapping Sciences field that is appropriate for career training, university transfer, and/or professional licensing examination preparation.

Department Chair
Mark Counts (Facilitator)
Course
SURV118 - Plane Surveying
SURV119 - Advanced Plane Surveying
SURV155 - Introduction to Geographic Information Systems
SURV205 - Computer Aided Drafting Fundamentals For Surveyors
SURV221 - Advanced Problems in Surveying I
SURV222 - Advanced Problems in Surveying II
SURV229 - Legal Aspects of Land Surveying I
SURV230 - Legal Aspects of Land Surveying II

Programs
Land Surveying, AS
Land Surveying, CA
Apply Now

Water Utility Science*

Mission
This department strives to meet the student needs for degree and certificate completion and successful employment in their chosen fields. We will provide current technology, the resources for learning, and an excellent faculty, all for the purpose of quality instruction.

Department Chair
Jeffry Dennis
(714) 628-5907
Dennis_Jeffry@sccollege.edu

Course
WATR020 - Introduction to Water Science
WATR048 - Wastewater Operator Exam Review
WATR050 - Water Mathematics and Hydraulics
WATR052 - Water Conservation Practitioner
WATR054 - Advanced Treatment Exam Preparation
WATR056 - Treatment Exam Preparation
WATR057 - Water Distribution Test Preparation
WATR059 - Advanced Distribution Exam Preparation
WATR060 - Water Utility Maintenance and Construction
WATR061 - Water Distribution
WATR062 - Advanced Water Distribution
WATR063 - Electrical Wiring and Controls for Operators
WATR064 - Pumps and Pumping
WATR065 - Backflow Prevention Devices
WATR071 - Water Treatment Fundamentals
WATR072 - Advanced Water Treatment
WATR073 - Water Quality
WATR074 - Water Quality Laboratory Analysis
WATR080 - Introduction to Wastewater Treatment
WATR081 - Wastewater Treatment
WATR082 - Advanced Wastewater Treatment
WATR083 - Collection Systems
WATR085 - Water Reclamation and Reuse
Programs

Wastewater/Environmental Sanitation, AS
Wastewater/Environmental Sanitation, CA
Wastewater Treatment, CERT
Water Conservation, CERT
Water Distribution, AS
Water Distribution, CA
Water Distribution, CERT
Water Equipment Operation and Maintenance, CERT
Water Treatment, AS
Water Treatment, CA
Water Treatment, CERT
Water Utility Management, CERT

Apply Now

Continuing Education Courses

Open entry/open exit courses are noted in the course descriptions. Students may enroll at any time in these courses and begin class immediately, provided there is space available. Students progress at their own rate and may exit from the class at any time upon satisfactory completion of the required work.

All credits listed are high school credits. Ten high school credits represent a minimum of 144 hours of study. In open entry/open exit courses, students earn credits by meeting individual competency-based objectives.

Some courses offer a certificate of course completion upon completion of all course requirements. A certificate of course completion does not appear on the official transcript.

Completion of Career Development and College Preparation (CDCP) program coursework appears on the student transcript. In addition, the student may request an official program certificate be issued for successful completion of all CDCP program coursework.

The class schedule should be consulted for current offerings.

Adult Basic Education*

Mission

The mission of Santiago Canyon College’s Continuing Education Adult High School Diploma Program and Adult Basic Education Department is to empower students to learn, to act, to communicate, and to think critically. We are committed to maintaining standards of excellence while helping students maximize their potential by acquiring the necessary skills to reach their personal, educational, and vocational goals as productive, contributing community members.

Department Chair

Jolene Shields

(714) 628-5948

Shields.Jolene@sccollege.edu

Course

ABE009 - Academic Skills
ABE010 - Money Matters: Financial Literacy
ABE011 - Native Language Basic Skills for Adults
ABE023 - Adult Basic Education Reading
ABE024 - Adult Basic Education Writing
ABE025 - Adult Basic Education Mathematics
ABE026 - Adult Basic Education Spelling

Programs

Adult Basic Education, COM
Adult Basic Education/Adult Secondary Education Mathematics, COM
Adult Basic Education/Adult Secondary Education Reading, COM
Adult Basic Education/Adult Secondary Education Writing, COM

Apply Now

Adults with Special Needs*

Mission

To provide life, employment, and foundational educational skills to students with intellectual, developmental, and/or learning disabilities through specialized curriculum. To provide students with the opportunity to earn a certificate of completion, transition into competitive wage employment, or transfer to credit classes. To provide employers with the opportunity for education on employees with disabilities.

Department Chair

Angela Guevara

(714) 628-5987

Guevara_Angela@sccollege.edu

Course

WKPR001 - Transition to Higher Learning
WKPR002 - Self-Advocacy
WKPR003 - Getting Around Town
WKPR004 - Choosing the Right Employment Path
WKPR005 - Safety on the Job
WKPR006 - Communication Skills for Successful Employment
WKPR007 - Social Skills and Necessary Etiquette
WKPR008 - Building Critical Thinking Skills
WKPR009 - Beginning Computers
WKPR010 - Customer Service for the Medical Field
WKPR011 - Introduction to Handling Money
WKPR012 - Applying Reading Skills on the Job
WKPR013 - Applying Writing Skills on the Job
WKPR014 - Basic Finances in the Workforce
WKPR015 - Public Communications
WKPR016 - Long Term Competitive Employment Training
WKPR017 - Applying Math Skills on the Job
WKPR018 - Social Media and Online Safety in the Workplace
WKPR019 - Understanding Students with Disabilities
WKPR103 - Strategies for Instructing Students with Disabilities

Programs

Effective Communication Skills, CC
Employment Readiness, CC
Office Leadership Skills, CC
Office Technology, CC
Technical Skills for Higher Learning, CC
Transition to Higher Learning, CC
Understanding and Supporting Employees with Disabilities, CC
Working with Students with Disabilities, CC

Apply Now
Citizenship*
Department Chair
Rita Van Dyke-Kao
(714) 628-5927
VanDyke_Kao_Rita@sccollege.edu

Course
CTZN020 - Citizenship

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Counseling & Guidance*
Department Chair
Rosa Salazar de la Torre
(714) 628-5935
Dela_Torre_Rosa@sccollege.edu

Course
CNG303 - Education and Career Assessment

Programs
Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

ESL Integrated*
Mission
The mission of the English as a Second Language Department is to offer a variety of ESL classes and programs that enable students to maximize their potential by acquiring the necessary English skills to reach their personal, educational, and vocational goals so that they can benefit from, and contribute to, a changing society as productive, active members of their communities.

Department Chair
Rita Van Dyke-Kao
(714) 628-4839
VanDyke_Kao_Rita@sccollege.edu

Course
ESL010 - ESL Writing
ESL120 - ESL Civics
ESL250 - Seminar for Beginning ESL Students
ESL260 - Seminar for Intermediate ESL Students
ESL270 - Seminar for Advanced ESL Students
ESL300 - Literacy
ESL301 - Beginning Low
ESL302 - Beginning High
ESL303 - Intermediate Low
ESL304 - Intermediate High
ESL305 - Advanced Low
ESL306 - Advanced High
ESL440 - Beginning Multilevel
ESL500 - Intermediate Multilevel
ESL510 - English for Work 1
ESL520 - English for Work 2
ESL530 - American English Pronunciation
ESL570 - Conversation 1
ESL580 - Conversation 2
ESL601 - Advanced Grammar and Writing
ESL606 - Interactive Language Training
ESL800 - ESL for Medical Occupations

Programs

English as a Second Language Program, COM
Enhanced Advanced ESL Skills, COM
Enhanced Beginning ESL Skills, COM
Enhanced Intermediate ESL Skills, COM
ESL Advanced, COM
ESL Beginning, COM
ESL Beginning Multilevel, COM
ESL Civics, COM
ESL Communication, COM
ESL Intermediate, COM
ESL Intermediate Communication, COM
ESL Intermediate Multilevel, COM
ESL Intermediate Writing, COM
ESL Literacy, COM
Vocational ESL, COM

Apply Now

Health Education*

Department Chair
Nancy Parent

(714) 628-5939
Parent_Nancy@sccollege.edu

Course

SAFE200 - Health and Safety Awareness and Application
SAFE850 - Emergency Planning & Safety
SAFE877 - Health Issues & Concepts
SAFE898 - Substance Abuse

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Apply Now

Learning Skills Handicap*

Department Chair
Angela Guevara

(714) 628-5987
Course

SSD200 - Issues and Concepts for Adults With Developmental Disabilities
SSD787 - Employment Preparation for Adults with Developmental Disabilities
SSD788 - Independent Living Skills for Adults with Developmental Disabilities
SSD793 - Physical Activities for Adults with Developmental Disabilities

Programs

Santiago Canyon College does not currently offer a degree or certificate in this pathway.

Office Technology/Computer Applications*

Mission

The Santiago Canyon College, Continuing Education, Business Skills Department, offers a quality business skills and computer applications training program using industry standard/related software for students and community members. Curricula developed and taught by qualified instructors lead to course completion certificates and program completion certificates, as well as prepare students for successful transition to Santiago Canyon College Business Department credit courses and/or the workforce.

Department Chair

Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course

VBUS010 - Introduction to Web Design using Adobe Dreamweaver
VBUS012 - Workforce Readiness
VBUS013 - Introduction to Personal Management using Microsoft Outlook
VBUS014 - Introduction to Mobile and Social Media Tools
VBUS030 - How to Build a Home-Based Business
VBUS040 - Accounting for Non-Accountants
VBUS096 - Introduction to Use of Digital Cameras
VBUS097 - Introduction to Personal Commerce on the Internet
VBUS101 - Introduction to 3D Modeling using Blender
VBUS102 - Introduction to Desktop Publishing using Adobe InDesign
VBUS103 - Introduction to MS Project
VBUS105 - Introduction to 3D Animation using Blender
VBUS107 - Seminar in Adobe Tools
VBUS109 - Introduction to Desktop Video Editing using Adobe Premiere
VBUS117 - Introduction to Document Processing using Adobe Acrobat
VBUS118 - Microsoft Windows Overview
VBUS119 - Introduction to Keyboarding and Basic Windows
VBUS120 - Introduction to Animations using Adobe Animate
VBUS121 - Introduction to Computer Software Applications
VBUS130 - Introduction to 3D Printing
VBUS140 - Introduction to Google Applications for Work
VBUS150 - Introduction to Digital Marketing
VBUS152 - Introduction to Digital Marketing Analytics
VBUS160 - Introduction to Financial Services and Investments
VBUS161 - Introduction to Bitcoin and Digital Assets
VBUS242 - Introduction to Vector Graphics using Adobe Illustrator
VBUS257 - Seminar in Business Applications
VBUS258 - Navigating the Internet
VBUS260 - Introduction to Word Processing using MS Word
VBUS261 - Introduction to Databases using MS Access
VBUS262 - Introduction to Spreadsheets using MS Excel
VBUS302 - Introduction to Web Page Development using HTML
VBUS303 - Introduction to Electronic Imaging using Adobe Photoshop
VBUS304 - Introduction to Electronic Presentations using MS PowerPoint
VDOG020 - Concepts in Dog Training
VDOG030 - Practical Dog Training
VWHS010 - Warehouse Worker

Programs

3D Printing / Advanced Manufacturing, CC
Customer Service Representative, CC
Digital Marketing Specialist, CC
Executive Secretary/Administrative Assistant, CC
Financial Advisor Preparation, CC
First-Line Supervisor/Manager, Office & Administrative Support Workers, CC
General Medical Office Clerk, CC
Home-Based Business, CC
Multi-Media Artists and Animators, CC
Receptionist/Information Clerk, CC
Shelter Dog Training, CC
Warehousing, CC
Web Associate, CC

Vocational Clothing - OECIE*

Department Chair
Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course

VCLTH477 - Fundamentals of Commercial Sewing
VCLTH483 - Introduction to Commercial Sewing

Programs

Commercial Textile Worker, CC

Vocational Construction Carpenter - OECIE*

Department Chair
Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course

VCNST608 - Introduction to Welding, Pre-Apprentice
VCNST611 - Fundamentals of Welding, Pre-Apprentice
VCNST859 - Introduction to Cabinetry/Furniture Refinishing Pre-Apprentice
VCNST953 - Fundamentals of Cabinetry/Furniture Refinishing Pre-Apprentice
Programs
Carpenter, CC
Construction Laborer, CC
Apply Now

Custodial Technician*
Department Chair
Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course
VCST101 - Custodial Technician
VCST102 - Basic Hazmat Safety Standards

Programs
Custodial Technician, CC
Apply Now

Food Processing & Related Technology*
Department Chair
Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course
VFOOD005 - Food Handler Test Preparation
VFOOD010 - Food Service Manager Test Preparation

Programs
Food Handler, CC
Food Service Manager, CC
Apply Now

Vocational Medical*
Department Chair
Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course
VMED010 - Overview of the Nursing Assistant Training Program
VMED011 - Certified Nursing Assistant (CNA) Training
VMED020 - Overview of the Medical Assistant Training Program
VMED021 - Medical Terminology for Medical Assistants
VMED022 - Business Procedures for Medical Assistants
VMED023 - Body Systems for Medical Assistants
VMED024 - Human Diseases and Disorders for Medical Assistants
VMED025 - Clinical Procedures for Medical Assistants
VMED026 - Surgical Assisting for Medical Assistants
VMED027 - Externship for Medical Assistants
VMED030 - Introduction to Caregiving
VMED031 - Caregiver Training
VMED050 - Introduction to Healthcare Occupations
VMED051 - Healthcare Support Worker Pathways
VMED060 - Overview of the Home Health Aide Training Program
VMED061 - Home Health Aide (HHA) Training
VMED070 - Acute Care Theory for Nurse Assistants
VMED071 - Acute Care Practice for Nurse Assistants
VMED080 - Introduction to the Behavior Technician Program
VMED081 - Behavior Technician Certification Training
VMED090 - Introduction to Medical Coding
VMED091 - Introduction to Medical Billing

Programs
Behavior Technician, CC
Caregiver / Personal Care Aide, CC
Healthcare Support Worker, CC
Home Health Aide, CC
Medical Assistant, CC
Medical Billing, CC
Nurse Assistant Acute Care, CC
Nursing Assistant, CC

Vocational*

Department Chair
Angela Guevara
(714) 628-5987
Guevara_Angela@sccollege.edu

Daniel Oase
(714) 628-5985
Oase_Daniel@sccollege.edu

Course
WKPR100 - Understanding Employees with Disabilities in the Workplace
WKPR101 - Strategies for Working with Employees with Disabilities
WKPR500 - Workforce Readiness
WKPR600 - Attitudes for Success
WKPR601 - Money Matters

Programs
Basic Employment Skills, CC
General Medical Office Clerk, CC
Workforce Skills, CC

Continuing Education Information

https://sccollege.elumenapp.com/catalog/all-pages/4a0d669-c6e1-4cbc-bed7-dd32ba6eb18
Mission Statement
The mission of the continuing education division is to offer a variety of free, noncredit classes, programs, and services that enable students to maximize their potential by acquiring the necessary skills to reach their personal, educational, and vocational goals so that they can benefit from, and contribute to changing American society as productive, active members of their communities.

Santiago Canyon College
Orange Education Center
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Orange, CA 92867
714-628-5900

The Santiago Canyon College Orange Education Center is the major adult education service provider in the Orange area. In addition, there are other sites in which instruction is offered. These facilities provide a broad-based program that meets the educational needs of the community. Open entry/open exit classes allow students to register anytime during the school year and provide maximum flexibility with course schedules. For the current class schedule, please visit the website at sccollege.edu/oec or call the Orange Education Center at 714-628-5900.

Classroom Instruction
Traditional and individualized, self-paced classroom instruction is offered in academic, vocational, and basic skills areas. The open entry/open exit format allows flexibility in planning.

Convenient Community Locations
Day and evening community locations make classes conveniently available to all adults in the district.

Weekend Classes
To meet the needs of working adults, continuing education classes are also offered Fridays and Saturdays.

Continuing Education Instructional Programs
INSTRUCTIONAL PROGRAMS

Adult Basic Education (ABE)
Assists students in strengthening their skills in reading, writing, spelling, mathematics, English usage, and grammar. ABE provides students with a strong educational foundation that can be used as a basis for employment preparation, entrance into high school subjects, GED preparation, HiSET preparation, and college and vocational programs. In addition, Native Language Basic Skills for Adults assists students in acquiring basic skills in their native language in order to facilitate the transition to beginning English as a Second Language courses. This program focuses on reading, math, and writing skills, as well as classroom and community coping skills.

Adult High School Diploma
Accommodates adults with varied responsibilities, backgrounds, and needs who desire to earn a high school diploma or California High School Equivalency Certificate (GED/HiSET). Individualized instruction is provided so that students may take classes that fit their personal schedules, thus enabling them to work and complete high school credits at their own pace.

Short-Term Career Education
Provides employment preparation focusing on specific career technical areas and on general workforce development skills. Provides certificate programs in occupational areas with high employment potential.

Citizenship
Introduces students to U.S. citizenship and the naturalization process, U.S. history, and government. Prepares students for the U.S. Citizenship and Immigration Services USCIS interview and exam.
English as a Second Language (ESL)
Provides English language instruction for speakers of languages other than English. Offers instruction in the beginning through advanced levels. Core classes integrate the acquisition of skills in speaking, listening, reading, and writing. Specialty classes focus on further improvement of specific skills, such as conversation, pronunciation, writing, civics, or employability. Provides certificate programs for successful completion of levels; beginning through advanced, as well as specialty courses.

Health and Safety
Provides courses specifically designed to offer lifelong education to promote the health, safety, and well-being of individuals, families, and communities.

Older Adults
Offers courses designed to meet the specific needs of older students in a variety of areas, including music, cooking, health & wellness, manipulative skills, and discussion seminars. Many classes are offered in facilities specifically serving older adults.

Parent Education
Provides courses that emphasize intellectual, physical, and emotional aspects of parenting.

Substantial Disabilities
Provides courses designed to address the educational limitations of persons with a verified physical or mental impairment that substantially limits one or more major life activities.

Workforce Preparation
Provides Workforce Preparation courses focusing on the basic skills of speaking, listening, reading, writing, mathematics, decision-making, and problem-solving skills that are necessary to participate in job-specific technical training.

PLEASE NOTE: Some workforce preparation courses are designed to meet the specific needs of adults with disabilities, including physical, intellectual, developmental, and learning disabilities.

Admissions and Student Services
Who May Attend
Persons 18 years of age or older, or high school graduates, are eligible to enroll in continuing education classes. Students currently enrolled in secondary schools who wish to attend continuing education classes may be admitted by special request of the secondary school and approval from continuing education administration.

Where to Register
Santiago Canyon College
Orange Education Center
1465 North Batavia Street
Orange, CA 92867
714-628-5900

Santiago Canyon College
OEC Provisional Education Facility
1937 West Chapman Avenue, 2nd Floor
Schedule of Classes
A schedule of classes is prepared each semester which includes general information, courses offered, hours, locations, and rooms. Schedules are available before registration each semester in each of the major continuing education sites and Rancho Santiago Community College District campuses. Registration is ongoing, provided there is space available in classes.

Open Enrollment
The policy of the Rancho Santiago Community College District and Santiago Canyon College is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the college, shall be fully open to enrollment and participation by any person who has been admitted to the college, provided there is available space in classes.

Class Discontinuance Policy
Any class which does not have a total of at least 20 students enrolled by the beginning of instruction may be discontinued. Any class which does not maintain satisfactory attendance may be discontinued at any time during the term.

Student Identification Card
Each student may obtain a student identification card upon request. For more information, please call OEC Admissions and Records Office 714-628-5900.

Textbooks and Supplies
ESL textbooks are available for purchase (cash or check, no credit cards) at the OEC Provisional Education Facility Bookstore. A complete list of ESL textbooks required for each class, along with their costs, is posted. Supplementary books and supplies are also available. Phone 714-628-5924 for additional information. Students in classes held at Santiago Canyon College (SCC) can purchase textbooks and supplies at the Hawk Bookstore, located in A-101. For more information, phone 714-628-5900 or go to www.hawkbookstore.com.

Testing
A wide variety of academic, aptitude, vocational, interest, and other assessments are provided to assist the adult in educational and career planning. Diagnostic assessment tests are administered to advise placement for courses in English as a Second Language, Adult Basic Education, and High School Subjects.

Counseling and Guidance
Counselors are available to provide academic, career and personal counseling in a confidential office setting. Students may seek counseling for many reasons, including the planning of educational objectives, obtaining information about employment and job skills, resolving personal and family problems, examining aptitudes, interests, and achievement, finding new careers and vocational directions, and learning to adjust in a new country. Students enrolling in courses leading toward an adult high school diploma must see a counselor upon registering. Counselors are available by appointment or on a walk-in basis. For more information or to arrange an appointment, please call 714-628-5929.

Scholarships
Several scholarships are made available to continuing education ESL students and high school graduates. Selection of scholarship recipients will be based upon the recommendation of teachers and counselors, financial need, academic excellence, attendance, and minimum enrollment standards. For more information, call the Counseling office at 714-628-5929.

Photography
Santiago Canyon College, a non-profit California Community College, reserves the right to use photography and video images of students and visitors, age 18 and older, taken on our property and at college-sponsored events for marketing and promotional purposes. Objection to the use of an individual's photography may be made in writing to Public Affairs and Publications, RSCCD District Office, 2323 N. Broadway, Suite 408, Santa Ana, CA 92706.

Disabled
Students Policy The College will make reasonable accommodations for individuals with disabilities. To request services, contact the office of Disabled Students Programs and Services at 714-628-4860.

Career Services
Career information, materials, interest inventories, and counseling are provided for interested students. Appointments may be made by calling 714-628-5942.

Associated Student Government
The Associated Student Government was established to provide students with government and leadership experience. Opportunities are available to become involved as student representatives. Students will learn firsthand about group dynamics and decision making, event programming, and running effective meetings. Additionally, there are student clubs to join. For more information, please call 714-628-5947.

Child Development
A child development program center is available at Santiago Canyon College. There is no fee for eligible families. Arrangements may be made by calling 714-628-6952.

Transcripts
Students may obtain an official transcript of records by filing in person or mailing a request to the Admissions and Records Office, OEC Provisional Education Facility, 1937 West Chapman Avenue, 2nd Floor, Orange, CA 92868. The first two in-person transcripts will be issued without charge, thereafter, a $3 charge will be assessed for each additional transcript. All official transcripts are copies of the student's permanent record in the Office of Admissions and Records. Only records prepared and issued directly from that office will be considered official or certified for accuracy.

Policies Governing Students
Attendance
Students are expected to attend all class meetings. Students who are enrolled but absent on the first class session may be dropped. A student may also be dropped for excessive absences.
Students are expected to demonstrate academic progress throughout each course. Failure to meet academic goals and contracts may result in a student being dismissed from the program for more than one semester. Reentry enrollment is contingent upon a contractual agreement with the college administration.

Standards of Student Conduct

Guidelines for Student Conduct are set forth in the California Education Code, California Administrative Code, Title V, policies of the Board of Trustees, and all civil and criminal codes. Students enrolling in district educational programs assume an obligation to obey state law and district rules and regulations governing the conduct of students.

Standards of Conduct for Computer Classrooms and Computer Labs

In accordance with Board Policy (BP 3720) and Administrative Regulation (AR 3720) and in an effort to extend the life of the hardware, comply with the copyright laws, and adhere to appropriate computer network conduct and usage, standards of conduct are required of all students using computer classrooms, computer labs, and the wireless network.

Academic Honesty

Students at Santiago Canyon College are expected to be honest and forthright in their academic endeavors. To falsify the results of one’s research, to steal the words or ideas of another, or to cheat on an examination corrupts the essential process by which knowledge is advanced. Academic dishonesty is seen as an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization or uses unauthorized materials or fabricated information in any academic exercise. We as an institution, also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, assisting other students in acts of dishonesty, or coercing students into acts of dishonesty.

Disciplinary Action

Violations to any tenets within the standards of student conduct are subject to the following disciplinary actions: warning, reprimand, probation, restitution, removal, suspension, or expulsion. Disciplinary actions may be imposed singly or in combination.

Grading Standards

A - Superior - 4 grade points per unit
B - Above Average - 3 grade points per unit
C - Average - 2 grade points per unit
D - Below Average - 1 grade point But Passing per unit
F - Fail - 0 grade points (but counted in GPA)
CIP - Currently - In Progress 0 grade points
P - Pass - 0 grade points
COM - Completed - 0 grade points
SP - Satisfactory Progress - 0 grade points
NP - No Pass - 0 grade points

Credit by Examination

Credit by examination may be earned only for courses that are specifically designated as courses that are eligible for credit by examination. A student cannot take credit by examination to improve a substandard grade. High School Diploma Courses Information for receiving credit by examination may be obtained from a continuing education counselor.

High School Subjects:

English 066, 067, 084, 098
Mathematics 156, 157, 159, 163, 164, 165, 166 Science 168, 169, 190, 191, 192, 193
Social Sciences 215, 218, 219, 222, 229, 230

Math Continuing Education 206, 255

Career Technical Business Skills Courses Examinations are offered on specific dates. Students who demonstrate course competency are awarded a passing grade.

Vocational: Business 118, 119, 258, 260, 261, 262, 304 Food 005

Procedures for Student Complaints Regarding Grades

Education Code 76224 states: “When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor for the course; and the determination of the student’s grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetence, shall be final.”

Procedure

Students shall meet with an instructor to discuss the grade.

If the issue is not resolved, and the student believes that the grade is based on mistake, fraud, bad faith, or incompetency (EC 76224), an appeal in writing may be made to the Area Dean of Instruction and Student Services. Forms of written appeal may be found in the office of the Area Dean of Instruction and Student Services.

The student may be requested to set up an appointment with the Dean of Instruction and Student Services to discuss the written complaint.

The Dean of Instruction and Student Services will review the allegations and may consult with the instructor.

The Dean of Instruction and Student Services will review the issue and will notify the student and instructor in writing of the decision.

The decision of the Dean of Instruction and Student Services is final.

Complaint Procedures for Students

Students may file a complaint when they believe they have been deprived of a right granted to students by the Board of Trustees in any of the policies or regulations of the Rancho Santiago Community College District. The purpose of these complaint procedures is to resolve differences as fairly and expeditiously as possible while preserving the rights of students and staff members.

Definitions

Days: number of days refers to the days when the District offices are open.

Committee: Continuing Education Student Complaint Committee.

Procedure

Students shall first confer with the staff member who took action or made the ruling to which they object no later than ten days following the event which prompted the complaint. The Area Dean of Instruction and Student Services or designee will assist the student in arranging an appointment with the staff member.

If the difference is not satisfactorily resolved, the student shall confer with the staff member’s supervisor. The Area Dean of Instruction and Student Services or designee will assist the student and staff member’s supervisor.

If the complaint is unresolved, the student may file a written statement setting forth the nature of the complaint on the prescribed form with the Area Dean of Instruction and Student Services no later than ten days after conferring with the staff member’s supervisor.

The complaint form shall be completed in full and shall include a full description of the complaint, times, dates and pertinent facts, and the remedy sought by the student.

A Student Complaint-Staff Response form will be sent to both the staff member and supervisor for completion.

The Area Dean of Instruction and Student Services shall forward the completed forms to the Continuing Education Student Complaint Committee chairperson for review and recommendation. The committee shall have the power to make an appropriate investigation of the complaint and shall state the findings and make a recommendation.

If the complaint is sustained by the committee, it will recommend appropriate action for relief of the complaint and communicate this in writing to the staff member to whom the complaint was directed. If the staff member accepts the recommended action and if the student who filed the complaint is satisfied with the action, the complaint shall be considered resolved and closed.
If the findings of the committee do not sustain the complaint, the committee shall communicate this finding in writing to the student who filed the complaint. If the student accepts this finding, the complaint shall be considered resolved and closed.
If no resolution of the complaint is obtained under (g.) or (h.) above, the Area Dean of Instruction and Student Services shall forward the complaint together with the findings of the committee to the Chancellor for review and decision.
If this decision does not resolve the complaint in the opinion of the student, the Chancellor shall present the case to the Board of Trustees with the findings and recommendations. If the Board finds that the complaint is invalid, the Chancellor's recommendation shall stand in the final resolution. If the Board finds that the complaint is valid, it shall instruct the Chancellor as to how the complaint shall be resolved, and the Chancellor shall implement the Board's decision.

Student Records
Under the guidelines of the Family Educational Rights and Privacy Act of 1974, student records are confidential, and privacy is to be scrupulously maintained.

Right to Review and Challenge Records:
Under the provisions of the U.S. Department of Health, Education, and Welfare, students have the right to inspect and review any of the following files:
– admissions/records
– data processing
– financial aids
– placement
– veterans

After review and exploration, students may challenge any information relating to them if they believe the information to be inaccurate, misleading, or otherwise in violation of their rights of privacy or other rights. Forms for a challenge are available in the Area Dean of Instruction and Student Services office. District staff or other professionals who have a legitimate educational interest such as counseling and carrying out the normal operations of the educational program have access to student records. Any student has the right to file a complaint with the U.S. Department of Health, Education, and Welfare concerning alleged failure of the institution to comply with provisions above or Section 438 of the General Provision.

High School Petition Students
Secondary school students who wish to take course work in Rancho Santiago Community College District Continuing Education and have it transferred to another school must present a completed Petition for Registration in order to be considered for admission. Failure to comply fully with all conditions listed on the form may result in the immediate revocation of the petition and dismissal from Continuing Education classes.

Grading and Transfer of Credits: Students must satisfactorily complete all course requirements including exams, projects, papers, and attendances before credit or grades can be issued. Students are responsible for planning schedules and progress in order to earn credits in time to meet graduation deadlines in other school districts.
Conduct: A student's conduct must be productive, responsible, and courteous at all times. Unacceptable behavior may result in the immediate revocation of this petition and dismissal from class. Unacceptable behavior includes, but is not limited to, excessive talking, noncompliance with rules, failure to follow instructor directions, falsification of records, cheating or assisting others to cheat, destruction or theft of school property, disruption of classes, violence, or being under the influence of drugs or alcohol.

Special Rules, Regulations, and Student Obligations
Because of special program characteristics, the following programs must adhere to special rules, regulations, and student obligations beyond the Standard Guidelines for Student Conduct adopted by the Rancho Santiago Community College District. Students enrolled in any of the following programs are obligated to perform within those special program guidelines in order to maintain class attendance: any community-based organization or governmental agency with which the Rancho Santiago Community College District cooperates in a program offering.

Family Education Rights and Privacy
As required under the provisions of the Family Education Rights and Privacy Act of 1974, the Rancho Santiago Community College District will make public without student consent only certain directory information. This information consists of the following: a student's name; city of residence; a major field; participation in officially recognized activities and sports; weight, height, and age if a member of an athletic team; dates of attendance; degree and awards received; and the most recent previous educational institution or agency attended by the student. A student may request the Admissions and Records Office to withhold this information. Such requests must be in writing and submitted each semester.

Use of Public School Facilities for Adult Classes

Alcoholic Beverages and Controlled Substances: Both by policies instituted by local Boards of Education (Garden Grove Unified School District, Orange Unified School District, Rancho Santiago Community College District, and Santa Ana Unified School District) and California State Law specifically prohibit possession of alcoholic beverages and controlled substances on school premises at any time, by any person, regardless of age. Regulations also prohibit the use of alcoholic beverages at school events, whether on or off the campus, or the appearance at school events while under the influence of alcoholic beverages and/or controlled substances. The penalty for violation of these regulations is immediate suspension from school, followed by expulsion if imposed by the Board of Trustees. Additional penalties may be imposed by law enforcement agencies.

Smoking: Provisions of the Uniform Fire Code, Article 29, Section 29.06, Smoking Activity on School Property, state: "It shall be unlawful for any person or persons to engage in any smoking activity or to possess any flaming or glowing object or cause to be lighted any substance in any classroom or on school property at any time except in areas authorized by the local Board of Education." The only areas authorized for smoking are outside the school buildings in a designated smoking area. There is to be No Smoking by anyone in any of the classrooms at any time. Proper containers are provided in the smoking areas for the disposal of cigarettes.

Food and Beverages: Food and beverages are not to be brought into the classrooms at any time. Proper containers are provided for the disposal of trash in designated areas.

Adult High School Program

General Information

Rancho Santiago Community College District offers a comprehensive adult high school diploma program for adults who wish to continue their formal education. The Adult High School Diploma Program at Santiago Canyon College is approved by the California Community Colleges Chancellor's office. Santiago Canyon College is accredited by the Accrediting Commission for the Western Association of Schools and Colleges (Approval #31601). Diplomas are issued by the Rancho Santiago Community College District to students who complete the required course of study and demonstrate proficiency in basic skills. Graduation ceremonies are traditionally held each spring at Santiago Canyon College. Students may complete the diploma program at any time during the year and receive verification of completion of requirements at that time. Courses designed to meet adult high school graduation requirements are offered in both the traditional classroom setting or in open entry/open exit self-paced individualized learning. Elective credits may be earned in continuing education classes offered in a wide variety of locations throughout the community as listed in the schedule of classes published each semester.

Counseling and Guidance

Students must see a counselor to prepare an educational plan, discuss academic and career goals, and regularly update their educational plans. Counselors are available by appointment or on a walk-in basis. For more information or to arrange an appointment, please call 714-628-5929.

Registration

The Adult High School Diploma Program is available at the Santiago Canyon College. Students may obtain a schedule of classes and enroll at any time during the fall, spring, and summer semesters. For information, call 714-628-5929.

To qualify for an adult high school diploma, the candidate must meet the following requirements:

The Course of Study - Adult High School Graduation Requirements

The high school diploma requires a total of 160 credits taken from the following:

- **English** - 40.0 (a maximum of 10 credits of reading; must include at least one composition course)

- **Mathematics** - 20.0 Natural Sciences 20.0 (must include both a biological and a physical science course)
Social and Behavioral Sciences (must include U.S. History, 30.0 American Government, Economics, World History, Geography, and Culture)

Humanities - 10.0
Electives - 40.0
TOTAL 160.0

Limitations on Enrollment
A student who has received a passing grade (A, B, C, D) for a high school course may not re-enroll in the same course. A student who has graduated from the Adult High School Diploma Program may not enroll in Adult Basic Education (ABE) or high school courses without written permission from an administrator.

Residency
Residency Requirement: At least 20 of the 160 required high school credits must be completed in residence at Santiago Canyon College. Only 5 of the 20 residency credits may be challenged.

Petition for Graduation & Catalog Rights
A petition for graduation must be completed and submitted soon after the date a student completes the diploma requirements. Students who maintain continuous enrollment have the option to meet the certificate requirements as listed in the catalog in effect at the time of first enrollment or any subsequent year. Continuous enrollment is defined by earning a grade in continuing education for at least one course during any semester or session (fall/spring or summer), within that academic year. For the purposes of the catalog, an academic year begins with the fall semester and concludes with the summer session. If a student does not earn a grade on their transcript during any of the semesters, or sessions, during an academic year, then the student is no longer protected by previous diploma/certificate requirements and will be held to the additional requirements. The student must then reset their catalog rights clock to use the catalog at the time of readmission or subsequent enrollment. In the event a loss of catalog rights due to extenuating circumstances, a student wishes to waive or substitute a requirement for certificate requirements, the student could complete the appropriate form and submit to the Exceptions for Academic Regulations (EAR) Committee for final determination.

NOTE: Commencement exercises are held once a year at the end of the spring semester for those students who complete the requirements for graduation during the year or the summer session. Students transferring credits to complete the high school diploma must have Official Transcripts from all high schools and/or colleges attended on file in the Admissions and Records office prior to graduation.

Proficiency Requirements
Proficiency must be demonstrated in basic skills areas of reading, mathematics, and composition, according to the categories listed below:

- **Reading.** Students will be required to demonstrate a minimum eighth-grade reading ability as measured by an SCC Continuing Education approved reading proficiency examination.
- **Mathematics.** Students will be required to demonstrate math proficiency by passing an SCC Continuing Education approved mathematics examination with a minimum score of 70%, or by passing the Math Fundamentals 2 course.
- **English Composition.** Students will be required to demonstrate English composition proficiency by passing an SCC Continuing Education approved composition examination with a minimum score of 70% or by passing the Composition 2 course.

Grade Reports
Grade Reports: In-class progress is reported to the student in a number of ways. Tests are often given to show individual student progress.
Cumulative Records: The district will maintain cumulative records on each current high school diploma student. These records may contain pertinent information necessary to aid students in educational planning. Placement tests follow-up, interest inventories, and other data contained in the cumulative record will be available for review by the student upon request.
Previous Secondary Schools

All credits earned in the 9th, 10th, 11th, and 12th grades recorded on an official transcript will be accepted except physical education credits and credits which are a duplication of course work for which credit was previously granted.

Trade or Business Schools

Courses that are taken in trade or business schools will be evaluated for possible high school credit equivalency. Courses in this category must be approved by the Office of Private Postsecondary Education. It is the responsibility of the student to provide to the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

Armed Forces Schools and/or Programs

Credit may be granted for completion of training programs and other valid educational experiences provided they have been certified by the United States Armed Forces Institute or by a statement on the service record, and provided they parallel 1) courses usually taught in secondary schools, and 2) vocational training courses with counterparts in civilian life. The recommendations for credit for such programs and experiences are contained in three volumes published by the American Council on Education: The 2006 edition of the Guide To The Evaluation of Educational Experiences In The Armed Services, Vol. I.-Air Force; Vol. II.-Army; Vol. III-Coast Guard, Marine, and Navy.

This section is to be interpreted as including:
- Officer and enlisted service school courses;
- Off-duty classes offered by the armed forces and cooperating local institutions;
- Correspondence courses offered by the United States Armed Forces Institute, the Marine Corps Institute, the Coast Guard Institute, and cooperating colleges and universities;
- United States Armed Forces Institute courses and subject examinations. (Authorization for this procedure is contained in Title V, Section 99, part C, of the California Administrative Code.)

College Courses

College units to be used for high school credits may be evaluated in a ratio of 3 college units to 10 high school semester periods of credit. The college should be notified in writing when college credits are utilized to meet high school requirements. College credit equivalency recommended by the American Council on Education guides will be evaluated for high school credit on the same basis as other college credit courses.

Correspondence Courses

Courses taken by correspondence will be evaluated for possible high school credit equivalency. Courses in this category must be approved by the Office of Private Postsecondary Education. It is the responsibility of the student to provide the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

Adult School Courses

Courses taken at adult schools will be evaluated for possible high school credit equivalency. Courses in this category must be approved by the California State Department of Education. No credit will be allowed for physical education courses nor for courses from other adult schools if such courses are designated in the Rancho Santiago Community College District as “no high school credit.” It is the responsibility of the student to provide the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

Work Experience

Students may obtain credit for certain types of full-time work experience or for work experience that can be related to high school subject matter. In order to obtain credit for work experience, students must provide written verification from those employers with whom they have worked for at least one year. The Continuing Education administrators or counselors will evaluate the amount of work experience credit and the area of application. Evaluation will not be made for more credits than is necessary to meet graduation requirements and which the letters of verification justify. Combined work experience credit and consumer skills task credit may not exceed 40 credits.

Verification of work experience should be obtained by the student, requesting from each employer on official letterhead stationery the following information:
Dates of employment.
Job description.
Nature of duties performed, indicating progress to more complex operations justifying a division into the beginning and advanced skills.
Statements regarding successful performance.
Reason for termination of employment, if applicable.
The letter of self-employed students must be accompanied by a copy of the student's business license or W-2 form.
Upon receipt of verification of all work experience which the student wishes to be considered for credit, an evaluation will be made on the following basis:

- Up to 10 credits will be given for the first year of successful work experience.
- Up to 10 additional credits to a maximum of 40 will be granted for each additional full year of employment if the student has made successful progress each year on the job.
- After the initial 10 credits for the first year, a student may earn 5 credits for a period of six months of employment, provided there is evidence of successful progress.

Testing
The district may award a maximum of 80 high school credits on the basis of district-approved testing.

**Mathematics Achievement Test (ITED)** Credit may be earned in mathematics by obtaining a satisfactory score on the math section of the Iowa Tests of Education Development Form X5. No other subtests are accepted for credit purposes. Ten-semester credits will be awarded for a raw score of 14, provided these credits are not previously earned math credits. (These 5 credits may be used to satisfy Math Fundamentals 2 requirements.) Fifteen-semester credits will be awarded for a raw score of 20, provided these credits are not a duplication of previously earned math credits. (These 10 credits may be used to satisfy Math Fundamentals 2 requirements, and 5 elective credits.)

**Subject Matter Credit by Examination** Credit by examination may be earned only for courses that are specifically designated by the division curriculum committee as courses that are eligible for credit by examination. Information for receiving this credit may be obtained from a counselor in continuing education. Only 5 of the 20 residency credits may be challenged.

Regional Occupational Program Courses
Credit will be determined upon receipt of an official secondary or community college transcript which indicates credit and grades as appropriate.

Guidelines for issuance of ROP credit when not on a unified school district transcript:
RS CCD will accept an official Grade Reporting Sheet from the Central County Regional Occupational Program in lieu of a unified school district transcript provided it has a grade and a number of total hours.
The amount of credit issued is to be based on 16 clock hours per credit unit.
A maximum of 20 units toward electives will be accepted in this manner.
Students coming from outside the CCROP will have to validate their credits only through an official school district transcript.

Other Electives
Learning Skills A maximum of 40 credits in Learning Skills will be allowed toward high school graduation credit in the elective area, including work experience.
English as a Second Language (ESL) A maximum of 10 elective high school diploma credits may be awarded to students who pass English as a Second Language 304, 305, or 306.
Adult Basic Education (ABE) A maximum of 20 high school elective credits may be granted when students pass all or parts of the required ABE exit tests.

Career Development & College Preparation Certificates

- **3D Printing / Advanced Manufacturing, CC**
- **Adult Basic Education, COM**
- **Adult Basic Education/Adult Secondary Education Mathematics, COM**
- **Adult Basic Education/Adult Secondary Education Reading, COM**
- **Adult Basic Education/Adult Secondary Education Writing, COM**
- **Adult Secondary Education, College Preparation Algebra, COM**
- **Adult Secondary Education, College Preparatory Composition, COM**
- **Adult Secondary Education Mathematics, COM**
Basic Employment Skills, CC
Behavior Technician, CC
Caregiver / Personal Care Aide, CC
Carpenter, CC
College Preparation Mathematics, COM
College Readiness, COM
Commercial Textile Worker, CC
Construction Laborer, CC
Custodial Technician, CC
Customer Service Representative, CC
Digital Marketing Specialist, CC
Effective Communication Skills, CC
Employment Readiness, CC
English as a Second Language Program, COM
Enhanced Advanced ESL Skills, COM
Enhanced Beginning ESL Skills, COM
Enhanced Intermediate ESL Skills, COM
ESL Advanced, COM
ESL Beginning, COM
ESL Beginning Multilevel, COM
ESL Civics, COM
ESL Communication, COM
ESL Intermediate, COM
ESL Intermediate Communication, COM
ESL Intermediate Multilevel, COM
ESL Intermediate Writing, COM
ESL Literacy, COM
Essential Mathematics and Math Study Skills Support, COM
Executive Secretary/Administrative Assistant, CC
First-Line Supervisor/Manager, Office & Administrative Support Workers, CC
Food Handler, CC
Food Service Manager, CC
General Medical Office Clerk, CC
General Office Clerk, CC
Healthcare Support Worker, CC
High School Equivalency Test (HiSET), COM
Home-Based Business, CC
Home Health Aide, CC
Medical Assistant, CC
Medical Billing, CC
Multi-Media Artists and Animators, CC
Nurse Assistant Acute Care, CC
Nursing Assistant, CC
Office Leadership Skills, CC
Office Technology, CC
Receptionist/Information Clerk, CC
Secondary Education, COM
Secondary Education/GED Preparation, CC
Shelter Dog Training, CC
Student Leadership, COM
Technical Skills for Higher Learning, CC
Transition to Higher Learning, CC
Understanding and Supporting Employees with Disabilities, CC
Vocational ESL, COM
Warehousing, CC
Web Associate, CC
Workforce Skills, CC
Working with Students with Disabilities, CC

A1: Oral Communication

COMM100 - Introduction to Interpersonal Communication
COMM100H - Honors Introduction to Interpersonal Communication
COMM101 - Group Dynamics
COMM110 - Public Speaking
COMM111 - Argumentation and Debate
A2: Written Communication

ENGL100 - Freshman Composition with Integrated Support
ENGL101 - Freshman Composition
ENGL101H - Honors Freshman Composition

A3: Critical Thinking

COMM111 - Argumentation and Debate
ENGL102 - Literature and Composition
ENGL102H - Honors Literature and Composition
ENGL103 - Critical Thinking and Writing
ENGL103H - Honors Critical Thinking and Writing
PHIL110 - Critical Thinking
PHIL111 - Introductory Logic
READ150 - Critical Reading
READ151 - Critical Reading and Analysis

Academic Skills

ABE009:

288.0 Hours

Instructs students in basic skills including reading, writing, spelling, and mathematics. Prepares students to take High School Subjects courses, job training or college credit classes. Optional field trips may be offered. Open Entry/Open Exit. Minimum of 5 HS credits, a maximum of 20 HS credits - increments of 5 credits. Lecture hours range - 72 min hours to 288 max hours. Previous Title: Adult Basic Education (2017)

Requisites

Requisites:

Advisory

ESL460 - Intermediate ESL 1

or higher and/or placement by counselor assessment

Learning Outcomes

Course Objectives:

Read, comprehend, and utilize print information to succeed in school and function in society

Appreciate a variety of reading materials

Read at a level acceptable for entry into high school completion program, GED, or other education or job-training programs

Use context clues to understand text

Use critical thinking skills to interpret and analyze text

Broaden knowledge of word meaning through the use of vocabulary development

Increase sight vocabulary

Understand multiple meanings, synonyms, antonyms, homonyms, and frequently recurring prefixes and suffixes

Use reference tools, such as the dictionary, Internet, and library

Practice decoding skills including sight vocabulary, structural analysis, and phonic awareness

Develop a connection between reading and writing skills

Compose effective sentences, using the standard conventions of English including mechanics, sentence structure, spelling, and usage

Compose effective and well-organized paragraphs using the Writing Process

Produce a variety of written materials to meet personal, educational, and job-related needs

Use word processing software to assist in the publication of written materials

Complete Megawords workbook activities including computer activities and multi-sensory spelling concepts practiced in class lessons

Proof and correct written exercises, including using spell check on the computer

Understand number concepts including place value and rounding

Add, subtract, multiply, and divide whole numbers

Add, subtract, multiply, and divide fractions
Add, subtract, multiply, and divide decimals

Apply problem-solving techniques using the above skills in real-life situations

**Student Learning Outcomes:**

- Demonstrate proficiency in addition, subtraction, multiplication and division of all whole numbers, fractions, and decimals.
- Demonstrate level gains in reading.
- Develop and organize a 10-15 sentence paragraph unified by a central idea.
- Demonstrate improvement in spelling in everyday writing.

**Money Matters: Financial Literacy**

**ABE010:**

36.0 Hours

Prepares the student for the adult world of financial management by developing sound decision-making skills in personal and family money matters. Open Entry/Open Exit. 2.5 HS credits.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Demonstrate how to manage personal spending
- Develop a personal budget that works
- Identify the advantages and disadvantages of credit and debt
- Explain how to avoid credit card fraud
- Demonstrate how to boost earning capacity.
- Develop an educational plan and set financial goals.
- Comprehend how to put personal assets to work to build wealth
- Identify the sources of money for college
- Use tables charts and graphs
- Identify means to earn extra money
- Explain education as an investment in future employment prospects.
- Identify the sources of investment information to make sound investment selections
- List steps to protect against identity theft.
- Recognize signs of a scam.
- List elements of internet safety

**Student Learning Outcomes:**

- Create a budget of monthly income and expenses.
- Develop a savings plan.
- Demonstrate ability to calculate interest on loans and credit cards.
Native Language Basic Skills for Adults
ABE011:

216.0 Hours
Assists students in acquiring basic skills in their native language in order to facilitate the transition to beginning ESL courses. Focuses on reading, math, and writing, as well as academic and life skills. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Identify sound/symbol relationship of alphabet.
Demonstrate understanding and ability to use decoding skills.
Build and develop vocabulary.
Read for meaning.
Read and print the alphabet, syllables, words, and simple sentences.
Recognize and use basic writing skills (punctuation, capitalization, and usage).
Understand how to gain vital information by reading and through community awareness.
Apply and reinforce reading and writing skills.
Recognize and identify basic parts of speech.
Understand and apply basic math concepts (addition, subtraction, and word problem application).
Develop basic life skills:
Fill out basic forms.
Express basic needs with simple words or phrases drawn from learned materials.
Produce basic personal identification.
Respond to simple commands as used in basic communication in the community.
Ask questions with words and phrases about personal information, family and time.

Student Learning Outcomes:
Increase basic reading and writing skills.
Increase basic math and life skills.

Adult Basic Education Reading
ABE023:

90.0 Hours
72.0 Hours
Instructs students in basic reading and functional literacy skills. Prepares students for Adult High School Diploma courses, job training, or the California High School Equivalency Certificate course. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Describe phonemic awareness and phonics decoding skills.
Perform skills in phonics, compound words, and syllabication.
Demonstrate skills including recognizing sight words and word parts.
Increase reading fluency.
Increase comprehension skills (recalling facts, main idea, fact and opinion, sequence of events) for more efficient reading.
Increase critical thinking and reading skills such as making inferences and drawing conclusions.
Demonstrate skills for studying and vocabulary development.
Identify reference tools, such as dictionary, Internet, and library.
Increase understanding of word meanings.
Distinguish the meaning of frequently used synonyms, antonyms, and homonyms.
Describe meaning of vocabulary in context.

Student Learning Outcomes:
Increase basic vocabulary.
Improve reading comprehension and fluency.

Hours
Total Hours
90.0

Total Hours
72.0

Adult Basic Education Writing
ABE024:

72.0 Hours
Instructs students in basic writing and functional literacy skills. Prepares students for Adult High School Diploma courses, job training, or the California High School Equivalency Certificate course. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Employ basics of grammar, mechanics, punctuation, and word use.
Identify parts of speech.
Identify components of a complete sentence.
Use proper punctuation in varied sentences.

Identify sentence fragments and run-on sentences.

Write sentences with proper subject-verb agreement.

Identify paragraph components and development.

Write a topic sentence.

Write adequate supporting details for a topic sentence.

Write a concluding sentence.

Demonstrate the writing process by displaying prewriting, rough draft, revising, proofreading, and editing steps.

**Student Learning Outcomes:**

- Evaluate basic grammar and writing mechanics resulting in well-crafted sentences.
- Write a well-organized paragraph.

**Hours**

**Total Hours**

72.0

**Adult Basic Education Mathematics**

**ABE025:**

90.0 Hours

72.0 Hours

This class is designed to teach and enhance student's functional math skills. The areas covered are money management/budgeting, time, measurement, basic math computation and personal consumer skills. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Describe strategies of money management.

Recognize the difference and similarities in analog and digital time.

Solve real-world problems involving customary and metric measurement.

Solve real-world problems involving whole numbers, fractions, and decimals.

Demonstrate personal consumer skills.

**Student Learning Outcomes:**

Analyze money management/budgeting, time, and measurement.

Employ basic math computation and personal consumer skills.

**Hours**

**Total Hours**

90.0

72.0

**Adult Basic Education Spelling**
ABE026:

90.0 Hours

72.0 Hours

Provides students with a multisensory approach to improving English spelling skills. Emphasizes phonetic structures using workbooks and audio lessons. Prepares students for Adult High School Diploma courses, job training, or the California High School Equivalency Certificate course. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Determine placement level.

Decode and encode multisyllabic words.

Identify common English spelling pattern.

Increase phonemic awareness.

Identify syllabication rules.

Correctly spell multisyllabic words.

Increase reading fluency.

Identify new vocabulary by learning definitions of spelling words.

Identify root words to determine meaning of unknown words.

Improve pronunciation of spoken vocabulary.

Student Learning Outcomes:
Identify common English spelling patterns.
Use phonetic structures to improve spelling.

Slabs/Interior-Exterior Footings

ACA002B:

1.5 Units

This class highlights the techniques and procedures used in the layout and setting of footing forms according to prints and shop drawings. Introduction of slab construction for casting tilt up panels will be discussed. Acceptable elevation tolerances, proper concrete placement and slab leveling will be stressed. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Define terms, tolerances, and footing characteristics
Describe form methods for interior and exterior footings
Place and align batter boards to print offsets
Utilize alignment techniques to square formwork
Set, elevate, and construct forms for footings where applicable
Level slab forms to tolerance given for casting tilt-up panels
Layout panel joints and grout pads to print specifications

Student Learning Outcomes:
- Accurately layout out and elevate formwork according to slab and footing plans.
- Level slab formwork to tolerance for casting tilt-up panels.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
40.0

Tilt-Up Introduction
ACA003A :

1.5 Units

Designed to familiarize tilt-up students with basic panel types and typical construction methods used in the tilt-up industry. This course identifies panel features, applications, specialty hardware, and provides an overview of the construction and placement of tilt-up panels. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Define terminology and identify tilt-up panel building methods used in the construction industry.
State the pros and cons of tilt-up building construction. Discuss the structural elements, components, and placement of tilt-up panels.

Identify materials and hardware used in the tilt-up industry.

Describe the characteristics and methods for placement of concrete.

Locate panel elements and features on prints.

Calculate dimensions for panel size and features using print information.

Determine materials and hardware for panel construction.

Layout panel and panel features using calculated dimension.

Demonstrate safe and proper use of all necessary hand and power tools.

Create a material cut list.

Frame a basic tilt-up panel using project print.

Accurately install hardware and embeds.

**Student Learning Outcomes:**

Interpret project plans to locate tilt-up panel sizes, quantity, and panel characteristics.

Construct typical tilt-up panel formwork to print specifications.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

40.0

**Lifting, and Bracing Safety**

**ACA004A:**

1.5 Units

This class will describe the lifting procedures and accident prevention measures necessary to safely raise and place tilt-up panels. Students will be introduced to various types of bond breakers used in the industry. Product catalogs will be used to review the proper use of each product. Safety practices on the connection points and bracing of wall panels will be discussed in detail. Manufacturers specification on specific hardware used to secure temporary braces will also be covered. Students will review all safety aspects of rigging and setting panels with the crane. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Describe the purpose and use of bond breakers.
Match lifting hazards and accident prevention measures.

Conduct pre-lift checks and safety procedures.

Utilize the appropriate print views to determine pick-up points

Calculate dimension for layout of panel and pick-up points

Demonstrate the proper set up and use of builders' transit level

Sight and record elevation readings.

Explain the importance of pre-lift safety procedures.

Safely and properly rig and set panels with a crane.

Employ the correct bracing procedures to secure panels in place.

**Student Learning Outcomes:**

- Utilize project prints to establish finish floor elevation, and panel location-orientation.
- Demonstrate safe rigging procedures and correct placement of panels.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units:**

1.5

**Total Hours:**

45.0

**Poured-in-Place Wall Forms**

**ACA004B :**

1.5 Units

This course provides instruction for poured-in-place wall systems and will highlight decorative finish applications. Both basic formwork procedures and additional techniques to create embellished wall details on finished concrete surfaces will be presented. Students will identify materials such as exposed aggregate, faux veneers, and various artistic impressions used to create architectural features as part of the finished surface design. The importance of formwork alignment and reinforcement will be emphasized during manipulative exercises. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Describe how design features are incorporated in formwork.
- Determine formwork configuration for poured-in-place concrete wall forms.
Identify building lines and dimensions.
Estimate wall forming materials.
Demonstrate the proper use hand and power tools.
Install a single waler wall system to project specifications.
Correctly attach bracing to formwork for poured-in-place concrete walls.
Demonstrate the proper use hand and power tools.
Install a double waler wall system to project specifications.
Utilize the proper techniques incorporative decorative concrete template to formwork.
Correctly attach bracing to formwork for poured-in-place concrete walls.

**Student Learning Outcomes:**
- Construct and brace formwork for poured-in-place concrete walls.
- Correctly attach formwork templates to for decorative poured-in-place concrete wall.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5

**Total Hours**
45.0

**Print Reading**

**ACA004C:**

1.5 Units

This course introduces basic visualization skills needed for reading and interpreting construction prints. Views, elevations and the role of specifications as they relate to insulation details on prints will be discussed. An awareness of sustainable and green building practices will be covered during the course. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Define terms and categorize print according to specific characteristics
- Identify drawing methods used to create prints
- Label the standard views used in orthographic projection
- Describe and use conventional lines, symbols and dimensioning methods
Locate beginning and ending measuring points and calculate dimensions
Interpret views to identify components details and layout features
Locate beginning and ending measuring points and accurately calculate dimensions
Interpret views to identify components details and layout features
Complete a detailed material list from print specifications (insulation)
Use plans to accurately establish construction layout

Student Learning Outcomes:
Apply the principles of orthographic project to visualize three dimensional images from two dimensional graphic representations.
Interpret prints to determine commercial and residential construction elements, size and arrangement.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Wall-Column Forms/Cutting and Burning
ACA005A :

1.5 Units

This course presents the forming methods and techniques used in the construction of reinforced concrete walls and columns. Form design, print reading, estimating, and hands-on projects for single and double waler forming systems will be included. Students will be introduced to safe operating and cutting procedures for the oxygen-acetylene torch. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify column and wall types, terms, uses, and manufactured materials
Locate dimensions for building line layout
Locate layout dimension on formwork prints
Apply mathematical formulas to design form systems by accurately calculating forms and materials needed
Design and install single and double waler wall systems
Utilize and interpret proper techniques for embed and hardware installations in wall construction
Select and use the appropriate bracing techniques for securing wall and column forms
Demonstrate safe and appropriate use of the oxygen and acetylene torch

Student Learning Outcomes:
- Analyze prints to determine and calculate the appropriate materials for cut lists used for single and double waler formwork construction.
- Demonstrate safe set-up and use of cutting and burning equipment.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Site Work/Curb and Gutter
ACA005B:

1.5 Units

This course covers the forming methods and techniques used in the construction of site work, curbs and gutters. Site work layout, elevation, and construction practices will be presented. Jobsite safety, print interpretation, material identification and site preparation will be included in the training. Students will construct sidewalk, curb and gutter forms to prints specifications. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
- Identify site work, curb, and gutter elements.
- Interpret prints to determine site work, curb, and gutter layout dimensions.
- Match safety hazards with accident prevention measures for site work.
- Utilize appropriate construction methods and materials.
- Construct site formwork to project plans specifications.
- Establish formwork elevation using correct methods and techniques.
- Calculate materials and estimate concrete placement requirements.
- Construct curb and gutter formwork to project plans specifications.

Student Learning Outcomes:
- Analyze prints to determine and calculate the appropriate materials for cut lists.
- Construct sidewalk, curb and gutter formwork to print specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Specialized Forms and Rigging
ACA005C:

1.5 Units

This course will instruct students in the construction of specialized forms used to create exterior architectural design features on tilt-up buildings. An emphasis will be placed on interpretation of design feature details on prints, location of rigging points, and building methods for selected forms. In addition to concrete calculations, practical assignments will focus on rigging safety, load formulas, lifting hardware and procedures. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Describe typical features used in architectural designs.

Visualize geometric shapes using project plans.

Create panel design according to details on project plans.

Construct panel formwork to industry standards.

Identify rigging hardware and sling configurations.

Calculate the safe working loads.

List the crane hazards and accident prevention measures.

Apply safe-rigging practices to place panels.

Student Learning Outcomes:

Interpret prints to determine details for exterior building architectural design.

Apply the correct rigging procedures to determine safe lifting configurations.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5
Total Hours
45.0

Orientation
ACA021A :
1.5 - 2.0 Units

This course provides an overview of the construction industry, safety overview, with focus on tool identification and use. Upon successful completion, students will receive OSHA 10 Hour and Powder Actuated Tool Certifications. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify and describe trade terms, industry roles and responsibilities, and basic skills

Discuss trade applications, quality and productivity practices

Identify the Focus Four safety hazards and accident prevention practices

Define 10 construction safety regulations to complete OSHA 10-Hour Safety Certification

Explain the importance of proper interpersonal communication and respectful conduct

Discuss the types and benefits of sustainable/green building practices in the workplace

Calculate measurements and accurately perform basic mathematic functions for assigned tasks

Match safety hazards and precautions for tools, equipment and PPE using manufacturers’ guidelines

Select and safely use hand and power tools for assigned tasks

Set up and fire powder actuated tool to standards required for Operator Certification

Student Learning Outcomes:
Demonstrate compliance with the rules, role, and responsibilities required of apprentices working in the construction trades.
Evaluate potential hazards and site the appropriate accident prevention measures.
Demonstrate safe operating procedures for selected tools and equipment.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Safety and Health Certifications
ACA021B:

2.0 Units

This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and equipment operating procedures will also be covered. Financial and life skills relevant to surviving the construction industry will be presented. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Scaffold Erector-Welded Frame Qualification Card. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

2.0

Learning Outcomes

Course Objectives:

- Identify scaffold components and applicable OSHA regulations
- Match safety hazards and precautions for scaffold erection procedures
- Conduct scaffold safety and equipment inspections
- Properly stage, assemble, and disassemble selected scaffolding
- Meet UBC criteria for erecting and dismantling scaffolds correctly
- Identify scaffold components and applicable OSHA regulations
- Match safety hazards and precautions for scaffold erection procedures
- Conduct scaffold safety and equipment inspections
- Properly stage, assemble, and disassemble selected scaffolding
- Meet UBC criteria for erecting and dismantling scaffolds correctly

Student Learning Outcomes:

Students will be able to demonstrate the proper erecting/dismantling procedures for welded frame scaffolds. Students will be able to demonstrate proficiency with various tools and equipment appropriate for the assigned construction tasks.

Units & Hours

Minimum Units:

2.0

Maximum Units:

2.0

Total Hours
Basic Wall Framing
ACA021C:

1.5 Units

This course presents wall construction theory, methods, and procedures required to frame basic residential walls. Practical experience using proper tool techniques and appropriate materials will provide students with fundamental skill development. An introduction to print reading will prepare students to locate measurements for determining wall lengths and size of openings. Students will perform basic wall layout tasks, use plating procedures, and assemble and brace framing before aligning and completing the selected wall construction project to industry standards. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify basic wall framing components and material types
Determine wall configurations from print information
Calculate and locate dimensions
Calculate dimensions for wall layout and location of openings
Complete a project material take-off list
Perform exterior/interior wall layout using 3, 4, 5 method
Execute plating-detail tasks
Construct, lift and connect framed walls using proper techniques
Install required bracing to print specifications
Plumb and align structures to 1/8" accuracy
Demonstrate safe and appropriate use of tools, materials and equipment

Student Learning Outcomes:
- Demonstrate proficient use of basic mathematics for construction preparation.
- Interpret prints to construct framed walls, using appropriate codes and materials.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0
Tool/Equipment Applications
ACA021E:

1.5 Units

This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and aerial lift safety and operating procedures will also be covered. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
ACA021A - Orientation
AND
Prerequisite
ACA021B - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Identify scaffold components and applicable Occupational Safety and Health Administration (OSHA) regulations
Match safety hazards and precautions for scaffold erection procedures
Conduct scaffold safety and equipment inspections
Properly stage, assemble, and disassemble selected scaffolding
Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly
Identify boom/scissor aerial lift components and applicable OSHA regulations
Match safety hazards and precautions for aerial lift equipment operation
Conduct aerial lift safety inspections
Demonstrate the safe operation of two types of aerial lifts
Meet UBC criteria for the proper operation of aerial lift equipment
Select appropriate mathematic operations to measure and calculate materials
Practice using the mathematic techniques presented to layout materials for wall construction
Select appropriate hand and power tools/equipment for assigned tasks
Utilize proper fastener placement and driving techniques
Apply the appropriate tool/equipment manipulative techniques to complete wall construction tasks assigned

Student Learning Outcomes:
Identify and demonstrate safe operating procedures for aerial lift truck equipment.
Demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.
Assess construction tasks to determine the appropriate tools, equipment and construction methods to apply.
Units & Hours
Minimum Units:
1.5
Maximum Units
1.5
Total Hours
45.0

Commercial Floor Framing
ACA022A:

1.5 Units

This course covers floor joist construction and the various installation techniques used in the commercial industry. Students will interpret floor plans for job planning, identify floor joist system, and calculate material take offs. Integration of wall plating, joist layout and floor sheathing methods will be included. Instruction will incorporate measuring skills, use of math operations, specialty hardware applications, and identification of appropriate building codes. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify floor components, installation techniques, hardware, terms, and building codes
Interpret prints and list components and materials for job planning
Demonstrate proper use of equipment and implement safety precautions
Calculate dimensions, verify angles, determine materials, and create take-off lists
Select and use the correct layout techniques to mark joists for flooring elements
Correctly install and fasten wall sections and floor joist members
Accurately measure and cut materials for floor members, wall plates and sheathing
Properly assemble and securely connect hardware, floor members and sheathing panels to complete selected projects to plan specifications

Student Learning Outcomes:
Analyze prints to determine and calculate the appropriate materials for cut lists used in the commercial floor framing process.
Demonstrate proper safety techniques and construction procedures to complete a commercial floor framing project.

Unidades & Horas
Minimum Unidades:
1.5
Maximum Unidades
Total Hours
45.0

Basic Stairs
ACA022B:

1.5 Units

This course provides an introduction to stair framing theory, terminology and construction techniques. Students will interpret floor plans and drawing elevations for job planning, and to layout and detail stair stringers. Methods for calculating the number of stairs, landing height, stair threads and riser dimensions will be presented and practiced. Instruction will include measuring skills, mathematical principles, stair and handrail fabrication, assembly and installation. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify stair elements, terms, and building codes used in commercial construction.

Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.

Practice calculating stair stringer dimensions.

Create a stair construction cut list.

Select the appropriate layout techniques and tools to mark stringers for locating stair elements.

Accurately measure and cut materials to various lengths for required thread and riser members.

Accurately measure and cut materials for handrail assembly.

Install and securely fasten stair and handrail elements to stringers and stair supports to complete project according to plan specifications.

Demonstrate safe use of tools and equipment.

Student Learning Outcomes:
Utilize print views to determine stair configuration and stringer layout.

Demonstrate the proper use of construction procedures to build a straight stairway design to print specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0
Exterior Finish Details
ACA022D :

1.5 Units

In this course the terminology, design considerations and construction techniques for various types of exterior detail installations will be covered. Students will use plan views and drawing elevations for job planning activities, including calculating dimensions and materials, identifying wall covering types and other exterior construction details. Students will apply the construction techniques presented to complete various exterior detail installations to print specifications. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify the terms, components, hardware, and techniques used in exterior detail construction.
List workplace considerations and site specific hazards.
Interpret blueprints to recognize and locate exterior elements, determine measurements, and to create material and cut lists.
Calculate dimensions and use formulas to verify angles.
Complete an exterior details sketch and job planning worksheet.
Identify and use the proper siding types and grades of lumber.
Complete project layout for roof and siding installations.
Select and use the proper types of siding and lumber grade.
Measure, cut, assemble, fasten and install various roofing and exterior wall coverings according to project plan.

Student Learning Outcomes:
Accurately layout out exterior wall lines and features according to print specifications given an exterior finish design.
Complete exterior wall framing and finish detail construction to meet project print specifications, and troubleshoot design flaws presented by the instructor.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Commercial Roof Framing
ACA022E :
1.5 Units

This course provides an introduction to basic gable roof framing, terminology and construction methods. Students will interpret plan and elevation views to determine rafter systems and layout details to complete project assignments. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an applied understanding of introductory commercial roofing construction.
- Demonstrate an applied understanding of preparation and layout using established tools and methodologies.
- Demonstrate an applied understanding of the techniques and procedures for gable roof construction.

**Student Learning Outcomes:**

- Determine the necessary materials and methods of construction needed to complete a gable roof construction project.
- Construct a commercial gable roof to industry standards.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Basic Roof Framing**

**ACA023B:**

1.5 Units

This course provides an introduction to basic gable roof framing, terminology, characteristics and construction methods. Students will interpret print views and drawing elevations for job planning, and to determine rafter systems and layout details. Basic rise, run, rafter angles and length calculations will be practiced. Framed wall construction will be incorporated to facilitate the gable roof assembly techniques and installation procedures that are the focus of this training. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

Learning Outcomes
Course Objectives:
Identify gable roof elements, hardware, terms and building codes used in commercial construction.
Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.
Calculate common rafter angles and lengths, and dimensions, and apply math formulas to determine materials.
Create cut lists, and verify angle layouts.
Select and use the appropriate layout techniques and tools to mark ceiling joists for locating rafter elements.
Accurately measure and cut materials to various lengths and angles for required roofing members and sheathing.
Install and securely connect hardware, roof members and sheathing panels to complete project according to plan specifications.

Student Learning Outcomes:
- Accurately lay out roof lines and features based on a gable roof frame design.
- Assemble and install gable roof framing members to meet project print specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Advanced Roof Framing
ACA023C:
1.5 Units

This course provides the advanced skills used to frame hip roof types, and includes terminology, roof characteristics and construction methods. Students will interpret print views and elevations for job planning to determine hip roof rafter systems and layout details. Students will perform rise, run, rafter angles and length calculations. Framed wall construction will be incorporate to facilitate the hip roof assembly techniques and installation procedures that are the focus of this training. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify hip roof elements, hardware, terms and building codes used in commercial framing construction.
Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.

Calculate dimensions and create a cut list for hip roof framing members.
Select and use the appropriate layout techniques and tools to mark ceiling joists for locating rafter elements.

Assemble and properly fasten cut hip roof framing members to support roof sheathing.

Install and securely connect hardware, hip roof members and sheathing panels to complete project according to plan specifications.

Demonstrate the proper selection and safe use of tools and equipment.

**Student Learning Outcomes:**
- Analyze prints to determine the hip roof construction elements and apply the appropriate framing methods.
- Accurately layout out and construct hip roof framing to print specifications.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours:**
45.0

**Basic Commercial Framing**

**ACA024A**: 1.5 Units

This course provides an introduction to basic wall framing theory and commercial construction techniques. Floor plan interpretation will be used by students for job planning, design recognition, and to determine materials. Students will layout and detail wall plates for locating basic wall components and door openings typically found on commercial projects. Instruction will include measuring skills, mathematical principles, wall assembly and installation procedures, and detail how structural connections are made. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Identify basic rake wall framing elements used in commercial construction.
- Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.
- Determine applicable building codes.
- Calculate loads and dimensions, and apply mathematic formulas to determine materials.
- Create cut lists, and verify angle layouts.
- Select and use the appropriate layout techniques and tools to mark plates for locating rake wall elements and openings.
- Accurately measure and cut materials to various required lengths for rake wall.
- Assemble and properly fasten rake wall cut members to form basic wall sections.
Install and securely connect rake wall sections to complete project according to plan specifications.

**Student Learning Outcomes:**
- Identify basic rake wall framing elements for commercial construction applications.
- Accurately layout and construct rake wall framing according to print specifications.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours**
45.0

**Advanced Commercial Framing**

**ACA024B:**

1.5 Units

This course incorporates advanced commercial wall framing theory and construction techniques with structural hardware and shear panel installation. Students will interpret floor plans for job planning to layout and detail plates for complex wall configurations, rake walls and wall openings. Instruction will include measuring skills, use of mathematical principles, wall construction, plywood shear panel installation, and structural hardware attachment. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Review and discuss rake wall framing elements.
- Discuss technical aspects of exterior and interior wall configurations.
- Determine the applicable building codes used in commercial wall construction.
- Identify structural considerations and framing hardware applications.
- Calculate dimensions, rake wall angles.
- Apply math formulas to determine materials, create cut lists, and to verify angle layouts.
- Select and use the appropriate layout techniques and tools to mark plates for locating wall elements and rake wall studs.
- Accurately measure and cut materials to various lengths for required rake wall members.
- Assemble and properly fasten cut members to frame rake wall sections.
- Utilize the appropriate hardware to connect exterior and interior wall sections to structural members.
- Attach shear panels to complete project according to plan.
- Inspect and verify installation meets project and code specifications.
Student Learning Outcomes:
Analyze prints and project specifications to determine wall configuration, applicable building code and construction methods. Construct exterior and interior walls to meet project scope and material/building specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Panelized Roofing
ACA024C:
1.5 Units
This course covers the structural components and building techniques associated with heavy timber construction and panelized roof systems. The advantages and types of manufactured wood used, and their load carrying strength, span, and spacing will be discussed. A distinction between standard post and beam, and heavy timber construction will be emphasized. Students will interpret floor plan, section views and drawing elevations for job planning to layout and construct a heavy timber post and beam supported panelized roof. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify heavy timber post, beam and roof elements, hardware, terms and applicable building codes.
Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.
State appropriate safety measures for tools use and fall protection.
Select and use the appropriate layout techniques and tools to mark materials for locating walls, openings and roof elements.
Accurately measure and cut materials to various lengths and angles for required wall and roofing members, and structure sheathing.
Assemble exterior and interior walls.
Plumb and align building corners and wall sections to industry standards.
Install roof framing members using post and beam construction methods.
Install roof fascia and water drainage system (scupper).
Apply appropriate building codes for spacing, blocking, and nailing.
Demonstrate the proper use of safe operating procedures for tools and equipment.

Student Learning Outcomes:
Identify panelized roof framing construction methods and materials used in commercial applications.
Accurately layout out roof lines and features according to print specifications given a panelized roof frame design.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Transit Level/Laser
ACA024D:

1.0 - 2.0 Units

This course covers the terminology, optical principles, and operating procedures for the transit and laser levels. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.0

Learning Outcomes
Course Objectives:
- Identify equipment and construction terminology
- Discuss the operating principles of light and lens technology
- State construction applications for builders transit and laser levels
- Identify terms and label transit level components
- List the steps used in the set up and leveling of precision instruments
- Distinguish the increments on various reading rods and circular veneer scale
- Establish horizontal plane using transit levels (elevation)
- Apply techniques to establish a vertical plane (plumb)
- Identify terms and label laser level components
- List the steps used in the set up and leveling of laser instruments
- Explain how targets are positioned and read
- Establish horizontal plane using laser levels (elevation)
- Apply techniques for establish vertical plane (plumb)

Student Learning Outcomes:
- Explain optic principles and operating procedures for transit and laser levels.
- Level and plumb projects using both builders transit and laser levels.
Units & Hours
Minimum Units: 1.0
Maximum Units: 1.0
Total Hours: 36.0

Total Station I
ACA024E:
2.0 Units

This course discusses the evolution of survey and layout instruments and the advantages of using a total station for building layout over traditional methods. Students will set up a total station and configure the software. Exercises will include working in teams to stake out points and record point data using the total station. Equipment maintenance and troubleshooting are also discussed. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
ACA021A - Orientation
AND
ACA021B - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Describe the components of a total station and their functions
Compare and contrast total station and traditional methods
Convert dimensions to decimal unit measurements
Calculate distances and angles of layout points
Complete total station, instrument and backsight assembly
Identify common configuration settings
Set up a total station level, backsight and plumb over a point
Configure and edit data collector with survey software
Enter and edit points in data collector
Accurately shoot benchmark/remote elevation
Use a total station and data collector to accurately stake out points
Explain and demonstrate sideshot, resection, and inverse
Identify jobsite challenges and explain how total station technology can be used to solve them
Use total station technology to quickly solve complex jobsite challenges
Explain how to safely operate a total station
Perform preventative maintenance on the total station and its components
Describe how to recognize and identify layout inaccuracies

**Student Learning Outcomes:**
- Set up and properly adjust total station equipment using manufacturers' instructions.
- Digitally measure and compute angles and distances using the components of a total station system.

**Units & Hours**

**Welding Fabrication**

**ACA025:**

1.5 Units

This course provides an introduction to the layout, cutting, and basic welding skills used in the fabrication process. The students will practice using oxy-acetylene equipment and accessories to setup, cut, shape, grind, weld, file, heat and bend metal parts. Training will include fundamental arc welding techniques to fabricate project components. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

ACA021A - Orientation

**AND**

**Prerequisite**

ACA021B - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Identify terms, regulations, and torch/welding equipment components
Discuss safety practices/Personal Protective Equipment (PPE), and operating procedures for arc welding
Recognize fabrication symbols on prints
Discuss and evaluate arc welding methods
Identify electrode characteristics and use
Properly maintain and store equipment
Demonstrate proper setup and adjustment of torch cutting equipment
Utilize proper techniques to complete cutting and burning assignments
Demonstrate proper setup and adjustment of welding equipment
Utilize proper techniques to complete welding assignments

**Student Learning Outcomes:**

Demonstrate proper procedures to safely operate torch and arc welding equipment.
Perform torch cutting, and arc welding techniques to fabricate parts.
Units & Hours
Foundations and Flatwork
ACA025A:

1.5 Units

This course covers the design and function of several types of foundations and concrete flatwork. The methods, techniques and procedures for formwork layout, elevation, and construction will be presented and applied by students during practical assignments. Jobsite safety, print interpretation, material identification, and basic use of the builders' level will be included in the training. Students will construct three selected formwork projects. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Construct three types of foundation and flatwork forms to print specifications
Interpret prints to identify formwork elements and determine materials
Install and align batterboards
Discuss job site hazards and safety precautions
Identify foundation/flatwork types, function, and construction methods
Complete layout of building lines using plan views
Set formwork elevation using builders' levels
Install and accurately set form screed supports to elevation

Student Learning Outcomes:
Analyze prints to determine and calculate materials for cut list used in the formwork process.
Employ the proper techniques to lay out building lines construct formwork to print specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Advanced Stairs
ACA025C:

1.5 Units
This course is designed to enhance the students' existing skills in the construction of basic stairs. Students will interpret floor plans and drawing elevations for job planning, and to layout and construct complex stair designs. Stair calculations will be adapted to determine the number of stairs, landing height, stair thread and riser dimensions. In addition to measuring skills, mathematical principles, stair and handrail fabrication and assembly, the installation techniques required for circular and u-shaped stair configurations will be covered. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Accurately measure and cut materials for required landing, thread, riser and handrail framing members.

State safety hazards and precautions.

Identify circular and u-shaped stair elements, terms, building codes, and commercial construction applications.

Proper tool selection and safe use of equipment.

Calculate stair and landing dimensions, and apply math formulas to determine materials, create cut lists, and to determine and verify angle layouts.

Install and securely fasten stair framing to complete projects according to plan specifications.

Demonstrate the correct framing techniques and procedures for multi-level stair construction.

Measure and mark stringers for locating stair elements.

Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.

**Student Learning Outcomes:**

Interpret plans to lay out and determine the materials required for multi-level stair projects.

Demonstrate ability to complete multi-level stair projects to print specifications.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Advanced Print Reading**

**ACA025D :**

1.5 - 2.0 Units

In this course, students will analyze multi-view drawings to determine construction type, locate benchmark and building elements; review codes, references, and perform calculations for construction planning. Open Entry/Open Exit.

**Requisites**
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Find framing and material details on drawings
Estimate time and labor for project based on print information
Explain what is included in specifications and find selected topics
Reference views and determine benchmark and reference dimensions on prints
Determine building lines and complete layout for foundations
Practice sketching views using orthographic method
Interpret prints to identify project elements, code compliance, and construction type
Determine wall configuration and layout building lines
Calculate material take-offs from representations in specific views and schedules
Record site location and orientation information from plot plan
Read beam and column schedules and determine materials

Student Learning Outcomes:
Interpret print specifications for project compliance and construction materials.
Determine construction tasks and work sequence using prints and specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Tilt-Up Panel Construction
ACA026A:

1.5 Units

This class will cover layout techniques and building procedures for commercial structures using the tilt-up panel construction method. Various wall types, position, and sequence for raising panels will be discussed. Students will be able to explain the importance of layout methods in squaring panel formwork. A focus will be placed on identifying specific types of openings and on the location of finish floor and roof lines on prints. Open Entry/Open Exit.

Requisites
None
Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Locate panel elements and features on prints.
Calculate dimensions for panel size and features using print information.
Identify materials and hardware used in the tilt-up industry.
Frame a basic tilt-up panel using project print.
State the pros and cons of tilt-up building construction.
Demonstrate safe and proper use of all necessary hand and power tools.
Determine materials and hardware for panel construction.
Create a material cut list.
Define terminology and identify the tilt-up panel building methods used in the construction industry.
Accurately install hardware and embeds.
Layout panel and panel features using calculated dimension.

Student Learning Outcomes:
Interpret project plans to locate panel sizes, quantity, and panel characteristics.
Construct typical tilt-up panel formwork to print specifications.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Wall Forming

ACA026B:
1.5 Units

This course covers the skills and procedures for forming reinforced concrete walls using single and double waler systems. Students will identify the characteristics and application of built-in-place, per-fabricated, and specialty forms. Practical exercises will prepare students for locating wall forming information on project plans, calculating layout dimensions, and for estimating material requirements. Basic wall panel forming and reinforcement methods, material preparation, and hardware installation are included in training. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify factors affecting form strength and stability.
Identify terms and classification of wall forms.
Demonstrate the proper use hand and power tool and fall protection equipment.
Install a single waler wall system to project specifications.
List and describe form components and hardware.
Identify building lines and dimensions.
Estimate wall forming materials.
State the purpose and use of various types of wall forms.
Determine wall form configuration and forming method using project plans.
Install a double waler wall system to project specification.

Student Learning Outcomes:
Interpret wall form plans and accurately layout out exterior wall lines and features.
Construct typical exterior wall form panels to project specifications using two forming methods.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Gang Forms/Columns
ACA026C :

1.5 Units

This course presents the formwork types, applications and construction methods for gang and column forms using built and manufactured forming systems. Discussions will cover heavy timber gang forms and use of taper ties, bracing, and bulkhead tables. The course project will include gang and column formwork construction, assembly, and hardware using selected manufactured products. Related safety, mathematics and print reading will be covered in the training. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Demonstrate the proper use of hand and power tool and fall protection equipment.
Form a column using a Symons forming system to project specifications.
Determine wall form configuration and forming method using project plans.
State the purpose and use of various types of gang forms.
Estimate gang forming and column materials.
Identify terms and definitions association with gang forms and column construction.
List and describe gang form components and hardware.
Identify linear and elevation dimensions.
List and describe column form components and hardware.
Identify factors affecting form strength and stability.
Demonstrate the proper use of hand and power tool and fall protection equipment.
Form a wall using an Atlas wall forming system to project specifications.

Student Learning Outcomes:
- Analyze prints to determine formwork requirements for gang form and column form projects.
- Construct wall and column formwork using manufactured forming systems.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Abutments

ACA026D:

1.5 Units

This course provides formwork construction skills for the abutment support structure used in most bridges and heavy highway projects. Students will identify abutment anatomy and will be instructed on footing layout, form detailing, and construction techniques used in the industry. Terminology, components, form materials, building code requirements and sequence of construction will be presented. Students will work collaboratively to complete an abutment formwork project including keyway, panel, head wall and wing wall construction. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Lay out building lines for abutment project.
List the types of formwork used in abutment construction.
Convert fractional measurements and calculate dimensions in decimal units.
Define terms and state the purpose and use of abutments in heavy highway construction.
Apply chamfer and drip grooves according to print specifications.
Identify formwork materials and hardware.
Accurately measure and cut materials for panels.
Identify tools and equipment, materials, personal protective equipment.
Interpret prints to determine abutment configuration and layout dimensions.
Place, connect and securely attach panels in proper position.
Demonstrate ability to correctly install and fasten waler and strongbacks.
Label abutment components and describe its function.

Student Learning Outcomes:
Analyze prints to calculate dimensions for abutment footing layout and formwork elements.
Collaboratively construct all components of abutment formwork to print specifications.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Beam and Deck Forming
ACA027C:
1.5 Units

This course will introduce the use of various woods, and patented forming systems for construction of concrete beams and decks. Students will identify formwork types and installation techniques including calculating materials and setting beam & deck forms. Metal beam forms and capitals will be highlighted. Additionally, layout and builders level skills will be used in this class. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
### Learning Outcomes

**Course Objectives:**
- Label formwork components for beam and deck construction.
- Describe the types of formwork used to build beams and decks.
- Demonstrate safe and appropriate use of tools, materials and equipment.
- Inspect project and verify installation meets industry standards.
- Accurately calculate formwork dimensions and layout locations.
- Construct a beam and deck according to plan using proper construction techniques.
- Accurately layout building lines for beam and deck project.
- Identify terms, construction codes and beam and deck industry standards.
- Identify material types, grades and quantities using print specifications.
- Find bracing locations.
- Determine beam types and elevation for deck formwork.
- List safety hazards and accident prevention methods.
- Explain the factors that influence beam and deck construction design.
- Utilize the appropriate views to find details for formwork construction.
- Determine shoring details indicated on project plans.

**Student Learning Outcomes:**
- Interpret prints to accurately locate beam supports and formwork bracing.
- Work in groups to construct basic wood beam and deck shoring to project specifications.

### Units & Hours

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours:**
45.0

### Stairs and Ramp Forming

**ACA027D:**

1.5 Units

Provides related and supplemental instruction for apprentice carpenters in the areas of the various techniques to form stairs and ramp structures; related safety, mathematics, and blueprint reading. Open Entry/Open Exit.

### Requisites

**Requisites:**
None

### Transferability & General Education Options

**Transferable:**
Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Describe the procedures for curing and testing concrete.
Inspect completed ramp for compliance with applicable codes and regulations.
Define terms and identify building codes and ADA regulations.
Demonstrate proper construction techniques to build ramp formwork.
Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.
Accurately measure and cut materials to various lengths for required thread and riser members.
Calculate dimensions, and apply mathematic formulas to determine materials, create cut lists, and to determine and verify angle layouts.
Utilize print information to calculate volume of concrete.
Demonstrate proper construction techniques to build stairs.
Verify complete stairs meets applicable codes and regulations.
Identify stair and ramp components.

Select and use the appropriate layout techniques locating ramp elements.

Student Learning Outcomes:
Accurately layout out stair/ramp building lines and stringers according to print specifications.
Complete straight stair and connecting ramp construction in compliance with Americans with Disability Act regulations.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Bridge Construction

ACA028A:

1.5 Units

This course provides students with an overview of bridge types and the skills required to perform standard bridge construction tasks. Students will be able to describe the purpose and function of exterior and interior girders, edge forms, bulkheads and hinge forms. Bridge formwork project will include panel construction, assembly, and hardware installation tasks. Related safety, math and print reading will be covered in the training. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Identify and define the nomenclature of concrete box girder bridges and forms.

Explain the difference between various methods and types of construction.

List assembly steps for box girder bridges.

Inspect box girder bridge to verify it meets industry codes and standards.

Install bridge formwork using the proper sequence of construction.

State how seismic codes are applied to bridge construction.

Explain the purpose of substructure components.

Identify bridge orientation, elevation and drainage angle.

Utilize the proper bracing and re-shoring methods.

Describe the proper alignment of superstructure to substructure.

Analyze prints to determine the proper forming method and materials.

Student Learning Outcomes:
- Analyze prints to accurately determine and layout location for bridge formwork.
- Apply the correct methods and procedures to construct a bridge and deck project to industry standards.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Intermediate Commercial Framing

ACA028C:

1.5 Units

This course enhances basic wall framing theory, and wall construction techniques are applied at increased skill levels. A review of basic wall framing and floor plans used for job planning, design recognition, and materials lists is included. Students will layout and detail wall plates for locating basic wall components and door openings. Instruction will include measuring skills, mathematical principles, wall assembly and installation procedures, and detail how structural connections are made. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5
Learning Outcomes

Course Objectives:
Assemble and properly fasten cut members to form basic wall sections
Demonstrate proper use of equipment and implementation of safety precautions
Verify alignment
Accurately measure and cut materials to various lengths for required wall members
Recheck plumb line
Select and use the appropriate layout techniques and tools to mark plates for locating wall elements and openings
Install and securely connect wall sections to complete project according to plan specifications
Calculate loads and dimensions, and apply mathematic formulas to determine materials, create cut lists, and to verify angle layouts
Apply corrective measures for design flaws
Interpret prints and plan views to find dimensions, and identify materials for job planning and construction
Identify basic wall elements, terms and building codes used in commercial wall construction

Student Learning Outcomes:
- Determine project scope and wall framing methods to employ from prints and specifications.
- Demonstrate ability to coordinate and execute an exterior and interior wall construction project to print specifications.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Bridge Falsework
ACA028E:

1.5 Units

This course will focus on bridge falsework construction. The techniques for bent assemblies, base sub-assemblies, deck soffits and hardware installation will be presented. Falsework tasks will include rigging and alignment techniques. Related safety, math and print reading will be covered in the training. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
ACA021A - Orientation
AND
Prerequisite
ACA021B - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable
Learning Outcomes

Course Objectives:

- Identify and define the nomenclature of bridges and falsework
- List the sequence used in the construction of bridge falsework
- Discuss the factors that lead to falsework failures
- Identify construction building codes and state heavy highway requirements
- Identify materials and hardware used in falsework construction
- Complete a site safety inspection
- Prepare sub-assembly materials and sandboxes
- Demonstrate the safe use of hand/power tools and chain saw
- Practice converting units of measure
- Interpret prints to locate sub-assemblies and bent spacing
- Establish offset building line from reference points at given distance
- Set sub-assemblies to elevation
- Install bottom cap and verify elevation
- Assemble base and bent support posts
- Attach bracing and install hardware
- Inspect construction and verify alignment and elevation
- Accurately lay out deck form using project plans
- Measure, cut and assemble bridge deck supports
- Correctly install and secure in place hardware and bracing
- Utilize the proper nailing pattern for deck sheathing
- Demonstrate safe use of tools and personal protective equipment

Student Learning Outcomes:

Analyze construction prints to determine falsework supports and bent configuration.
Construct bridge falsework to industry standards.

Units & Hours

Rigging

ACA029A:

1.5 Units

This course presents both lifting theory and practical rigging methods and procedures. The design, characteristics and safety working load of lifting hardware will be discussed. Rigging attachment procedures, lifting equipment, limits of operation and communication practices will be covered. Upon successful completion, students will be issued United Brotherhood Of Carpenters (UBC) Rigging Qualification Cards. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Demonstrate proper use of signals for productive load movement.
Safely lift and place loads with smooth motion.
Communicate clearly during load movement.
Inspect rigging hardware for damage and wear.
Identify the theories, historical and modern rigging tools and inventions.
Demonstrate ability to correctly attach slings and hardware.
List the types of rigging hardware and applications.
Inspect slings for damage and wear.
Match crane hazards with rigging accident prevention measures.
Describe industry accepted safety standards and rigging regulations.
Identify the design, construction, and safe working load of various slings.
Describe industry accepted safety standards and rigging regulations.
Properly tie selected types of knots used in rigging.
Calculate center of gravity for asymmetrical loads.

Student Learning Outcomes:
Identify and properly select rigging hardware attachment to industry standards.
Demonstrate the correct use of rigging procedures and signaling to safely place loads.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Rigging Qualification Studies - Journeyworker
ACA029BJ:
0.5 Units

This course provides an overview of lifting theory and the practical rigging methods and procedures required to maintain industry credentials. Rigging standards, procedures and communication practices will be covered. Upon successful completion, a student will be issued United Brotherhood of Carpenters (UBC) Rigging Qualification Cards.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes

Course Objectives:
Demonstrate an applied understanding of slings with regard to evaluation points.
Demonstrate an applied understanding of rigging industry standards of lifting and configurations.
Demonstrate an applied understanding of rigging consideration terminology and theory.
Demonstrate an applied understanding of rigging hardware related to evaluation points.

Student Learning Outcomes:
Assess the load sling configurations presented to establish the application meets rigging standards and safe working load limits.
Evaluate attachment hardware to comply with safe lifting practices for designated loads.

Units & Hours

Minimum Units:
0.5

Maximum Units
0.5

Total Hours
9.0

Solar Installer Level 1
ACA029C:

1.5 Units

This course will provide workers with an industry overview and outlook for photovoltaic (renewable) energy production. Key terms and concepts of photovoltaic system operations will include solar cell technology, photovoltaic (PV) array configuration, series and parallel circuits, testing equipment, inspection, balance of system components, mounting methods, and applicable codes. Practical training will cover site analysis, system orientation based on site location, safety concerns, utilization of construction tools and skills for rooftop and ground mount system installations. Upon successful completion, students will receive a United Brotherhood of Carpenters (UBC) Solar Installer Level 1 Qualification Card.

Requisites

Requisites:
Prerequisite
ACA021A - Orientation

AND

Prerequisite
ACA021B - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Identify components and characteristics of several solar panel systems

Describe methods for laying out, orienting, and mounting modules or arrays

Examine the steps for measuring and analyzing system performance and operating parameters

Identify the characteristics and function of photovoltaic (PV) system devices

Explain criteria for inspecting and testing photovoltaic (PV) modules and devices

Determine materials, equipment, and installation sequences necessary to maximize installation efficiency

Assemble solar modules, panels, or support structures, as specified

Construct foundation forms to print specifications

Demonstrate safe operation and proper use of personal protection equipment (PPE), tools and equipment

Explain the tenants of sustainable construction practices and related green building/products rating systems

**Student Learning Outcomes:**

Describe electrical and solar power components of rooftop, ground mount and large scale photovoltaic (PV) systems.

Install several rooftop and ground mounted photovoltaic (PV) systems in accordance with codes and standards.

**Units & Hours**

**Standard First Aid**

ACA030A:

0.4 - 1.0 Units

Enables carpenters to cope with accidents and emergency situations with the goal of protecting and saving lives. American Red Cross certificate available upon successful completion. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

Transferable:

Not transferable

**Weekly Lecture Hours:**

1.0

**Learning Outcomes**

**Course Objectives:**

Discuss the value of AED along with CPR

Differentiate between cardiac arrest and heart attack

Discuss and demonstrate CPR appropriate use of compressions only CPR

Demonstrate the appropriate emergency action steps for choking, sudden illness, injury, and environmental emergencies

Recognize the signs and symptoms of heart attack

Define defibrillation and explain how to restore an effective heart rhythm

Discuss and demonstrate the Check-Call-Care action steps

Discuss and demonstrate CPR emergency care steps and rescue breathing

List the four key actions of responders in an emergency

Identify precautions to take when using AED
Describe the links in the Cardiac Chain of Survival

Discuss the factors that lead to deciding to take action in an emergency

Describe use of AED in various special situations

Demonstrate how to use an AED

**Student Learning Outcomes:**

Identify and perform the proper treatment for various sudden illnesses and injuries, given a set of emergency workplace situations.

Pass the American Red Cross certification exam.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

43.2

**Cabinet Millwork and Assembly**

**ACA033A**:

1.5 Units

This course details cabinetry fabrication from design and function through the complete production process. An emphasis will be placed on print interpretation, job planning, and proper construction sequence. Countertops and hardware styles and types will be discussed. Students will use the methods and procedures presented to build a typical base unit. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Accurately measure and cut various cabinetry joints

Identify terms, components, and hardware

Correctly use hand and power saws to construct components

Calculate materials and create cut list for cabinet parts fabrication

Shape doors according to project plan.

Inspection cabinet function and properly adjust

Accurately measure and cut various cabinetry joints

Correctly use hand and power saws to construct components
Accurately measure and cut various cabinetry joints
Identify countertops types, styles and construction methods
List the type wood for cabinet components on project plans
List the steps in the cabinet fabrication and assembly process
State the classes and sizes of standard cabinets
Accurately measure and cut various cabinetry joints
Correctly use hand and power saws to construct components
Explain the similarities between commercial and residential installations

**Student Learning Outcomes:**
- Analyze a basic cabinet project plan to determine cabinet design and material requirements.
- Construct a basic base cabinet to industry standards.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours:**
45.0

**Cabinet Installation**

**ACA033B:**

1.5 Units

This comprehensive course covers cabinet installation from establishing the design layout to attaching countertops. To enhance student’s skill level an emphasis will be placed on print interpretation, job planning and proper installation sequence. Students will use the methods and procedures presented to install typical upper and lower cabinetry units and countertops. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- State the classes and sizes of typical base and wall cabinets
- Install cabinetry components according to drawing specifications
- Correctly and safely use tools and equipment
- Inspect installed cabinetry function and properly adjust
- Install a countertop to drawing specifications
Install cabinetry components according to drawing specifications
List the steps in the installation sequence
Identify terms, components and hardware
Accurately measure, scribe and layout cabinetry
Accurately measure, scribe and layout cabinetry

Student Learning Outcomes:
- Work cooperatively to complete a base and wall hung cabinet installation to industry standards.
- Explain and demonstrate the importance of scribing in cabinet installation.

Units & Hours
Minimum Units: 1.5
Maximum Units: 1.5
Total Hours: 45.0

Show Case and Loose Store Fixtures
ACA033C:
1.5 Units

This course includes basic cabinetmaking construction techniques for the installation of commercial store fixtures. Students’ skill level will benefit from an emphasis placed on measuring, leveling, hand and power tool use, and safety. Students will interpret prints and material bills for the store fixture components included in the course project. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours: 1.5

Learning Outcomes
Course Objectives:
- Accurately layout, construct, position, install and align fixtures to 1/8” tolerance
- Use problem solving skills, repair techniques and procedures to modify fixtures
- Identify terms, types of fixtures, electrical components, and hardware
- Calculate measurements and create a detailed material and cut list
- Demonstrate the proper receiving, transporting and staging of fixtures
- Interpret prints to identify dimensions, components; layout and installation details

Student Learning Outcomes:
- Demonstrate ability to install a typical commercial arrangement of show case products.
- Interpret project plans and install loose store fixtures according to design criteria.
Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Molding and Trims
ACA033D:
1.5 Units

This course covers how moldings and trims are utilized to finish exterior and interior construction design features. Product styles, characteristics, applications, and installation methods are included in the discussions. The tools techniques for cutting, coping and installing various molding and trim types are presented and practiced throughout the training. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Describe the design, styles and types of molding and trim
Interpret prints to calculate materials
Perform inside and outside miters
Utilize specifications to problems solve material issues
Troubleshoot joints and angles
Accurately measure layout molding and trim
Compare and contrast commercial and residential applications
List finishing methods
Cope miter cuts accurately
Practice cutting materials using proper tools and techniques
Install, nail, chalk and putty various molding and trims

Student Learning Outcomes:
Complete a molding and trim project to meet industry standards.
Identify and describe the moldings and trims used in finish carpentry.
1.5

Maximum Units
1.5

Total Hours
45.0

Plastic Laminates
ACA034A :

1.5 Units

This course covers installation of plastic laminates including function and design. Suitable materials, styles, and textures will be identified. Students will review prints to determine laminate type and calculate quantities. Installation methods and techniques for drop edge and back splash together with cleaning and repair will be emphasized. A countertop will be designed and installed to specifications. Correct use of tools and other equipment will be stressed. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
List positive/negative factors affecting selection of laminate for countertops
Discuss the common types of countertop substrates
Identify terms, applications and characteristics of manufactured products
Finish and inspection countertop laminates for proper installation
Shape substrate countertop and backsplash
Select and apply the appropriate adhesives
Demonstrate the proper router techniques
Accurately measure and cut plastic laminates to size
Study plans and estimate materials for installation project
Adhere and trim laminates according to drawing specifications
Adhere and trim laminates according to drawing specifications
Demonstrate safe and correct use of tools and equipment

Student Learning Outcomes:
Install a plastic laminate countertop to industry standards.
Explain the pros and cons for plastic laminate installations.

Units & Hours
Minimum Units:
1.5
Maximum Units
1.5

Total Hours
45.0

Solid and Stone Surfaces
ACA034B :

1.5 Units

This course covers both basic and advanced assembly and installation techniques for solid surface, natural stone and manufactured materials. Various products, designs, materials, accessories, and safety considerations will be included. Students will use the procedures presented to fabricate countertops with backsplash, and create a design inlay. Open Entry/Open Exit. Previous Title: Apprenticeship Carpentry 034B, Solid Surface and Stone Countertops (2017)

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.
Select and use the appropriate layout techniques and tools to mark material for locating joints.
Install and securely connect countertops using proper procedures to complete project according to plan.
Install and securely connect edge, backsplash and inlay design using the proper procedures.
Demonstrate proper use of equipment and implementation of safety precautions.
Accurately measure and cut materials to lengths per countertop specification.
Assemble and properly fasten cut members to form countertop joints.
Assemble and properly fasten cut material for edge, backsplash and inlay specifications.
Identify solid surface terms, materials, hardware and special tooling.
Calculate dimensions, and apply math formulas to determine materials, create cut lists, and to verify angle layouts.

Student Learning Outcomes:
Fabricate and install a solid surface/natural stone countertop project.
Troubleshoot installations to make repairs on solid surface materials.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5
Total Hours
45.0

Stair Trim
ACA034C:

1.5 Units

This course covers how various trims are utilized to finish stair construction design features. Product styles, characteristics, applications, and installation methods are included in the discussions. The tools techniques for cutting and installing selected trim types are presented and practiced throughout the training. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Troubleshoot joints and angles
Verify handrail height meets code and ADA requirements
Correctly and safely use tools and equipment
Install, nail, chalk and putty various trims
Describe the design, styles and types of stairs and trims
Perform inside and outside miters
Cope miter cuts accurately
Match the appropriate trim type for stairs and wall application
Interpret prints to calculate materials
Demonstrate the proper use of installation techniques for wainscot
Accurately measure layout trim

Student Learning Outcomes:
Fabricate and fit trim material for a fine finish staircase.
Select the suitable trim materials for a fine finish staircase.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0
Doors and Door Hardware  
ACA034D :

1.5 Units

This course covers the installation process for several types of security and exit door hardware. Discussion of electrical and card reader systems will be included. An emphasis will be placed on print interpretation, codes, door schedules, symbols, and hardware recognition. Students will use the methods and procedures presented to install selected door and hardware systems. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
List the steps in the door and hardware installation sequence
Troubleshoot door frame openings
Identify “hand” “swing” labels
Identify codes, and doors and hardware components using door schedules on prints
Cut door for hinges, and locksets
Locate doors on floor and elevation views
Select the appropriate hinges, and locksets based on print specifications
Install door framing
Correctly and safely use tools and equipment
Select and hang appropriate door types
State the classes and sizes of typical doors
Ability to interpret door schedule details
Attach and inspect hardware for proper function

Student Learning Outcomes:
Install selected door and door hardware according to print specifications.
Explain what Occupational Safety and Health Administration (OSHA), American Disability Act (ADA), and fire code regulations govern the hardware industry.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0
Exit and Electrical Security Devices
ACA035C :

1.5 Units

This course will highlight the classification, types, models, codes, and uses for accident hazard exit ("panic") devices. A range of security products and door hardware used in the industry such as crossbars, latches, flush bolts, and kick plates will be discussed. Proper selection, installation and adjustment techniques for selected devices will be covered. Students will complete installation and adjustment of two types of exit devices. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Accurately install and adjust a concealed vertical rod exit device.
Describe four styles of exit devices.
Explain the differences between panic and fire exit devices.
Use adjustment procedures and techniques to modify exit/ electrical security devices.
Identify terms, types, classification and installation applications.
Complete a detailed material list for exit hardware selected installation projects.
Properly install a rim exit device on a door.
Accurately install and adjust a mortise exit device.
Interpret prints/schedules to identify dimensions, component layout and installation details.
Accurately install a surface vertical rod exit device on a door.

Student Learning Outcomes:
Install and adjust door exit hardware to manufacturer's instructions.
Select the proper types and models of exit hardware needed for an exit hardware project.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Scaffold Erector, Standard 40 Hour - Journeyworker
ACA040CJ :
1.5 Units
This course will cover the basic techniques and procedures associated with frame, system, and tube and clamp scaffolds. Upon successful completion, a student will be issued a United Brotherhood Carpenters (UBC) Scaffold Qualification Card.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Demonstrate an applied understanding of introductory frame, system and tube and clamp scaffolding.

Demonstrate an applied understanding of scaffolding inspection, assembly and removal in the areas of frame, system, tube and clamp.

Demonstrate an applied understanding of scaffolding configurations in the areas of frame, system, tube and clamp.

Student Learning Outcomes:
- Determine the proper scaffold configuration, layout and material list, provided with dimensions and load characteristics.
- Safely assemble and dismantle to industry standards three types of scaffolds.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Scaffold Erector, Systems Scaffold - Journeyworker
ACA040EJ:

0.5 - 0.6 Units

This course provides the required instruction in basic techniques and procedures associated with system scaffold components and focuses on terminology, component identification, construction practices, and safety considerations. Students will erect typical configurations to industry standards using system scaffold components. Upon successful completion, a student will be issued a United Brotherhood Carpenters (UBC) Scaffold Qualification Card. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
Learning Outcomes

Course Objectives:
Demonstrate an applied understanding of scaffolding inspection, assembly and removal.
Demonstrate an applied understanding of system scaffolding configurations and methods.
Demonstrate an applied understanding of introductory system scaffolding.

Student Learning Outcomes:
- Determine the proper scaffold configuration, layout and material list, provided with dimensions and load characteristics.
- Safely assemble and dismantle to industry standards System types of scaffolds.

Units & Hours

Minimum Units:
0.5

Maximum Units:
0.5

Total Hours:
10.8

Powered Industrial Truck Operator - Rough Terrain

ACA041A:

0.4 Units

This course covers an overview for safe operation of rough terrain lift trucks for the construction industry, Code of Federal Regulations (CFR), and training requirements. Upon successful completion, students will be issued a United Brotherhood of Carpenters (UBC) Powered Industrial Truck Operator-Rough Terrain (RT) Qualification Card. Open Entry/Open Exit.

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
- Identify the parts of a rough terrain lift truck
- Explain the proper sequence and recording for equipment inspection and refueling
- Demonstrate safe operation of a rough terrain lift truck in forward and backward movement
- Match safety hazards and operating precautions for equipment
- List and state the types and use of operational controls
- Perform a safety inspection using inspection criteria

Student Learning Outcomes:
- Explain potential hazards and site safe operating procedures for rough terrain lift trucks.
- Apply the proper inspection and maintenance procedures for rough terrain lift trucks.

Units & Hours
Total Hours
7.2

Powered Industrial Truck Operator - Industrial Terrain
ACA041B :

0.4 Units

This course covers an overview for safe operation of industrial lift trucks for the construction industry, Code of Federal Regulations (CFR) regulations, and training requirements. Upon successful completion, a student will be issued an United Brotherhood of Carpenters (UBC) Powered Industrial Truck Operator-Industrial Truck (IT) Qualification Card. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Perform a safety inspection using inspection criteria
Match safety hazards and operating precautions for equipment
Demonstrate safe operation of an industrial lift truck in forward and backward movement
Identify the parts of a industrial lift truck
List and state the types and use of operational controls
Explain the proper sequence and recording for equipment inspection and refueling

Student Learning Outcomes:
Articulate potential hazards and site safe operating procedures for industrial lift trucks.
Apply the proper inspection and maintenance procedures for industrial lift trucks.

Units & Hours
Total Hours
7.2

Acoustical Ceilings
ACA061A :

1.5 Units

This course provides an introduction to basic acoustical ceiling installation. Acoustical theory, engineering, and applicable building and seismic codes requirements will be covered. Students will install acoustical ceilings to industry standards using the proper techniques and procedures. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Inspect and verify attached ceiling materials are fastened according to seismic codes.

Explain the proper preparation and application of various wall molds and trims.

Employ the proper installation sequence to construct a basic acoustical ceiling.

Identify building and seismic codes required for installation of acoustical ceilings

Use the appropriate math functions to determine measurements and materials for basic grid pattern.

Recognize and describe the purpose of material components used in the acoustical ceiling installations.

Describe acoustical theory, engineering controls and explain how it is applied to ceiling design.

Demonstrate accurate layout of seismic grid supports to print specifications.

Select and safely use hand and power tools for assigned tasks.

Select and safely use hand and power tools for projects assigned.

Student Learning Outcomes:
- Describe acoustical engineering controls and materials used in acoustical ceiling designs.
- Demonstrate the proper installation of a basic acoustical grid ceiling to print specifications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Advanced Acoustical Ceiling Layout
ACA061B :
1.5 Units

This course identifies the advanced layout methods used to complete complex acoustical system installations. Students will use the skills presented to complete selected multifaceted acoustical ceiling layout projects as part of this course. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Use appropriate techniques to layout complex multifaceted ceiling grids
Employ proper procedures to establish transfer marks
Assess architectural features and develop a layout plan
Demonstrate accurate layout of “beginning point”
Identify layout methods for various architectural design
Describe how lasers and transits are used in layout procedures
Practice calculating the dimensions for sample layouts
Demonstrate correct use of layout tools and equipment

Student Learning Outcomes:
Assess architectural features and determine the appropriate layout methods and techniques to apply.
Accurately layout several complex multi-surface ceiling grids to industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Advanced Acoustical Ceiling Installation
ACA061C :

1.5 Units

This course identifies the advanced layout methods used to complete complex acoustical system installations. Students will use the tool and framing techniques presented to complete selected multifaceted acoustical ceiling layout projects. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Utilize correct procedures for establishing level and plumb surfaces
Demonstrate the safety and proper use of tools and equipment
Explain the characteristics of multifaceted ceiling grid layouts
Employ proper techniques to prepare trim and mold materials
Calculate materials and select materials per shop specifications and drawings
Layout, cut, and install ceiling grids according to plans
Demonstrate proper use of framing techniques

Install drywall finish materials and specialty edging to plan specifications

Identify terms, methods, material characteristics, green rating systems, and building codes

**Student Learning Outcomes:**

- Analyze architectural ceiling features to determine the appropriate framing methods and installation techniques to apply.
- Complete construction of complex architectural acoustical ceiling to industry standards.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours**
45.0

**Standard Acoustical Grids ACA062:**

1.5 Units

This course covers various grid patterns considered as standard for acoustical ceilings in the interior system construction industry. The methods and procedures used to form the patterns are the key focus of the course. Students will install several standard acoustical grid patterns to print specifications using the proper techniques and procedures. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**

- Use project plans to determine grid pattern and components
- State how wall configuration affects installation methods and procedures
- Demonstrate accurate layout of standard ceiling grid patterns to print specifications.
- Evaluate installed grids for compliance with industry standards.
- Identify building and seismic codes required for installation of acoustical ceilings
- List and describe the characteristics of standard acoustical grids styles and their applications.
- Use the appropriate math functions to determine measurements for standard grid patterns layout.
- Complete layouts for Horizontal Grid Pattern, Diagonal, Radius Wall, Gable Ceiling, Fine Line grids

**Student Learning Outcomes:**

- Interpret ceiling plans to distinguish the characteristics of various standard grid patterns.
- Accurately layout and install standard grid acoustical ceilings to print specifications.
Units & Hours
Minimum Units: 1.5
Maximum Units: 1.5
Total Hours: 45.0

Suspended Ceilings
ACA063:
1.5 Units
Provides instruction covering the installation of suspended ceilings in various configurations and will include both radius and square wall drywall suspension methods. Students will complete selected suspended ceiling installations using the techniques presented. Open Entry/Open Exit.

Requisites
Requisites: None

Transferability & General Education Options
Transferable: Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Apply the correct layout procedures for AH, gable ceiling and diagonal patterns.
Describe the characteristics of suspended acoustical ceilings and their applications.
Employ proper techniques to install suspended drywall grid for a circular space.
Use appropriate math functions to determine measurement for radius wall layout.
List the procedures used to install suspended drywall ceiling grids for a circular space.
Compare suspended ceilings with standard grid installation methods and procedures.
Explain the importance of the proper selection and use of tools and materials.
Demonstrate accurate layout of radius wall pattern to print specifications.
Inspect installed ceiling grid components for compliance with industry standards.
Evaluate drywall installation for proper attachment and use of fasteners.
Demonstrate proper material handling techniques.
Utilize the proper techniques to install suspended drywall grid for a square room.
Identify the procedures used to install a square suspended drywall ceiling.

Student Learning Outcomes:
Articulate the installation differences between standard and suspended grid ceiling systems.
Accurately layout and install selected suspended acoustical ceiling grids to print specifications.
Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Acoustical Soffits
ACA064:

1.5 Units

Provides instruction covering the construction of acoustical soffits in various configurations and will include square and slant faced, tapered, concealed, drywall suspension and sloped soffits methods. Students will complete selected acoustical soffit installations using the techniques presented. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Use appropriate math functions to determine materials for sloped and transition soffits.
Identify construction information on prints for installation of acoustical soffits.
Use appropriate math functions to determine measurements for square and slant faced soffit layout.
Inspect and verify soffit installations comply with industry standards.
List and describe the characteristics of two types of acoustical soffits.
Demonstrate the ability to construct a concealed system soffit.
Discuss the purpose and use of acoustical soffits in construction.
Demonstrate the ability to layout and construct both square and slant faced soffits.
Demonstrate the ability to construct a soffit using drywall suspension materials.
Use appropriate math functions to determine measurements for placing bracing.
Demonstrate the ability to construct a tapered and sloped transition soffits.

Student Learning Outcomes:
Differentiate construction elements for multiple variations of acoustical soffits.
Accurately layout and construct multiple variations of acoustical soffits to industry standards.

Units & Hours

Minimum Units:
Maximum Units
1.5

Total Hours
45.0

Prefab/Sound Panels
ACA065:

1.5 Units

This course will focus on the technical knowledge and skills needed for the installation of prefabricated wall and ceiling panel systems. Students will use the proper techniques and manufacturers’ guidelines to install various types of prefabricated wall and ceiling panels. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Discuss where prefabricated /sound panels are used
Install fabric panels according to design application.
Install fabric panels according to design application
Use appropriate math functions to determine the number and size of panels.
Use appropriate math functions to determine the number and size of panels
Identify prefabricated /sound panel types and materials
Demonstrate proper ceiling attachment of pyramid diffusers.
Explain the difference between sound reduction and sound proofing
Demonstrate proper wall placement of selected styles of diffusers

Student Learning Outcomes:

Describe the acoustical characteristics for various types of prefabricated sound panels.
Complete wall and ceiling panel assembly and installation to print specifications.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
Concealed/Glue-Up/Staple-Up Systems
ACA066:

1.5 Units

This course illustrates the design flexibility of concealed, semi-concealed ceilings and soffits using glue-up and staple-up systems. Students will employ the glue-up and staple-up techniques presented to install concealed grid ceiling system. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Employ proper installation techniques to complete a concealed ceiling system.

Describe ceiling applications and installation procedures.

Use appropriate math functions to calculate dimensions for concealed ceiling and soffit layouts.

Identify concealed glue-up/staple-up system materials.

Use appropriate math functions to calculate mold and trim materials for installation.

Compare and contrast concealed glue-up and staple-up system with standard grid ceiling systems.

Demonstrate the ability to form various types of corners using molds and trims.

Comply with applicable building and seismic codes for installation.

List installation procedures based on type of material to be attached.

Demonstrate the ability to construct a soffit with concealed system materials to industry standards.

Student Learning Outcomes:

Compare and contrast installation methods between standard grids and concealed ceiling systems.

Construction a concealed ceiling and modify procedures to construct a concealed system soffit project to industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Designer and Specialty Trims
ACA067:
1.5 Units

This course covers specialty skills needed to produce professionally finished edges for designer ceiling installations. Students will use the techniques presented to produce multiple ceiling edge contours using the compasso trim system. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Demonstrate accurate layout and installation of a free floating trimmed ceiling.
Use appropriate math functions and formulas for elliptical project layout.
Assess installation and verify compliance with industry standards.
Use appropriate math functions to determine dimensions for mold and trim preparation.
Perform layout using the correct techniques for installation of grid ceiling system designs assigned by the instructor.
Use appropriate math functions to calculate the materials needed to complete each project.
List installation procedures for compass mold and trim.
Select and prepare appropriate trim materials and integrate into grid ceiling.
Identify the custom perimeter trim products, Axiom, Infinity and Compasso.
Install "S" wave trimmed ceiling to comply with accuracy criteria on plans.

Student Learning Outcomes:
  Explain how designer and specialty trims are used to produce architecturally contoured finished edges.
  Complete multiple ceiling installations using the compasso trim system to industry standards.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Metal Pan and Security Systems

ACA068:

1.5 Units

This course will focus on design, function and installation of metal pan and security systems incorporated into construction of suspended ceilings. Students will demonstrate the ability to installation these components to direct wire and indirect channel suspension ceiling grid systems. Open Entry/Open Exit.
Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
State the sequence of procedures for basic component installation
Demonstrate proper metal pan soffit installation using square and radius techniques
Practice installing mold and trim using proper material handling and tool techniques
Identify ceiling components and product characteristics
Assess the accessibility of ceiling mechanical systems using snap-in and lay-in methods
Employ the applicable seismic installation requirements
Inspect and verify finished installation provides a monolithic appearance
Complete installation of a metal pan in a column to industry standards
State the proper sequence of installation of a metal pan into selected suspended ceiling system

Student Learning Outcomes:
Interpret products and installation methods used to incorporate metal pan and security systems in suspension ceiling grids.
Demonstrate suspended ceiling installation of various metal pan and security system components to industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Orientation
ACA071A:
1.5 Units
This course provides an overview of the construction industry, safety overview, with focus on tool identification and use. Upon successful completion, students will receive OSHA 10 Hour and Powder Actuated Tool Certifications. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Discuss trade applications, quality, and productivity practices
Match safety hazards and precautions for tools, equipment and PPE using manufacturers’ guidelines
Define 10 construction safety regulations to complete OSHA 10 Hour Safety Certification
Set up and fire powder actuated tool using standards required for Operator Certification
Explain the importance of proper interpersonal communication and respectful conduct
Identify the Focus Four safety hazards and accident prevention practices
Select and safely use hand and power tools for assigned tasks
Identify trade terms, industry roles and responsibilities, and basic skills
Discuss the types and benefits of sustainable/green building practices in the workplace
Calculate measurements and accurately perform basic math functions for assigned tasks

Student Learning Outcomes:
Apply Occupational Safety and Health Administration (OSHA) regulations and American National Standards Institute (ANSI) standards to evaluate potential hazards and cite the appropriate accident prevention measures.
Demonstrate safe operating procedures for selected tools and equipment.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Safety and Health Certifications
ACA071B :
2.0 Units

This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and equipment operating procedures will also be covered. Financial and life skills will be presented to help them survive in the construction industry. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Scaffold Erector-Welded Frame Qualification Card. Open Entry/Open Exit.

Requisites

Transferability & General Education Options
Not transferable

Weekly Lecture Hours:
Learning Outcomes

Course Objectives:
- Match safety hazards and precautions for scaffold erection procedures
- Conduct scaffold safety and equipment inspections
- Identify scaffold components and applicable OSHA regulations
- Practice using the math techniques presented to layout materials
- Create a financial worksheet and sample budget
- Select appropriate hand and power tools/equipment for assigned tasks
- Identify the effect of economic cycles on construction careers
- Apply the appropriate manipulative techniques for projects
- Meet UBC criteria for erecting and dismantling scaffolds correctly
- Select appropriate math operations to measure and calculate materials
- Utilize proper fastener placement and driving techniques
- Properly stage, assemble, and disassemble selected scaffolding

Student Learning Outcomes:
- Students will be able to demonstrate proficiency with various tools and equipment appropriate for the assigned construction tasks.
- Students will be able to demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.

Units & Hours

Minimum Units:
2.0

Maximum Units:
2.0

Total Hours:
54.0

Tool/Equipment Applications

ACA071C:

1.5 Units

This course covers the safe and appropriate use of fall protection, and emergency response procedures. Tool applications presented in this training will provide opportunities for tool skill mastery and equipment operation. Upon successful completion, students will be issued an American Red Cross First Aid/CPR Certification Card, and United Brotherhood of Carpenters (UBC) Fall Protection Qualification Card. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5
Learning Outcomes
Course Objectives:
Perform emergency response techniques and pass American Red Cross first aid, CPR and AED training tests.
Identify selected tools parts, operation, and accessories
Demonstrate the ability to select and use the appropriate fall prevention and personal fall arrest systems
Match safety hazards with appropriate fall protection equipment
Demonstrate the ability to select the appropriate tools for the tasks assigned
Demonstrate advanced tool manipulative proficiency
Identify fall protection methods and applicable OSHA regulations
Discuss health emergencies and identify first aid and CPR techniques

Student Learning Outcomes:
- Apply the appropriate first aid and CPR/AED techniques for specific emergencies.
- Demonstrate the proper don/doff of fall protection systems.
- Demonstrate proficiency with various tools to complete projects to industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Basic Metal Framing
ACA072A:

1.5 Units
Provides students with an overview of the use of metal framing materials in construction of building interiors. A comparison of metal framing and typical wood framing techniques will be presented. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Construct layout lines using project dimensions
Identify metal framing materials and components
Select and install drywall and lath trims
Apply the proper cutting and attachment techniques to attach drywall
Prepare and cut framing materials to size
Construct walls using metal framing components
Plumb and level components
Assess construction and material installation for quality standards
Identify and determine material quantities
Describe drywall and lath trims applications
Describe and calculate project materials

Student Learning Outcomes:

- Explain the major differences in materials and installation techniques for metal framing compared to typical wood framing.
- Use the proper tools and materials to complete basic metal framing construction sequence when presented with an installation plan.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Basic Lathing

ACA072B:

1.5 Units

This course presents the basic framing and lathing methods used in the industry for exterior/interior installations. The course will focus on exterior waterproofing, lath, and trim installation procedures. Students will use the skills presented to complete an exterior lathing project as part of this course. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:

- Describe lathing materials and trims
- Explain how poor and proper lath installation affects plaster finishing
- Describe the types of materials used to apply an exterior finish on lath
- List the steps in the sequence of construction
- Employ fastening criteria for paper and wire lath installation
Practice installation methods for selected lathing projects
Assess application surface for defects and installation issues
Calculate materials using project drawings
Complete layout for framing project prop
Prepare materials for installation
Assess completed project for standards and quality construction
Construct framing for lathing application

Student Learning Outcomes:
Identify exterior framing methods and lathing materials.
Complete an exterior lathing project to industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Advanced Lathing
ACA072C :

1.5 Units

This course presents advanced methods and application techniques for lath and trim products used on exterior-interior metal framing. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
ACA021A - Orientation

AND

Prerequisite
ACA021B - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Layout, cut, and safely handle various components, trims and beads
Identify terms, methods, material characteristics, and building codes
Employ layout sequence to accurately locate construction elements
Interpret prints to determine layout dimensions and assess designs flaws
Place and correctly fasten lath to exterior wood and steel substrates
Calculate materials and select trim products per shop specifications and drawings
Discuss the importance of communication on the jobsite
Describe uses and advanced application of lath and trims types
Utilize correct procedures for establishing level and plumb surfaces
Apply advanced techniques to install selected lath and trims to meet print criteria

Student Learning Outcomes:
- Analyze prints and evaluate suitable materials to complete complex lath installations.
- Assess design flaws and apply corrective measures based on applicable standards and codes.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Framing Ceilings and Soffits
ACA073A:

1.5 Units
This course identifies the materials used and their application for various types of fire rated walls, ceilings and soffits. It presents methods and procedures used for layout and template development. Drywall and trim applications are discussed. The types of tools used and their associated safety, applied math and print reading fundamentals are reviewed. Students will use the skills presented to complete a ceiling and soffit project as part of this course. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
- Execute framing construction sequence and verify allowable tolerances
- Describe the components and construction procedures for framing projects
- Use correct leveling tool procedures to set soffit elevation
- Calculate materials for project framing and trim installation
- List the steps used to develop a framing plan and detail worksheet
Select and use appropriate framing materials based on framing plan
Demonstrate proper fastening of ceiling joists to code requirements
Apply proper techniques to attach and fasten drywall and trims to wall and soffit framing
Demonstrate proper set up of leveling equipment
Construct fire-rated shaft wall and soffit framing to print specification

**Student Learning Outcomes:**
- Complete this course will be able to determine proper framing methods and materials using information on prints.
- Complete ceiling soffits framing projects using the proper sequence and procedures.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours**
45.0

**Framing Suspended Ceilings**

**ACA073B:**
1.5 Units

Provides instruction covering the installation of circular ceilings with drops, and drywall suspension in both square and circular grids. Students will complete selected suspended ceiling installations using the techniques presented. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Install ceiling grid components to meet industry standards.
- Calculate measurements and accurately perform math functions for ceiling layout of suspended panel patterns.
- Demonstrate proper fastening techniques to industry standard
- Compare suspended ceiling installation techniques with standard grid installation methods and procedures
- Install ties to meet industry codes
- Accurately set wall mold and align
- Construct square grid as indicated on project plan
- Install ties to meet industry codes
- Place borders according to project plans
Correctly align drywall to framing

List and describe the characteristics of suspended acoustical styles and their applications.

Construct circular grid as indicated on project plan

Accurately set wall trim at given height

Demonstrate accurate layout of suspended ceiling grid patterns to print specifications.

Identify building and seismic codes required for installation of acoustical ceilings

Accurately layout AH, Radius Wall, Gable Ceiling, Diagonal, Fine Line Drywall circular and square grids.

**Student Learning Outcomes:**

- Illustrate the difference in techniques and procedures applied to suspended acoustical ceilings construction with standard acoustical grid construction.
- Organize layout and install selected suspended acoustical ceiling grids to print specifications.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Framing Curves and Arches**

ACA073C:

1.5 Units

This course provides instruction in framing methods for curves and arches and their related structural limitations. It identifies the various wall and ceiling types and the layout principles, and materials used for each Lath applications and trim are also discussed. Students will use the skills presented to complete a framing project that includes curves and arches. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Install wall track and studs to code using plan view layout
- Explain the difference between arched ceiling framing techniques and basic ceiling framing
- Discuss the structural limitations for curved and arched walls and ceilings
- Interpret project plan to calculate radius wall and material take-off
- Use proper framing techniques to create equally spaced window openings
- Construct framing for curved wall segment to code and industry standards
List the framing steps for constructing arched ceilings

Construct framing for arched ceiling and soffits according to project plan

**Student Learning Outcomes:**

- Compare and contrast basic metal framing techniques with framing techniques for curved walls and arched ceilings.
- Construct framed curved walls and arched ceiling to print specifications.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Print Reading**

ACA074A:

1.5 - 2.0 Units

This course introduces basic visualization skills needed for reading and interpreting construction prints. Views, elevations and the role of specifications as they relate to insulation details on prints will be discussed. An awareness of sustainable and green building practices will be covered during the course. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Define terms and categorize print according to specific characteristics
- Identify the major principles of sustainable building practices
- Interpret views to identify components details and layout features
- Locate beginning and ending measuring points and accurately calculate dimensions
- Use plans to accurately establish construction layout
- Label the standard views used in orthographic projection
- Describe and use conventional lines, symbols and dimensioning methods
- Identify drawing methods used to create prints
- Locate beginning and ending measuring points and calculate dimensions
- Interpret views to identify acoustical components details and layout features
- Complete a detailed material list from print specifications (insulation)
Student Learning Outcomes:
- Apply the principles of orthographic project to visualize three dimensional images from two dimensional graphic representations.
- Interpret prints to determine construction elements, size arrangement, and implication of energy efficiency considerations.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Advanced Print Reading
ACA074B:
1.5 - 2.0 Units

In this course, students will analyze multi-view drawings to determine acoustical ceiling construction types, locate benchmark and building/wall elements; review codes, references, and perform calculations for construction/ceiling grid planning. Open Entry/Open Exit.

Requisites
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
- Explain what is included in specifications and find selected topics.
- Interpret prints to identify project elements, code compliance and construction type
- Estimate time and labor for project based on print information
- Read beam and column schedules and determine materials
- Calculate material take-offs from representations in specific views and schedules
- Practice sketching views using orthographic method
- Record site location and orientation information from plot plan
- Reference views and determine benchmark and reference dimensions on prints
- Find framing/insulation details on drawings

Student Learning Outcomes:
- Apply the orthographic projection drawing method to sketch a three dimensional object in standard views.
- Estimate costs based on construction elements for various specialty crafts found on prints.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Air, Moisture, and Thermal Barriers
ACA074C:

1.5 Units

This course will demonstrate that correctly installed air, moisture and thermal barrier systems increase building envelope energy efficiency. Building sealing products and installation techniques will be the main focus of hands-on exercises. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
ACA071A - Orientation

AND

Prerequisite
ACA071B - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Identify terms, methods, material characteristics, and building codes
Describe uses and energy efficiency of air barrier systems
Discuss the importance of proper building sealing to achieve energy efficiency
Find air and moisture barrier and insulation details on plans
Interpret prints to determine layout dimensions and assess designs flaws
Employ layout sequence to accurately locate construction elements
Locate walls and openings as indicated on project plans
Assess allowances for air, vapor and moisture barriers
Describe installation procedures for sheet and spray air barrier products
Locate insulation details as indicated on project plans
Utilize the proper installation procedures for insulation methods
Select the correct materials for exterior and interior application
Demonstrate the proper installation of drywall materials
Describe the different levels of finish used for joint sealing
Demonstrate the proper application of tape and compound for sealing wall joints

Student Learning Outcomes:
Describe the sealing attributes of various air/vapor, moisture barrier and thermal products used to increase the integrity of the building envelope.
Install air, moisture and thermal barrier systems according to project instructions.

Units & Hours
Light Gage Welding AWS - A
ACA075A:

1.5 Units
This course covers light gage welding methods and techniques. American Welding Society (AWS) welding processes, symbols, materials and safety procedures will be presented. Students will practice setting up equipment and identifying the proper electrode position and speed. Instruction will include an explanation of typical metal frame welding practices. An emphasis on hands-on experience using 6013 electrodes will reinforce proper use of the welding procedures. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Describe the proper welding position for each type weld
Demonstrate safe work practices for welding tasks
Describe the welding process and electrodes used in the LAC certification exam
Identify electrode characteristics
Define welding terms
Demonstrate the ability to form welds used in metal stud framing
Explain the importance of using the proper safety attire
Identify the process and procedure used in the AWS welding standard
Interpret basic welding symbols
Properly adjust welding equipment settings
Describe applications for various types of welds
List the types weldments used in metal stud framing

Student Learning Outcomes:
Identify welding applications used in the interior systems industry.
Weld metal framing components to meet industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
Total Hours
45.0

Light Gage Welding LAC
ACA075B:

1.5 Units

This course covers light gage welding methods and techniques. American Welding Society (AWS) welding processes, symbols, materials and safety procedures will be presented. An emphasis on hands-on experience using 6010 electrodes will reinforce proper use of required welding procedures, and ability to perform welding tasks used to complete the Los Angeles City (LAC) certification process. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Identify electrode characteristics
Describe the proper welding position for each type weld
Explain the importance of using the proper safety attire
Locate code requirement to meet written testing criteria
Identify the process and procedure used in the LAC certification program
Demonstrate safe work practices for welding tasks
Demonstrate the ability to form welds to meet the performance testing criteria
Identify weld types on drawings
Describe the welding process and electrodes used in the LAC certification exam
Describe applications for various types of welds
List the weldments used in the LAC performance test
Properly adjust welding equipment settings

Student Learning Outcomes:
Research welding code books and write descriptions consistent with Los Angeles City (LAC) welding requirements under certification standards.
Produce weldments that meet the welding requirements stated in LAC performance certification standards.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

**Total Hours**
45.0

**Light Gage Welding AWS - B**
ACA075C :

1.5 Units

This course covers light gage welding methods and techniques. American Welding Society (AWS) welding processes, symbols, materials and safety procedures will be presented. An emphasis on hands-on experience using 6013 electrodes will reinforce proper use of required welding procedures, and ability to perform welding tasks used to complete AWS certification process. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Identify electrode characteristics
- Explain the importance of using the proper safety attire
- Demonstrate the ability to form welds required for AWS performance testing
- Demonstrate safe work practices for welding tasks
- Identify the process and procedure used in the AWS welding standard
- Describe the welding process and electrodes used in the AWS certification exam
- List the types weldments used in metal stud framing
- Define welding terms
- Describe the proper welding position for each type weld
- Interpret basic welding symbols
- Complete written code requirement exam
- Properly adjust welding equipment settings

**Student Learning Outcomes:**
- Research welding code books and write descriptions consistent with American Welding Society (AWS) welding requirements under certification standards.
- Produce weldments that meet the welding requirements stated in AWS performance certification standards.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5
Total Hours
45.0

Basic Hand Finishing
ACA076A:

1.5 Units

This course is designed to develop basic hand finishing skills using the correct tools and materials. The training will include terminology and description of finishing levels as well as hand tool manipulation techniques, material identification and selection criteria. Manufacturer’s guidelines will highlight the environmental conditions for proper mixture preparation and use. Key discussions will draw attention to typical finish issues, causes, and solutions frequently employed. Tool techniques and application sequence and will be explained and demonstrated. The importance of mixture consistency, proper coating sequence will be stressed during level four hand finishing exercises. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Construct prop wall
Select type and mix compound to the appropriate consistency
Apply compound and tape to surfaces using the correct hand tools and techniques.
Identify and state the proper use basic hand tools and equipment
Identify compound products
Use proper sequence to uniformly coat levels two, three and four
Discuss terms, characteristics and types of material and trims
List levels of the finishing process
Perform basic mathematics operations
Properly sand and smooth coats to industry standards
Prepare surfaces and mix compounds to the appropriate consistency

Student Learning Outcomes:
Manipulate hand tools with the proper motion.
Compare and contrast hand tool with mechanical tool methods.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5
Total Hours
45.0

Automatic Finishing Tools
ACA076B :

1.5 Units

This course will advance the methods, applications and sequences of the bazooka, skim boxes, nail spotters and angle boxes. Students will be required to demonstrate the ability to tape in different situations and the ability to coat all field and butt joints. The levels of finishing and the various finish trims will be discussed. The operation of automatic taping and finishing machine tools including those newly introduced to the industry will be covered. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Properly mix and load tools with joint compound
Properly mix and load tools with joint compound
Demonstrate basic ability to coat surfaces using automatic finishing tools
Practice trouble shooting techniques for automatic finish tools
List tool set up and safety inspection procedures
Locate finish levels on prints
Identify production sanding techniques
Identify the parts and operation of automatic finishing tools
Describe the sequence in which automatic and hand tools are used
Properly mix and load tools with joint compound
Discuss basic maintenance, troubleshooting, and tool repair techniques
Demonstrate basic ability to coat surfaces using automatic finishing tools
Demonstrate basic ability to coat surfaces using automatic finishing tools

Student Learning Outcomes:
Demonstrate ability to manipulate automatic finish tools to attain surface smoothness to industry standards.
Describe the advantages and disadvantages of mechanical equipment finishing techniques.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5
Total Hours
45.0

Drywall Installation/Finish Trims
ACA077A:

1.5 Units

This course will introduce drywall handling methods, applications and recommended levels of drywall finish to achieve the desired aesthetics. An emphasis will be placed on trim attachment and finishing techniques. Various types of finish trim will be identified. Students must demonstrate proficiency in the proper use of automatic taping tools. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
List the trim installation sequence
Marking joists and hanging ceilings
Identify terms, drywall and trim characteristics and uses
Hang walls with door and window openings
Apply codes and perform trim installation methods
Tape and first coat drywall/trim installation
Measure and cut corners
List the drywall hanging sequence
Discuss drywall codes and installation methods
Verify installation meets industry codes

Student Learning Outcomes:
Trims and finish drywall ceiling and wall surfaces according to project plans.
Describe corrective measure for typical drywall installation issues.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Advanced Hand Finishing
ACA077B:

1.5 Units

This course will focus on advanced methods and applications using hand tool techniques. The proper sequence of operation, phases and materials to be used in order to produce a higher level finished product to industry standards. Curved and radius wall characteristics for finish levels will be discussed. The course will cover wall frame components, materials used, surface preparation, and application methods. Students will complete a project to a Level Five standard. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Uniformly coat surfaces to Level Five finish
Install prop, drywall and trims
Discuss curved and radius wall characteristics for finish levels
Perform detailed sanding
Troubleshoot application flaws
Apply tape and compound to joints
Utilize hand lighting for inspection of finish surface
Use the correct joint sequence to apply compound
Properly finish sand surfaces
Identify advanced techniques for hand finishing applications
State the procedures for Level Five finishing
Check proosity of wall surface
Demonstrate proper application of third coat

Student Learning Outcomes:
Contour surfaces consistent with Level Five industry standards.
Explain the purpose of applying three coats of compound to tape drywall joints.

Units & Hours

Minimum Units:
1.5

Maximum Units:
1.5

Total Hours:
45.0
Advanced Automatic Finishing Tools
ACA077C:

1.5 Units

This course will advance the methods, applications and sequences of the bazooka, skim boxes, nail spotters and angle boxes. Students will be required to demonstrate the ability to tape in different situations and the ability to coat all field and butt joints. The levels of finishing and the various finish trims will be discussed. The operation of automatic taping and finishing machine tools including those newly introduced to the industry will be covered. Open Entry/Open Exit.

Requisites
Requisites: None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Discuss the finishing techniques for radius surfaces

Use finishing techniques and sequence used in advanced applications

Meet industry productivity rates for all finish levels

Demonstrate the ability to coat all field and butt joints to the required finish levels

Meet industry productivity rates for all finish levels

Meet industry productivity rates for all finish levels

Meet industry productivity rates for all finish levels

Demonstrate the ability to coat all field and butt joints to the required finish levels

Use the proper finishing techniques and sequence used in advanced applications

Explain how tool settings affect joint crowning and dishing

Use the proper finishing techniques and sequence used in advanced applications

Demonstrate the ability to coat all field and butt joints to the required finish levels

Identify advanced skill level productivity measures

Describe the visual cues that require tool setting adjustments (read walls)

Use the proper finishing techniques and sequence used in advanced applications

Student Learning Outcomes:

Visually “read” wall surfaces at each level and properly adjust tool settings.

Assess productivity levels for automatic finishing tool bead and molding applications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5
Total Hours
45.0

Advanced Metal Framing
ACA078B :

1.5 Units

This course will begin with a quick review of basic metal framing followed by detailed procedures for framing curved, serpentine, and elliptical non load bearing partitions. Using standard light gage components and other materials, students will learn advanced techniques to expedite work processes. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Cut, shape and attach drywall to finish partition construction
Identify terms, methods, material characteristics, and building codes
Identify approprate substrate materials
Install framing to form curved, serpentine and elliptical partitions
Use geometric construction to layout building lines
Describe the uses and advanced application of light gage components
Utilize correct procedures for establishing level and plumb surfaces
Install substrate to industry standards

Student Learning Outcomes:
Construct an advanced metal framing project to print specifications.
Compare and contrast metal framing with convention framing methods.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Wet Wall Finishes
ACA078C :
1.5 Units

This course presents industry methods, mediums, and typical application of wet wall finishes. The training will include terminology and description of industry standard finishing levels; application tool types and techniques, material identification and selection. Manufacturer’s guidelines will highlight the environmental conditions for proper mixture preparation and use. Key discussions will draw attention to typical finish issues, causes for defects, and solutions frequently employed, and emphasize the selection and use of low volatile organic compounds (VOC) products. The importance of mixture consistency, proper coating sequence will be stressed during wet wall finishing exercises. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:

Discuss coating mediums and wet application methods
Identify terms, application methods
Perform sanding techniques specifically to produce the desired level
Describe procedures for applying base, primers and top coats
Inspect and take correct measures to eliminate any surface imperfections to achieve a Level Five Finish
Select and use appropriate coating application equipment for spray techniques
Apply compounds to achieve Level Five finish using selected products
Select and use appropriate coating application tools for hand application

Student Learning Outcomes:

Execute a Level Five finish and inspect paint-coated walls for accepted industry standards.
Evaluate wet finish hand application and spraying methods.

Units & Hours

Minimum Units:

1.5

Maximum Units

1.5

Total Hours

45.0

Ceiling and Soffit Finishing

ACA078D:

1.5 Units

This course is designed to develop an advanced level of finishing skill for applications with architecturally detailed ceilings and soffits. Students will be required to determine type and quantity of materials for various designs and differentiate between levels of finish. Guided practice with a combination of hand and automatic tool techniques will promote manipulative ability required for a successful result. A variety of finish trims will be integrated into each method of finish. Open Entry/Open Exit.
Requisites
Requisites:
None
Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Identify and use the proper joint coating sequence for all finish levels
Employ productivity measures
Identify fall hazards
Explain the purpose and function of soffits
Utilize production sanding procedures
Coat surfaces to finish Level Four
Take corrective measures where needed
Discuss power tool safety and operation
Describe the features of architectural ceiling and soffit designs
Create punch list
Identify framing ceiling elements
Inspect ceiling and soffit framing
Check drywall and trim installation for defects
Inspect level of finish and assess imperfections

Student Learning Outcomes:
Assess pre-finished surface defects and take corrective action.
Complete a ceiling and soffit project to meet industry standards for a Level Four finish.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Drywall and Acoustical Ceilings
ACA079A:
1.5 Units
This course identifies the materials and methods used for acoustical ceilings combined with drywall installation. Seismic codes, materials, and requirements are also reviewed. Green building rating systems will be applied to selected acoustical and drywall materials. Installation for various grid systems will be discussed. Students will use the skills learned to complete a drywall-acoustical ceiling project. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Layout, cut, and install ceiling grids according to plans
- Explain the characteristics of three types of ceiling grid layouts
- Describe the tools and techniques used to install drywall for standard grid ceilings
- Layout ceiling grid according to project plan
- Place and correctly fasten drywall
- Identify terms, methods, material characteristics, and building codes
- Utilize correct procedures for establishing level and plumb surfaces
- Calculate materials and select materials per shop specifications and drawings
- Demonstrate safe and proper use of hand and power tools

**Student Learning Outcomes:**

- Install a drywall-acoustical ceiling system according to print specifications.
- Assess installation and identify modifications for overhead mechanicals.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Drywall Applications**

**ACA079C:**

1.5 Units

This course provides needed commercial and residential skills to properly handle and install drywall used in specialized applications. Productivity techniques will be discussed and practiced under jobsite conditions. Wall framing and drywall finishing methods will be incorporated into the hands-on activity. Open Entry/Open Exit. Previous Title: Apprenticeship Carpentry 079C, Drywall Applications (2016)

**Requisites**
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Demonstrate proper installation of wood and metal framing according to project plans.

Demonstrate accurate layout and leveling techniques.

Employ guidelines to select and safely use hand and power tools.

Apply time utilization techniques to maximize productivity as stated by instructor.

Compare residential and commercial framing methods for drywall applications.

Install and align finish trims and beads using the correct techniques.

Prepare and attach drywall materials as specified on project plans.

Interpret project plans to determine dimensions and specification details.

Incorporate time utilization techniques to maximize productivity for field conditions.

Apply drywall finishing materials using instructor’s criteria.

Identify material use and specialty drywall product characteristics.

Student Learning Outcomes:
State the proper use and handling of drywall and specialty drywall products in both commercial and residential applications.
Install drywall and specialty drywall products for residential and commercial applications to industry standards.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Drywall Applications
ACA079D:
1.5 Units

This course provides needed commercial and residential skills to properly handle and install drywall used in specialized applications. Productivity techniques will be discussed and practiced under jobsite conditions. Wall framing and drywall finishing methods will be incorporated into the hands-on activity. Open Entry/Open Exit.

Requisites
Requisites:
None
Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Apply drywall finishing materials using instructor’s criteria.

Apply time utilization techniques to maximize productivity as stated by instructor.

Compare residential and commercial framing methods for drywall applications.

Employ guidelines to select and safely use hand and power tools.

Install and align finish trims and beads using the correct techniques.

Demonstrate proper installation of wood and metal framing according to project plans.

Identify material use and specialty drywall product characteristics.

Interpret project plans to determine dimensions and specification details.

Incorporate time utilization techniques to maximize productivity for field conditions.

Prepare and attach drywall materials as specified on project plans.

Demonstrate accurate layout and leveling techniques.

Student Learning Outcomes:

Apply the proper use and handling of drywall and specialty drywall products in both commercial and residential applications.

Install drywall and specialty drywall products for residential and commercial applications to industry standards.

Units & Hours

Minimum Units:

1.5

Maximum Units

1.5

Total Hours

45.0

S/B Firestop/Fireproofing Procedures

ACA082B:

1.5 Units

This course covers various firestop/fireproofing systems and methods used as fire protection and fire control. Key discussions will highlight applicable fire codes and industry standards for testing firestop/fireproof methods. Manufacturer’s guidelines will identify application tool anatomy, instruction for job preparation, loading instructions, operating procedures, maintenance and care of equipment. Basic descriptions of penetration types and the materials used, including non-combustibles and B-Expands, will be covered. Students will apply and test firestop/fireproofing material in a controlled environment. Open Entry/Open Exit. Former Title: Apprenticeship Carpentry 082B, Firestopping Procedures (2020)

Requisites

Requisites:
None
Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Identify the characteristics of a firestop system
Identify the characteristics of a fire proofing system
Discuss the standards and testing methods for firestop/fireproof systems
Describe the functions of three different firestop/fireproof technologies
Utilize selected materials to form a firestopping seal
List typical firestop/fireproof system failures and abatement solutions
Perform testing methods for firestop systems
Utilize and apply selected materials to form a firestopping seal

Student Learning Outcomes:
   Form a firestop/fireproof system as indicated on project plans.
   Discuss the characteristics of several types of firestopping products.

Units & Hours

Decorative Trims and Textures

ACA082C:

1.5 Units

This course provides advanced hand and automatic tool finishing techniques used to apply decorative trims and special surface textures. Training includes product information for metal, paper, plastics and art beads. Special attention will be given to coating and sanding sequence of field and butt joints for selected surface textures. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Match proper tools and methods to selected applications
Complete finish utilizing touch up and light sanding procedures
Use mechanical spray equipment to apply splattered texture to surfaces
Mix and applying texture using spray equipment
Calculate materials using project plans
Practice using manipulative tool movement to create selected texture
Complete finish utilizing touch up and light sanding procedures
Identify decorative trims types and specialty textures
Accurately measure and cut decorative trim inside/outside corners
Discuss the methods and techniques used to create typical textures
Apply skip trowel texture to surfaces using hand tool techniques
Apply skip trowel texture to surfaces using hand tool techniques

Student Learning Outcomes:
Attach decorative trims and apply two types of textures to finish surface.
Evaluate hand tool and mechanical tool methods for applying wall textures.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Door and Door Frames
ACA083:
1.5 Units

An introduction to the doors and door frames used in the interior systems industry. The course discussions will incorporate applicable regulations governing door openings and door selection. Hardware, controlling and locking devices, and door layout and installation techniques will be included. Basic math and print reading will be covered as will tool-related safety concerns. Students will use the skills presented to complete a selected door and door frame installation project as part of this course. Open Entry/Open Exit.

Requisites
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Locate metal door frame on door schedule
Identify the different door types, door sizes and regulations on blueprints
Identify door hand and swing
Demonstrate various door frame installations accurately
Practice converting dimensions
Demonstrate safe and proper use of all necessary hand, power tools and leveling instruments
Perform and complete a Timed Manipulative Evaluation as stated in the DW-310 performance objectives
Practice 3-4-5 layout method
Install and align a metal door frame

Install select door hardware

Successfully pass a written examination with a score of at least 80% accuracy and perform all practical tasks to within 1/8"

**Student Learning Outcomes:**
- Install a basic door frame to industry standards.
- Install various types of door hardware as indicated on project plans.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5

**Total Hours**
45.0

**Door/Door Frame**

**ACA083C:**

1.5 Units

This course covers the installation process from constructing rough openings to hanging and adjusting doors. An emphasis will be placed on print interpretation, door schedules, symbols and hardware recognition. Students will use the methods and procedures presented to install selected frames and doors for wood framing applications. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Prerequisite
- ACA021A - Orientation

AND

Prerequisite
- ACA021B - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
- State the classes and sizes of typical metal doors
- Identify doors and hardware components from door schedules
- Discuss applicable building and fire codes and ratings
- List metal door types and quantities from print door schedules
- Accurately measure layout door frame locations
- Calculate dimensions for door jamb layout for rough wood framing
- Correctly and safely use tools and equipment
- Measure and mark metal door frames for hardware
Install metal door frame using proper fasteners and nailing pattern
List the steps in the door and hardware installation sequence
Calculate dimensions for door hardware layout
Correctly and safely use tools and equipment
Measure and mark door for hardware
Install door hanging hardware
List the steps in the door lockset installation sequence
Correctly and safely use tools and equipment
Accurately measure layout lockset and closer locations
Attach and inspect exit/panic door hardware systems for proper function
Troubleshoot door and hardware installation

Student Learning Outcomes:
- Determine metal door and frame requirements using print specifications for wood framed structures.
- Wood frame and hang metal doors to meet industry standards.

Units & Hours

Exterior Insulation Finish Systems (EIFS)
ACA086A:

1.5 Units

This course is an introduction to exterior insulation finish systems including terminology, definitions, specifications, and properties. It will deal with reinforcing mesh installation and the application of insulation board. Application methods and techniques for primers and finishes will be presented. Students will use the skills presented to complete an EIFS installation project as part of this course. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
- Compare and evaluate manufactured products.
- Install drainage systems.
- Identify the climatic considerations.
- Utilize prints and detail views to determine EIFS installation.
- Inspect and troubleshoot installation.
- Utilize moisture barriers.
- Identify EIFS applications used in the Drywall/Lathing Industry.
Demonstrate accurate systems applications including substrate preparation to back wrapping, trims and accessories, adhesive and mechanical fastening, mesh types and uses, and aesthetic joints, sealants and foam shapes.

Apply sealant according to project requirements.

Demonstrate proper installation of both types of reinforcing mesh.

**Student Learning Outcomes:**
- Describe design features of exterior insulation finish systems.
- Install an exterior insulation finish system to project specifications.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5

**Total Hours**
45.0

**Freeform Lathing**

**ACA089:**

1.5 Units

This course provides a comprehensive study of the theory and techniques used for the development of freeform lathing projects. This course will enable students to interpret gridline drawings; layout and build lath cage work and apply the appropriate lath(s) to achieve the desired or designed form or structure. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Demonstrate accurate graph and model interpretation, layout grids and form light iron and rebar cages to match
- Transfer design to substrate materials
- Complete a grid layout for project
- Identify and recognize the different tools, materials, methods, furring and framing requirements used in freeform lathing
- Create a design for freeform lath project execution
- Demonstrate safety use of welder and personal protective equipment
- Demonstrate safe cutting, handling and proper lath application
- Evaluate final project and compare to design
- Weld freeform design to secure framework
- Demonstrate basic welding and lath tying techniques
Student Learning Outcomes:
Complete a freeform lathing project.
Complete a plan for student designed freeform lathing project.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Residential Steel Stud Framing
ACA090:

1.5 Units
Provides the related and supplemental instruction required for interior systems apprentices in the new technology of cold-formed light gage steel framing for the residential market. Methods of constructing a structural floor, wall and truss system. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Learn how to use cold-formed light gage steel framing for the residential market, and to construct a structural floor, wall, and truss system.

Student Learning Outcomes:
- Demonstrate competence, proper safety techniques, and teamwork to complete a residential cold-formed light gage steel framing project.
- Demonstrate competence, proper safety techniques, and teamwork to construct a structural floor, wall, or truss system.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Confined Space - Journeyworker
ACA094J:
0.5 - 0.8 Units
This course covers both CAL-OSHA and Federal Occupational Safety and Health Administration (OSHA) regulation for safe access, entry and monitoring for confined space work. Upon successful completion, a student will be issued United Brotherhood of Carpenters (UBC) Confined Space Qualification Card.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes
Course Objectives:
Demonstrate an applied understanding of techniques and methods of scaffolding work practices in confined spaces.

Demonstrate an applied understanding of the techniques for monitoring and entering into confined spaces.

Demonstrate an applied understanding of introductory confined spaces.

Student Learning Outcomes:
Identify the necessary levels of personal protective equipment based on the four routes of entry, presented with a list of questions regarding symbols, hazardous materials and chemicals.

Complete work process in a simulated confined space and demonstrate proper use of two types of respirators.

Units & Hours
Minimum Units:
0.5

Maximum Units
0.5

Total Hours
14.4

Water Treatment Facilities
ACA095:
1.5 Units

This course provides instruction in the detailing, layout and construction of concrete formwork and waterstop used in water treatment facilities. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite

ACA021A - Orientation

AND

Prerequisite
Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Complete and pass written welding tests
Install water stop materials and imbeds
Identify the components and sequence of construction for gang forms used in water treatment applications
Discuss and evaluate the procedures for the safe lifting and placing of gang forms
Design and install radius gang form system
Utilize acquired safety skills in hand and power tool operation and fall protection
Identify the characteristics and functions of various manufactured forms products
Identify terms and characteristics of form systems
Locate formwork elements on prints
Design and install a single and double waler wall system
Install water stop materials and imbeds
Apply mathematical formulas to design form systems and calculate materials accurately

Student Learning Outcomes:
Analyze prints to determine formwork design and material requirements for water treatment formwork.
Apply the correct methods and procedures to construction a water treatment formwork project.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

QuickBooks

ACCT035:

2.0 Units
Preparation of accounting records for businesses using the QuickBooks software in the Windows environment. Topics include customer transactions, vendor transactions, bank reconciliations, reports, company file setup, and customization of QuickBooks.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
2.0

Learning Outcomes
Course Objectives:
Use QuickBooks software to create company files and input basic customer transactions.
Modify QuickBooks software to execute accounts receivable transactions.
Employ QuickBooks software to execute accounts receivable transactions.
Employ QuickBooks software to execute accounts payable transactions.
Use QuickBooks software to calculate and create bank reconciliation.
Employ QuickBooks software to illustrate accounts and create reports on vendors.
Use QuickBooks software to modify existing customers' accounts and create new customer accounts.
Apply the customizing tools to create unique reports and templates for a company.

Student Learning Outcomes:
- Use QuickBooks to set up the accounting system of an organization; enter accounting transactions, and prepare useful accounting reports.
- Apply QuickBooks to case studies, problem solving exercises and analysis.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
36.0

Accounting for Small Business
ACCT100:
3.0 Units

Accounting for Small Business is a beginning course in basic accounting as applied to service or merchandising/retail small businesses. Students will learn basic accounting procedures, preparation of financial statements, banking procedures, and payroll processing. Students will complete web-based weekly assignments based on lectures and text readings. This course is recommended for entrepreneurs, CPA candidates, those seeking professional development, and business students needing an accounting foundation before enrolling in ACCT 101.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

**General Education Plan:**
Local - Plan A
   Area F1: Lifelong Understanding and Self-Development

**Learning Outcomes**

**Course Objectives:**
- Describe the basic financial accounting concepts and principles.
- Explain the psychology behind accounting and ethics and accounting exam anxiety.
- Explore the role of accounting in society.
- Identify the fundamental accounting equation and its components.
- Describe accounting systems for service enterprises.
- Learn basic accounting theory and practice as it relates to service operations.
- Explain the accounting cycle.
- Prepare the income statement, balance sheet and statement of owner’s equity.
- Explain merchandise accounting and prepare financial statements for merchandising firms.
- Prepare subsidiary ledgers and special journals.
- Reconcile bank accounts and cash funds.
- Explain the psychology behind the fraud triangle and preventing fraud.
- Explore the impact of fraud in society.
- Explain payroll accounting and compute employee earnings, deductions, employer taxes.

**Student Learning Outcomes:**
- Apply the accounting equation to transactions throughout the accounting cycle for a service company and a retail business.
- Interpret financial information including the use of journals, ledgers, and worksheets.
- Prepare basic financial statements for proprietorships.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Financial Accounting**

**ACCT101:**
4.0 Units

The study of accounting as an information system, examining why it is important, and how it is used by investors and creditors to make decisions. Coverage includes the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. It also includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics.

**Requisites**
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:

UC Comparable Transfer Courses

Course Identifier (C-ID)
Accounting

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Explain the nature and purpose of generally accepted accounting principles (GAAP)
Explain and apply the components of the conceptual framework for financial accounting and reporting, including the qualitative characteristics of accounting information, the assumptions underlying accounting, the basic principles of financial accounting and
Define and use accounting and business terminology
Explain what a system is and how an accounting system is designed to satisfy the needs of specific businesses; summarize the purpose of a journal and a ledger.
Apply transaction analysis, input transactions into the accounting system, process this input, and prepare and interpret the four basic financial statements.
Distinguish between cash basis and accrual basis accounting and their impact on the financial statements, including the matching principle.
Identify and illustrate how the principles of internal controls are used to manage and control the firm's resources and minimize risk.
Explain the content, form, and purpose of the basic financial statements (including footnotes) and the annual report, and how they satisfy the information needs of investors, creditors, and other users.
Explain the nature of current asset issues including measuring and reporting receivables and bad debts, measuring and reporting inventory and cost of goods sold.
Identify and illustrate issues relating to long-term asset acquisition, use, depreciation, and disposal.
Distinguish between capital and revenue expenditures.
Explain the valuation and reporting of current liabilities, estimated liabilities, and other contingencies.
Identify and illustrate issues relating to long-term liabilities including valuation of debt, issuance, and retirement.
Identify and illustrate issues relating to stockholders' equity including issuance, repurchase of capital stock, and dividends.
Explain the importance of operating, investing and financing activities reported in the Statement of Cash Flows when evaluating solvency and liquidity of the firm.
Interpret company activity, profitability, and liquidity through selection and application of appropriate financial analysis tools.
Identify the ethical implications inherent in financial reporting and be able to apply strategies for addressing them.

Student Learning Outcomes:
Use ratios, common-size and other pertinent analysis and research to determine the financial health of a company, given a set of financial statements for a company.

Record transactions and complete the accounting cycle producing the required financial statements for a company.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
72.0

**Managerial Accounting**

**ACCT102:**

4.0 Units

Study the use and reporting of accounting data for managerial planning, cost control, and decision-making purposes. The course includes broad coverage of concepts, classifications, and behaviors of costs. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, relevant costs, and capital budgeting.

**Requisites**

**Requisites:**

**Prerequisite**

ACCT101 - Financial Accounting

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
4.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**

Accounting

Santa Ana College - Shared Course

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Identify and illustrate the primary activities and informational needs of managers and explain the role of the managerial accountant as a member of the management team; compare and contrast financial and managerial accounting.

Define and illustrate various cost terms and concepts and evaluate their relevancy for different decision-making purposes.

Define relevant costs and benefits, giving proper treatment to sunk costs, opportunity costs, and unit costs; prepare analyses of special decisions - accept or reject a special order; outsource a product or service; add or drop a service or product; and s

Prepare traditional and contribution-margin income statements; define related terms; explain cost-volume-profit analysis, degree of operating leverage and safety margin and employ each as an analytical tool.

Describe the traditional types of product costing systems (including job-order and process), illustrate the flow of costs in each, and prepare related accounting records and reports.

Discuss the impact of technology on the manufacturing environment and its implications for product costs and the development of activity-based costing and management; prepare activity-based cost reports.

Explain the purposes of budgeting; prepare a master budget and its component schedules and relate the budget to planning and control.

Explain the development and use of standard costs, prepare and interpret variance analysis reports and relate them to cost center planning and controlling.

Explain the nature of and need for segment reporting and the relationship with cost, revenue, profit, and investment centers; prepare and analyze related segment reports for each segment of responsibility.

Compare and contrast absorption costing and variable costing, prepare income statements using both methods, and reconcile the resulting net incomes.

Explain the nature of capital expenditure decisions and apply and evaluate various methods used in making these decisions.

**Student Learning Outcomes:**
- Make short and long term management decisions for a company, given external and internal financial information for a company.
- Determine all of the product and period costs as well as the appropriate selling price, given a specific product or service.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units:**
4.0

**Total Hours:**
72.0

**Managerial Cost Accounting**

**ACCT204:**

3.0 Units

Presents the theory of cost behavior, cost accounting, and cost control; the use of accounting information for management planning and decision making; cost systems, budgeting, and financial performance analysis.

**Requisites**

**Requisites:**

**Prerequisite**

[ACCT102 - Managerial Accounting](#)

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**
Course Objectives:
- Learn cost behaviors
- Understand cost behavior, different cost systems, inventory methods, overhead allocation procedures, and cost volume profit analysis
- Complete a job sheet and budget
- Understand basic cost accumulation and analysis strategies, and modern overhead allocation techniques
- Understand budgets and responsibility accounting reporting systems.
- Prepare various budgets
- Understand higher level budgeting, analysis, and cost allocation methods
- Prepare a production report
- Understand process costing, standard cost, and various other cost control techniques

Student Learning Outcomes:
- Cost a product and understand which costs are relevant.
- Demonstrate management uses of accounting information.

Units & Hours
Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 54.0

Intermediate Accounting I
ACCT205:

3.0 Units

An intermediate study of accounting theory and the conceptual framework; preparation of income statements and comprehensive income, balance sheets and statements of cash flows. Coverage includes present value and accounting concepts related to the asset side of the balance sheet.

Requisites
Requisites:

Prerequisite

ACCT102 - Managerial Accounting

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours: 3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Explain the nature and purpose of generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS) and how they are used to measure and value financial transactions and how they affect the four basic financial statements.

Illustrate how the underlying measurement concepts and valuation differ under generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS).

Explain the content, form, and purpose of the basic financial statements (including footnotes) and the annual report as well as prepare the financial statements in accordance with GAAP.

Prepare the Statement of Cash Flows and explain the importance of operating, investing and financing activities reported.

Distinguish between cash basis and accrual basis accounting and their impact on the financial statements, including the revenue recognition and matching principles.

Explain the nature of current assets and related issues, including the measurement and reporting of cash and cash equivalents, short-term investments, receivables and bad debts, and inventory and cost of goods sold.

Understand the concept of present value and its effect on accounting transactions.

Explain the nature of current assets and related issues, including the measurement and reporting of cash and cash equivalents, short-term investments, receivables and bad debts, and inventory and cost of goods sold.

Explain the nature and valuation and other issues relating to long-term asset acquisition, use, cost allocation, disposal and interest capitalization.

Distinguish between capital and revenue expenditures.

Identify the ethical implications inherent in financial reporting.

Student Learning Outcomes:
- Prepare and analyze financial statements using GAAP.
- Demonstrate how GAAP is applied to value, record and report assets.
- Demonstrate their understanding of present value concepts.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Improving Oral Expression and Pronunciation
ACE091:

2.0 Units

Students will improve pronunciation of individual sounds, word stress, intonation and connected speech through dialogues, conversations, and presentations. Emphasis is on clarity of expression through control of word endings, thought group patterns, and targeted sounds. Former Title: ACE N81, Improving Pronunciation (Fall 2019)

Requisites:

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
Learning Outcomes

Course Objectives:
Understand and use the jargon of pronunciation: vowels, consonants, consonant blends, word stress, syllables, intonation, points of articulation, IPA and/or dictionary symbols.

Receive individualized pronunciation assignments using lab software programs and online videos as needed.

Understand the points of articulation for consonant sounds and how vowel sounds are produced.

Identify and correctly stress syllables in words and thought groups.

Identify, understand, and prevent epenthesis

Improve control over commonly misspelled words.

Understand how vowel sounds correlate to spelling patterns.

Improve comprehensibility in English by practicing linking strategies and connected speech.

Identify linking needs and pauses between words, within phrases and at clause intersections.

Functional intonation for statements, questions, commands (rising, falling)

Increase comprehensibility within dialogues, conversations, and presentations.

Use appropriate nonverbal communication and follow-up comments or questions to demonstrate engagement in active listening.

Student Learning Outcomes:
- Demonstrate improved fluency and comprehensibility in various discourse activities.
- Demonstrate achievement of their targeted pronunciation goals.

Units & Hours

Minimum Units:
2.0

Maximum Units
2.0

Total Hours
36.0

Academic Listening and Speaking 1
ACE094:

2.0 Units

Intermediate level students expand their speaking skills in English. They will practice different types of speaking tasks such as expressing and supporting opinions, restating what others have said, and paraphrasing what they have heard or read. This course also strengthens students’ vocabulary and critical thinking skills. Former Title: ACE 053, Expanding Academic Speaking Skills (Fall 2019)

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
2.0
Learning Outcomes

Course Objectives:
Explain the main points in the course syllabus.

Practice specific listening involvement skills such as offering positive reinforcement to a speaker, asking questions, and taking notes

Learn note-taking strategies to help with rephrasing

Practice various casual speech formats and types of assignments to alleviate speech anxiety (e.g., introducing oneself and a classmate, telling a story, describing a souvenir or memory, explaining a memorable experience, using speech preparation worksheet)

Identify key words and transitions that indicate major points in a speech

Use key words and transitions correctly in speech activities

Use set phrases to express opinions during discussions

Identify and produce correct stress and intonation patterns for sentences, questions and exclamations

Learn to read aloud with expressive intonation and correct division of thought groups

Understand word linkages

Strengthen ability to accurately produce word endings when reading aloud and speaking extemporaneously (specifically, -s and -ed forms)

Increase ability to effectively complete a presentation within a time limit

Create a detailed outline and note cards to use during a presentation

Use transitional expressions effectively so that listeners can follow the speaker’s organization and thoughts easily

Determine the most effective use of visual aids during a presentation

Create a persuasive speech which aims at changing a belief, opinion or behavior

Follow the typical organizational plan for a persuasive speech

Evaluate the strengths and weaknesses of classmates’ speeches

Student Learning Outcomes:

Produce clear and accurate paraphrases of spoken discourse at an intermediate level.

Present comprehensible information in a short presentation with fluency that is reasonable for an intermediate level.

Units & Hours

Minimum Units:
2.0

Maximum Units
2.0

Total Hours
36.0

Academic Listening and Speaking 2
ACE095:

2.0 Units

High-intermediate speaking and listening skills course. Students will increase their ability to understand and summarize longer lectures, engage in group discussions and do effective presentations. Lab and online research may be required for some assignments. Former Title: ACE 093, Refining Academic Speaking Skills (Fall 2019)

Requisites
Requisites:
Advisory

ACE102 - Refining Academic Writing and Reading

Concurrent enrollment in ACE 102 is strongly advised. ACE 102 will be ACE 106 in Fall 2020.

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
2.0

Learning Outcomes

Course Objectives:
Recognize areas of pronunciation which require focus and practice

Navigate lab pronunciation programs in order to focus on the recommended areas of need

Practice the aspects of pronunciation recommended by instructor

Vocabulary Development Practice using different forms of a word correctly in sentences and phrases (e.g., succeed, success, successful, successfully) as well as collocations

Use a dictionary and thesaurus to expand vocabulary and identify word forms

Identify idiomatic and slang expressions and convert these to more academically appropriate choices

Use with increasing ease various transition expressions in speech

Improve ability to use new vocabulary and different word forms in speech

Expand skills in summarizing by using their notes to express opinions and ideas

Develop ability to paraphrase by using vocabulary choices and grammar/sentence variety

Identify where to expect main ideas to appear vs. supporting details

Develop more accuracy in note-taking and strengthen ability to rephrase original passages from notes

Learn and practice attentive listening and questioning strategies in group discussions

Plan, prepare, organize and delegate presentation tasks

Practice participating equally in group activities

Give successful and understandable presentations to small groups and to the class

Study vocabulary effectively

Student Learning Outcomes:

Demonstrate listening comprehension skills at a high intermediate level.

Demonstrate speaking skills which include control of English pronunciation, grammar and vocabulary.

Units & Hours

Minimum Units:
2.0

Maximum Units
2.0

Total Hours
36.0
Academic Reading and Writing 1  
ACE104:  

4.5 Units

Intermediate students expand their skills in grammar and in writing paragraphs. This course also strengthens students’ vocabulary, reading and critical thinking skills. Laboratory is required and includes class assignments, individualized work and writing conferences with the instructor. Lab is part of the scheduled class meeting hours. Former Title: ACE 052, Expanding Academic Writing and Reading (Fall 2019)

Requisites
Requisites:
Prerequisite

Qualifying profile from placement process

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.5

General Education Plan:
Learning Outcomes
Course Objectives:
Analyze reading passages in a consistent way to differentiate between controlling ideas and supporting details.
Support opinions with logical reasons.
Understand charts, graphs and outlines and communicate that information in speech and in writing.
Develop strategies to paraphrase and summarize reading passages.
Develop skills in using a dictionary and thesaurus, as well as grammar-based vocabulary development through word forms.

GRAMMAR:
Demonstrate control of grammar concepts studied in class.
Understand and track their specific grammar problems so that they can focus on improving them by completing individualized lab tasks and rewriting sentences and paragraphs. LAB WRITING CONFERENCES:
 Demonstrate that they can complete a writing task at each lab session.
Analyze their writing with instructor input, noting ways to improve writing skills and grammar control.

Demonstrate improved control of grammar concepts by completing exercises in various ESL software programs.

Student Learning Outcomes:
Demonstrate reading comprehension skills at an intermediate level.
Demonstrate increasing fluency in academic writing which includes control of basic English grammar, mechanics, sentence combining strategies and vocabulary typical at an intermediate level.

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5
Total Hours
108.0

Academic Reading and Writing 2
ACE106:

4.5 Units

Students receive intensive practice with strategies to improve their writing skills at the paragraph and short essay level. They also refine their grammar, vocabulary, reading and critical thinking skills. Lab is required and is part of the scheduled class meeting hours. Former Title: ACE 102, Refining Academic Writing and Reading (Fall 2019)

Requisites
Requisites:
Prerequisite
ACE052 - Expanding Academic Writing and Reading

ACE 052 will be ACE 104 in Fall 2020
AND

Advisory
ACE093 - Refining Academic Speaking Skills

Concurrent enrollment. ACE 093 will be ACE 095 in Fall 2020.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.5

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Analyze reading passages in a consistent way to find controlling ideas and basic support

Use instructor input to improve writing skills

Develop paraphrase and summary strategies

Connect information from different readings and respond to others’ ideas with well-reasoned comments

Correctly use basic punctuation patterns

Practice and improve control of verb tenses and forms, differentiating between active and passive ideas and controlling major verb tenses

Create strong topic sentences and develop them effectively

Avoid redundancy

Control basic grammar

Improve control of sentence combining and punctuation

Develop ability to use various transitional devices
Expand ability to use active/passive correctly
Use more advanced punctuation and sentence variety
Control verb environments for verb tense and forms
Strengthen their ability to stay focused on a topic and develop it effectively
Learn to check for pronoun consistency and avoid common pronoun reference problems with “it,” “this” and “that”
Develop conclusions which connect back to their introductions
Make inferences based on textual information
Differentiate between real and unreal and past vs. present verb forms
Control a sustained hypothetical, such as a regret, wishing for a different result, and imagining future possibilities
Use various conjunctions that indicate contrast and concession correctly
Create contrast paragraphs with solid development and clear transitioning
Expand sentence combining skills with appropriate choices for description and definition at both sentence and paragraph level
Strengthen ability to identify in their own writing places where they should use adjective clauses
Learn and use correctly the structures of direct and indirect speech as well as expressions that enable writers to give credit to others such as “according to”
Use quotes effectively and punctuate them correctly
Blend direct and indirect speech in paragraphs and short essays
Practice and improve control of structures of comparison and contrast as well as parallelism
Complete final exams in each of the course components

GRAMMAR:
Complete grammar exercises using lab programs and demonstrate increasing control of grammar concepts presented in class
Complete specific grammar activities identified and assigned by the instructor

WRITING CONFERENCES:
Take responsibility for coming to each conference prepared with a writing assignment to review with the instructor
Understand and express the notions of wish/hope and hypothetical ideas with the structures of the unreal conditionals, focusing on verb forms:

Student Learning Outcomes:
Demonstrate the ability to summarize reading passages accurately, using correct source information, word forms and targeted vocabulary.
Express a main idea, develop it effectively and control grammar and mechanics.

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
108.0

Introduction to Academic Composition
ACE116:
4.5 Units
Advanced students are introduced to common academic writing tasks such as comparing/contrasting and supporting an argument. Students also produce a short research paper. The course emphasizes control of grammar, punctuation and mechanics within student papers. Students will also strengthen critical reading and vocabulary skills. Laboratory is required and includes class assignments, individualized work and writing conferences with the instructor. Lab is part of the scheduled class meeting hours.

**Requisites**

**Requisites:**

**Prerequisite**

ACE102 - Refining Academic Writing and Reading

ACE 102 will become ACE 106 in Fall 2020

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.5

**General Education Plan:**

**UC Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**

Learn strategies to analyze readings and increase comprehension

Demonstrate responsibility by preparing for instructor conference sessions with specific questions related to the essay

Use outlines and notes to create accurate summaries and paraphrases of reading selections

Expand vocabulary with a thesaurus and collocations

Use vocabulary and grammar strategies to manipulate word forms as a paraphrasing strategy

Identify the main structural features common to academic and nonfiction writing—main ideas, patterns of organization and development, and transitioning strategies

Develop clear, effective thesis statements

Practice with different types of introductions and hooks

Develop outlines of readings

Identify and correct main sentence-level errors which recur in their papers

Practice various sentence combining techniques to develop a broader range of sentence patterns used in their own writing

Use library resources to create a short research paper in correct MLA format.

Create essays with effective introductions, clear thesis statements, strong development, and conclusions that relate to the introduction

Demonstrate improvement in the areas targeted with their instructor at the start of the semester

Practice and complete grammar review activities applicable to the entire class as well as specific exercises selected by the instructor for individual practice

**Student Learning Outcomes:**

Demonstrate control of targeted concepts in grammar, punctuation and mechanics.

Create short essays which develop a main idea through relevant, effective and sufficient support.

**Units & Hours**

**Minimum Units:**

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32b9a6eb18
4.5 Maximum Units

4.5 Total Hours

108.0 Orientation

ACPD021:

1.5 Units

This course examines fundamental trade skills, employee-employer roles and responsibilities, and safe work practices needed for entry level performance for pile drivers in the construction industry. While an emphasis will be placed on attaining standard industry safety credentials, the course is designed to provide students with practical experience using construction terminology, math operations and basic measuring techniques, and tool identification and use in preparation for the next level of training. Safety will cover OSHA training for jobsite hazard recognition, accident prevention, and safe tool and equipment operation. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:

- Identify trade terms, industry roles and responsibilities, and basic skills
- Identify and discuss trade applications, quality and productivity practices
- Identify the Focus Four safety hazards and accident prevention practices
- Define 10 construction safety regulations to complete OSHA 10 Hour Safety Certification
- Explain the importance of proper interpersonal communication and respectful conduct
- Identify the types and benefits of sustainable/green building practices in the workplace
- Calculate measurements and accurately perform basic math functions for assigned tasks
- Match safety hazards and precautions for tools, equipment and PPE using manufacturers’ guidelines
- Select and safely use hand and power tools for assigned tasks

Student Learning Outcomes:

- Evaluate potential hazards and cite the appropriate accident prevention measures.
- Identify and perform the proper treatment for various sudden illnesses and injuries, given a set of emergency situations.
- Apply basic math operations to perform typical construction calculations.

Units & Hours

Safety and Health Certifications

ACPD022:

2.0 Units
This course is designed to increase the pile driver students’ awareness of construction hazard communication systems, proper tool/equipment operation, and will emphasize the importance of the individual responsibility for workplace safety and health. The students will discern that the construction environment has a higher potential for injuries and accidents than most workplaces and therefore requires the ability to assess danger, employ prevention measures, and take appropriate action in emergencies. This training will expose students to various health emergency scenarios, and provide students with ample opportunities to practice the appropriate CPR and first aid response. Because many injuries are the result of improper tool and equipment use, students will be trained on how to correctly select, inspect, use, and operate fall protection systems, tools, and powered lift truck equipment. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

ACPD021 - Orientation

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:

Identify placards, symbols, labels and documents used to ascertain hazards

Assess the information contained on chemical labeling

Locate safety and health information using safety data sheets

Identify tool parts, operation, and accessories

Demonstrate the ability to select and use the appropriate tools for the pile driver tasks assigned

Identify fall protection methods and applicable OSHA regulations

Match safety hazards with appropriate fall protection equipment

Demonstrate the ability to select and use the appropriate fall prevention and personal fall arrest systems

Identify lift truck components and applicable OSHA regulations

Match safety hazards and precautions for lift truck equipment

Conduct lift truck safety inspections

Demonstrate the safe operation of the selected lift truck

Meet UBC criteria for the proper operation of the selected lift truck

Discuss health emergencies and identify first aid and CPR techniques

Perform emergency response techniques and pass American Red Cross first aid, CPR and AED training tests

Student Learning Outcomes:

Apply the appropriate first aid and CPR/AED techniques for specific emergencies.

Identify the placards, symbols, and documents used to communicate safety precautions for physical and chemical hazards in the workplace.

Identify and demonstrate safe operating procedures for powered industrial lift truck equipment.

Demonstrate the proper installation and use of fall protection systems.

Units & Hours

Tool/Equipment Applications

ACPD023:

1.5 Units
This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and aerial lift safety and operating procedures will also be covered. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

**Requisites**

**Prerequisite**

ACPD021 - Orientation

AND

**Prerequisite**

ACPD022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Identify scaffold components and applicable Occupational Safety and Health Administration (OSHA) regulations

Match safety hazards and precautions for scaffold erection procedures

Conduct scaffold safety and equipment inspections

Properly stage, assemble, and disassemble selected scaffolding

Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly

Identify boom/scissor aerial lift components and applicable OSHA regulations

Match safety hazards and precautions for aerial lift equipment operation

Conduct aerial lift safety inspections

Demonstrate the safe operation of two types of aerial lifts

Meet UBC criteria for the proper operation of aerial lift equipment

Select appropriate mathematic operations to measure and calculate materials

Use the mathematic techniques presented to lay out materials for wall construction

Select appropriate hand and power tools/equipment for assigned tasks

Utilize proper fastener placement and driving techniques

Apply the appropriate tool/equipment manipulative techniques to complete wall construction tasks assigned

**Student Learning Outcomes:**

Identify and demonstrate safe operating procedures for aerial lift truck equipment.

Demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.

Assess construction tasks to determine the appropriate tools, equipment and construction methods.

**Units & Hours**

**Piles and Hammers A**

ACPD024A :

1.5 Units
This course provides an overview of the types of piles used in construction as load-bearing support for commercial buildings, bridges, and piers when ground stratum is insufficient in strength. The rigging methods, driving techniques, and pile hammers utilized in the installation process will be presented. Students will use the proper procedures to install a lap-joint wood sheet pile system during this part of the training. Open Entry/Open Exit.

**Requisites**

**Prerequisites:**
- ACPD021 - Orientation
- AND
- ACPD022 - Safety and Health Certifications

**Transferability & General Education Options**

Transferable:
Not transferable

**Learning Outcomes**

**Course Objectives:**
- Identify terms and definitions for piles and hammers used industry wide
- Describe the types of piles and their applications
- Classify types of pile driving hammers
- State the advantages and disadvantages of sheet pile materials
- Correctly label fabricated interlocking connectors used to shape piles
- Calculate concrete volume for selected types of cast-in-place piles
- Identify pile materials and applications
- Describe the characteristics of various types of pile
- List the advantages and disadvantages of selected types of pile
- Describe the process of wood grading
- Explain precautions for handling treated wood
- Identify tools and equipment, materials, personal protective equipment
- Use the proper procedures and construction sequence for lap-joint wood sheet pile installation
- Describe the two major types of cranes
- List six types of tower cranes
- Discuss factors that effect boom and crane selection
- Identify the parts and basic operation of crane used with pile driving equipment
- Use the proper construction and placement procedures to drive piles to industry standards

**Student Learning Outcomes:**
- Identify the purpose and types of piles used in construction.
- Demonstrate proper construction and installation of lap-joint wood pile.
- Demonstrate the proper use of rigging and pile driving equipment.

**Units & Hours**

Piles and Hammers B
ACPD024B:

1.5 Units

This course provides an overview of the types of piles used in construction as load-bearing support for commercial buildings, bridges, and piers when ground stratum is insufficient in strength. The rigging methods, driving techniques, and pile hammers utilized in the installation process will be presented. Students will use the proper procedures to install a tongue and groove wood sheet pile system during this part of the training. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

ACPD021 - Orientation

AND

Prerequisite

ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:

Identify terms and definitions for piles and hammers used industry wide

Describe the types of piles and their applications

Classify types of pile driving rigs

State the advantages and disadvantages of sheet pile materials

Correctly label cast in place materials to shape piles

Calculate concrete volume for selected types of cast-in-place piles

Identify pile materials and applications

Describe the characteristics of various types of pile

List the advantages and disadvantages of selected types of pile

Describe two methods of construction

Explain precautions for handling treated wood

Identify tools and equipment, materials, personal protective equipment

Use the proper procedures and construction sequence for tongue and groove wood sheet pile installation

Discuss the two major types of pile driving rigs

Explain the advantages and disadvantages of crawler and mobile rigs

Describe pile driving accessories used with various types of cranes

Identify the parts and basic operation of pile driving equipment

Use the proper construction and placement procedures to drive piles to industry standards

Student Learning Outcomes:

Identify the purpose and types of piles used in construction.

Demonstrate proper construction and installation of tongue-groove wood sheet pile.

Demonstrate the proper use of rigging and pile driving equipment.
Units & Hours
Falsework A
ACPD026A :

1.5 Units

As part one of two courses, training will focus on bridge falsework construction. The techniques for bent assemblies, base sub-assemblies, deck soffits, and hardware installation will be presented. The procedures presented will include timber construction methods and alignment techniques to install and level base and bent assemblies. Students will develop skills using sand jacks, transit levels, and rigging procedures to set corbels, beams, and posts. Related safety, math, and print reading will be covered in the training. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
ACPD021 - Orientation

AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify and define the nomenclature for falsework components
List materials used in the construction of box girder bridge falsework
Describe falsework methods and sequence of construction
Explain how loads are transferred to falsework components
Identify rigging hardware and crane equipment operating procedures
Interpret prints to determine base dimensions and falsework configuration
Accurately layout sub-assembly to project specifications
Demonstrate the safe use of power tools and personal protective equipment
Assembly sill beam and posts to print specifications
Measure, cut and attach bent bracing to industry standards
Correctly drill and insert coil bolts
Demonstrate proper use of tools and leveling equipment
Employ best practices for alignment of bents

Student Learning Outcomes:
Identify falsework construction methods and materials.
Install and align falsework assemblies to print specification.

Units & Hours
Falsework B
ACPD026B:

1.5 Units

As part two, this course continues the focus on box girder bridge falsework construction. The techniques for bent assemblies, base sub-assemblies, deck soffits, and hardware installation will be reviewed. During this part of the training, procedures will include setting and installation of deck soffit assemblies. Students will develop skills using layout and rigging procedures to set and secure cap beams, stringers and joists support. Related safety, math, and print reading will be covered in the training. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
ACPD021 - Orientation
AND
Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Review overall falsework base, bent and bracing construction procedures
Explain the importance of construction codes and inspections
Identify deck soffit falsework sequence of construction
Review crane and rigging safe practices
Interpret prints to determine deck soffit arrangement
Identify deck soffit sequence of construction
Complete falsework installation to industry standards
Verify elevation and alignment
Attach deck sheathing using proper procedures
Discuss examples of falsework failures and causes
Utilize inspection criteria to evaluate falsework installation
Report defects and employ appropriate corrective measures

Student Learning Outcomes:
Identify falsework deck soffit construction sequence and materials.
Complete box girder bridge falsework installation to industry standards.

Units & Hours

Abutment A

ACPD027A:

1.5 Units
This course provides students with the skills needed to layout abutment formwork and construction of footings to industry standards. A close look at assembly components will describe key terms and abutment anatomy. The importance of earth strata in the construction of footings, piers, and retaining walls will be covered. The techniques for laying out keyway centerline and footing formwork construction will be the main focus during this part of abutment training. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite

ACPD021 - Orientation

AND

Prerequisite

ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:
Describe the materials and components used in abutment construction
Identify tools and equipment, materials, personal protective equipment
Read and recognize elements represented on project drawings
Convert and calculate measurements in decimal and fractional units
Complete layout of abutment keyway centerline and footings
Accurately measure and cut materials for abutment footings
Identify tools and equipment, materials, personal protective equipment
Use the proper procedures and sequence of construction for footings
Demonstrate ability to correctly level and align footing formwork
Install bracing and supports to industry standards

Student Learning Outcomes:

Identify the components and construction sequence of abutment structures.
Demonstrate layout and construction of abutment footings.

Units & Hours

Abutment B

ACPD027B:

1.5 Units

This course provides students with the skills needed to layout, and to construct abutment wall panel formwork to industry standards. A close look at assembly components will describe key terms and abutment anatomy. The importance of earth strata in the construction of footings, piers, and retaining walls will be covered. The techniques for layout, and keyway, wing/headwall panel formwork construction will be the main focus during this part of abutment training. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite

ACPD021 - Orientation
AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Describe the materials and components used in abutment wall panel formwork
Identify tools and equipment, materials, personal protective equipment
Read and recognize abutment wall elements represented on project drawings
Convert and calculate measurements in decimal and fractional units
Complete layout of abutment keyway and wing/head walls
Accurately measure and cut materials for abutment formwork panels
Identify tools and equipment, materials, personal protective equipment
Accurately measure and cut materials for panels
Demonstrate ability to correctly install and fasten waler and strongbacks
Place, connect and securely attach panels in proper position
Apply chamfer and drip grooves according to specifications

Student Learning Outcomes:
- Identify the components and construction sequence of abutment wall panel structures.
- Demonstrate layout and construction of abutment formwork.

Units & Hours

Bridge and Deck Forms A
ACPD028A:

1.5 Units

This course provides students with an overview of basic bridge and deck construction. Descriptions for exterior and interior girders; edge forms; bulkheads; hinge and deck forms will be presented. Bridge and deck formwork projects will include bridge panel construction, assembly, and hardware attachment tasks. Related safety, math, and print reading will be covered in the training. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite
ACPD021 - Orientation

AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable
Learning Outcomes

Course Objectives:
- Identify and define the nomenclature of bridge deck forms
- List materials used in the construction of concrete bridge formwork
- Describe bridge form construction methods
- Interpret prints to locate Bridge forms and determine dimensions
- Calculate concrete volume for bridge forms
- Accurately layout bridge formwork to project specifications
- Cut Top and bottom plate
- Cut studs to length
- Assemble and sheet with plywood
- Describe trim types and purpose
- Measure, cut and attach trims to print specifications
- Demonstrate safe use of tools and personal protective equipment

Student Learning Outcomes:
- Utilize the proper bridge and deck installation form layout procedures.
- Assemble bridge formwork panels to print specification.

Units & Hours

Bridge and Deck Forms B
ACPD028B:

1.5 Units

This course provides students with an overview of basic bridge and deck construction. Descriptions for exterior and interior girders; edge forms; bulkheads; hinge and deck forms will be presented. Bridge and deck formwork projects will include bridge panel construction, assembly, and hardware attachment tasks. Related safety, math, and print reading will be covered in the training. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite
ACPD021 - Orientation

AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
- Identify and define the nomenclature of bridge deck forms
List materials used in the construction of concrete bridge formwork

Describe bridge form construction methods

Interpret prints to locate deck forms and determine dimensions

Calculate concrete volume for deck forms

Accurately layout deck formwork to project specifications

Install panel formwork using proper installation sequence

Correctly install and secure form hardware

Demonstrate safe use of tools and personal protective equipment

Correctly install and secure falsework and bracing

Measure, cut and assemble deck formwork using proper installation sequence

Demonstrate safe use of tools and personal protective equipment

**Student Learning Outcomes:**

- Utilize the proper bridge and deck installation sequence of construction.
- Construct a bridge and deck project to print specification.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units:**

1.5

**Total Hours**

45.0

**Structural Welding-AWS A**

**ACPD029A:**

1.5 Units

This course is designed to be compliant with the American Welding Society (AWS) D1.1 code requirements and provide workers with industry-recognized structural welding credentials. A careful examination of the applicable codes will include terminology, shielded metal arc welding processes (SMAW), equipment and safety requirement, electrode identification and applications, welding positions, and deposits. Practical experience will include symbol identification, print interpretation, code citation, safe equipment set-up and operation, and recognition/remediation of welding flaws. This course will focus on the written examination and production of practical test plates required for AWS D1.1 certification. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

**ACPD021 - Orientation**

**AND**

**Prerequisite**

**ACPD022 - Safety and Health Certifications**

**Transferability & General Education Options**

**Transferable:**

Not transferable
Learning Outcomes

Course Objectives:
- Identify and explain the requirements needed to successfully obtain an AWS Certification
- Discuss components of safe welding practices
- Demonstrate proper use of personal protective equipment (PPE)
- Discuss shielded metal arc welding (SMAW) methods and equipment used throughout the industry
- Demonstrate proper setup and adjustment for welding equipment
- Identify the proper electrode selection, position and movement to form specific weldments
- Discuss the important role current and polarity play in welding process and the impact on weld types
- Apply proper techniques for selected SMAW welding assignments
- Utilize safety practices and procedures; including proper PPE
- Evaluate performance and complete written tests

Student Learning Outcomes:
- Demonstrate correct shielded metal arc welding (SMAW) procedures and observe safe welding practices.
- Perform fillet, butt and vertical fillet welds to meet certification criteria.

Units & Hours

Structural Welding-AWS B
ACPD029B:

1.5 Units

This course provides practical experience for structural welding skills used in commercial and industrial construction. Instruction will include a review of welding terminology, welding processes, welding equipment, and safety requirements. Key discussions will be used to identify electrode characteristics and metal inert gas/tungsten inert gas (MIG/TIG) welding applications. Practical experience will include safety procedures, proper equipment set-up and operation, electrode selection, fillet and groove weld formation in three positions, and recognition/remediation of welding flaws. This course will focus on developing the manipulative ability required for producing test plates acceptable for AWS D1.1 certification. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
ACPD021 - Orientation

AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
- Identify and describe four welding methods associated with AWS Certifications
Describe the proper use of applicable welding codes and print symbols

Discuss components of safe welding practices

Demonstrate proper use of personal protective equipment

Discuss, MIG, TIG welding methods and equipment used throughout the industry

Demonstrate proper setup and adjustment for MIG and TIG welding equipment

Identify the proper electrode selection, position and movement for forming various weldments (welding Symbols)

Discuss the differences each process has on the productivity and skill level required

Apply proper techniques to selected TIG/MIG welding assignments

Utilize safety practices and procedures including proper personal protective equipment (PPE)

Evaluate performance and complete written tests

Student Learning Outcomes:

- Identify and describe four different welding processes.
- Identify standard welding symbols and form corresponding weldments.

Units & Hours

Minimum Units:

1.5

Maximum Units:

1.5

Total Hours:

45.0

Print Reading

ACPD030:

1.5 - 2.0 Units

This course introduces print reading skills as a basic communication tool of the trades. The material covered will focus on developing the students' ability to interpret two-dimensional views in such a way to convey the shape and characteristics of construction elements, and provide an overview of the scope of the project. Students will be able to recognize standard drawing methods, pictorial views, and how to read visual and verbal communication cues. Students will develop skills through a series of exercises including identifying parts of drawings, locating the building, pier, and heavy highway features, calculating dimensions, and using views to determine construction methods. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

ACPD021 - Orientation

AND

Prerequisite

ACPD022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Define terms and categorize print according to specific characteristics for commercial and residential applications
Identify drawing methods used to create prints
Label the standard views used in orthographic projection
Describe and use conventional lines, symbols and dimensioning methods
State how beginning and ending measuring points are indicated
Determine calculated dimensions
Match views to identify design scope, components and layout arrangement
Translate construction information using conventional lines and symbols
Determine beginning and ending measuring points and accurately calculate dimensions for project plans
Practice sketching construction elements using standard views
Interpret project plan views to identify construction elements and layout details
Complete a detailed material list from project plans (foundation/framing/finish)
Practice using plan/elevation views to determine construction elements and layout arrangement
Complete a detailed material list from print specifications
Use plans to accurately establish construction layout (footings/pier/bridge)

Student Learning Outcomes:
Apply the principles of orthographic project to visualize three dimensional images from two dimensional graphic representations.
Interpret prints to determine building, pier and heavy highway construction elements, size and arrangement.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Welding Fabrication A
ACP031A :
1.5 Units

This course provides an introduction to fabrication skills using oxygen/acetylene torch and welding equipment. A review of torch cutting principles will cover parts identification, gas characteristics, torch accessories and tips, safe operating and inspection criteria, and manufacturer’s guidelines for use and care. Instruction will include inspection, torch set-up, criteria for interchanging of cutting tips and attachments, and identification of applicable symbols and codes. An emphasis will be placed on interpreting fabrication drawings, cutting stock materials, and torch heating and welding of parts. The importance of fire and shop safety, reading and monitoring of gages, and the importance of following project instructions will be stressed during cutting/welding fabrication exercises. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
ACPD021 - Orientation

AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify terms, regulations, and welding equipment components
Discuss safety practices/personal protective equipment (PPE), and operating procedures for arc welding
Recognize fabrication symbols on prints
Discuss and evaluate oxy-acetylene welding methods, characteristics, equipment use and storage
Demonstrate proper setup and adjustment for torch cutting equipment; utilize proper techniques to complete cutting and burning assignments
Demonstrate proper setup and adjustment for torch welding equipment; utilize proper techniques to complete torch welding assignments

Student Learning Outcomes:
Demonstrate proper procedures to safely operate torch and welding equipment
Fabricate basic parts using torch cutting/welding techniques

Units & Hours
Welding Fabrication B
ACPD031B:

1.5 Units

This course provides an introduction to fabrication skills using oxygen/acetylene torch and arc welding equipment. A review of arc welding principles will cover equipment parts identification, gas characteristics, arc welding accessories, and electrodes, safe operating and inspection criteria, and manufacturer’s guidelines for use and care of the machinery. Instruction will include inspection, torch set-up, criteria for welding machine settings, applications for electrodes use, and identification of applicable symbols and codes. An emphasis will be placed on interpreting fabrication drawings, cutting stock materials, and torch heating and welding of parts. The importance of fire and shop safety, reading and monitoring of equipment gages and settings, and following project instructions will be stressed during welding fabrication exercises. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
ACPD021 - Orientation

AND

Prerequisite
ACPD022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Identify terms, regulations, and welding equipment components
Discuss safety practices/personal protective equipment (PPE), and operating procedures for arc welding
Recognize fabrication symbols on prints
Discuss and evaluate shielded metal arc welding methods, characteristics, equipment use and storage
Demonstrate proper setup and adjustment for torch cutting equipment; utilize proper techniques to complete cutting and burning assignments
Demonstrate ability to form joints using SMA procedures
Demonstrate proper setup and adjustment for torch welding equipment
Utilize proper techniques to complete torch and arc welding assignments

Student Learning Outcomes:
Demonstrate proper procedures to safely operate arc welding equipment.
Fabricate basic parts using arc welding techniques.

Units & Hours

Tool/Equipment Applications

ACPL023:

1.5 Units

This course promotes hand/power tool and equipment skill development for various interior systems construction applications. Aerial lift safety and operating procedures, and scaffold building will also be covered. Upon successful completion, students will be issued the United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite
ACA071A - Orientation
AND

Prerequisite
ACA071B - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Identify scaffold components and applicable Occupational Safety and Health Administration (OSHA) regulations
Match safety hazards and precautions for scaffold erection procedures
Conduct scaffold safety and equipment inspections
Properly stage, assemble, and disassemble selected scaffolding
Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly
Identify boom/scissor aerial lift components and applicable OSHA regulations
Match safety hazards and precautions for aerial lift equipment operation
Conduct aerial lift safety inspections
Demonstrate the safe operation of two types of aerial lifts
Meet UBC criteria for the proper operation of aerial lift equipment
Select appropriate mathematical operations to measure and calculate materials
Practice using the mathematic techniques presented to complete layout of materials
Select appropriate hand and power tools/equipment for assigned interior systems tasks
Utilize proper fastener placement and driving techniques
Apply the appropriate tool/equipment manipulative techniques to complete interior systems construction tasks assigned

Student Learning Outcomes:
- Identify and demonstrate safe operating procedures for aerial lift truck equipment.
- Demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.
- Assess interior systems construction tasks to determine the appropriate tools, equipment and construction methods to apply.

Units & Hours
Basic Plastering
ACPL025:

1.5 Units

This course covers common terms, safety procedures, building codes, and basic plastering production practices. Students will compare and use lath and plastering products for installation projects. Finish levels and hand tool manipulation will be covered with an emphasis on proper hawk and trowel techniques. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify terminology and applicable building codes
Prepare surfaces and mix material to the appropriate consistency
Uniformly apply plaster coats establishing true planes
Follow the procedures used for all plaster coats
Use basic hand tools and equipment safely
List workplace safety considerations and site specific hazards
Compare plastering finishes to other types of construction finishes
Work effectively off the heel and toe of a trowel

Student Learning Outcomes:
- Compare and contrast various types of plastering methods used in the construction industry.
- Complete a basic plastering project to industry standards.
Units & Hours
Exterior Plastering
ACPL026:

1.5 Units

This course is designed to provide the students with the methods, procedures, and practices used in Exterior Plastering. Special attention will be given to Portland Cement Plaster. Mixing and proportions, curing rates, and quality workmanship will be included. Students will enhance their plastering application and tool manipulation skills with guided practice in the scratch coat, brown coat, and a variety of finish coats. Training will conclude with inspection criteria for evaluating coat levels. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Discuss terms, characteristics, tools and types of material
Identify various mixes and proportions of cement, sand, lime and water
Measure project area and calculate material needs
List three-coat work procedures and precautions
Use proper techniques to uniformly coat scratch, brown and finish levels
Properly moist cure coats to industry standards
Prepare surfaces and mix material to the appropriate consistency
Demonstrate ability to complete surface finishing to project specifications

Student Learning Outcomes:
Correctly mix each coat of an exterior plastering project.
Properly apply exterior plastering coats to project specifications.

Units & Hours
Dot and Screed Techniques
ACPL027:

1.0 Units

This course is designed to teach the apprentice the importance of plumb and square projects. The students will use 3-4-5 or center line methods to square the project, establish control lines and wall finish lines. The plumbing of the project will be learned through the dotting and screeding portion of instruction. The student will brown up and finish a project using methods of application previously covered. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable
Learning Outcomes

Course Objectives:
- Identify terms and applicable building codes
- Describe the proper spacing, setting and pressing of dots
- Measure project area and calculate material needs
- Interpret prints to find dimensions and identify materials for job planning
- Accurately plumb and square walls using dots and screeds
- Establish benchmarks using a water level, laser and transom
- Select and use appropriate tools bringing walls to a true surface with precise plaster thickness according to plans
- Use placed dots to correctly run horizontal and vertical screeds

Student Learning Outcomes:
- Apply the proper techniques for wall layout projects.
- Complete a dot and screed wall layout.

Units & Hours

Interior Plastering

ACPL028:

1.5 Units

This course is designed to introduce the student to modern gypsum interior plastering. They will learn the most widely used systems today. Proper methods of application, proper proportioning and mixing, and good workmanship will be stressed in this course. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:
- Compare finished surface to industry standards for veener applications.
- Describe variations in coating techniques.
- Identify types and characteristics of plaster.
- Select and use the appropriate application techniques and tools for gypsum coating.
- Demonstrate the proper surface and material preparation techniques.
- Use proper proportioning and mixing techniques.
- Apply a one coat veneer system to surface.
- Identify materials for job planning.
- Compare finished surface to industry standards for smoothness.
- Use proper proportioning and mixing techniques for gypsum three-coat and veneer one-coat work.
- List advantages of a plaster system over other interior finish systems.
- Identify materials used to sheath wall framing.
Interpret prints to find surface area.

Practice attaching substrates to wall framing.

Select and use the appropriate application techniques and tools for gypsum and veneer systems.

**Student Learning Outcomes:**
- Properly apply the appropriate interior plastering coatings to industry standards.
- Correctly apply veneer plaster on interior surfaces.

**Units & Hours**

**Tender and Plastering Equipment**

**ACPL029:**

1.5 Units

This course covers the terminology, components, and operating procedures for plastering equipment and machinery. Machine maintenance, safety, troubleshooting procedures, limits of operation, and communication practices will be covered. Students will inspect and properly set up and clean a plastering pump. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
- Identify terms, machinery components and applicable Occupational Safety and Health Administration (OSHA) regulations
- Compare the quality and production of machinery use from hand tools
- Demonstrate safe and proper use of machinery
- Match safety hazards and precautions for machinery handling
- List the steps used in the set up and operation of the machinery
- Perform machinery maintenance and repairs
- Describe common problems and repair solutions that may occur when handling machinery
- Conduct machinery safety and maintenance inspections
- Learn safe and proper use of machinery, good housekeeping techniques, proper us of personal protective equipment, and to identify site specific hazards

**Student Learning Outcomes:**
- Properly set up and operate pump equipment according to manufacturer's instructions.
- Perform maintenance checks and complete common repairs.

**Units & Hours**

**Exterior Insulation Finish Systems (EIFS)**

**ACPL030:**

1.5 Units
This course will teach the basic working knowledge and technical skills needed to successfully install Exterior Insulation and Finish Systems (EIFS) to meet industry specifications and standards. Introduction to the proper usage of products and materials will be discussed and used. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Prepare surfaces and mix material to the appropriate consistency
Accurately layout, install and finish architectural shapes
Demonstrate the proper methods for laying out and installing expanded polystyrene (EPS) boards over substrate
Properly layout and cut reveals and drips
Measure project area and calculate material needs
Identify terminology, materials and applicable building codes
Use proper techniques to apply base coat, reinforcing mesh and synthetic finishes
State the procedures used for installing EPS boards and all plaster coats

Student Learning Outcomes:
Install an Exterior Insulation Finish System (EIFS) to industry standards.
Locate EIFS construction details on prints and in specification.

Units & Hours
Ornamental Plastering
ACPL031:
1.5 Units

This course provides practical experience using applied geometry for plastering ornamental designs. Students will use the plastering skills presented to create molds and complete an ornamental installation to print specifications. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Create and install molds according to print specifications.
Build a sturdy bench with a good working surface.
Run bench and trammel molds.
Describe sequence of mathematical operations used to layout materials for ornamental plaster elements.
Demonstrate proper set up and run of a keystone at the apex of an arch.
Discuss design elements for ornamental features.

Horse all required molds.

Use the appropriate print views to identify and calculate materials.

Set required pieces of staff and point up.

Describe various methods and techniques used in ornamental plastering.

Identify terms, types of molds and building codes.

Practice layout of arches and various angles for plaster ornamental designs.

Lay out an elliptical arch that is true to working drawings.

**Student Learning Outcomes:**

Apply geometric calculations to achieve ornamental features according project design.

Create, install and plaster ornamental details to meet industry standards.

**Units & Hours**

**Plastering Equipment Application**

**ACPL032:**

1.5 Units

This course identifies the materials, application methods, and techniques for operating a plaster pump. Students will complete a three-coat work application to industry standards. An emphasis will be placed on proper pump set-up, washout, and maintenance. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Identify terms, materials and building codes

Interpret prints to find dimensions and identify materials for job planning

Compare hand application from pump application

Use proper proportioning and mixing techniques

Select and use the appropriate application techniques and tools

Apply three coat work using proper pumping techniques

Identify and properly use good housekeeping skills, personal protective equipment, and tools and equipment

Practice effective communication skills

**Student Learning Outcomes:**

Correctly execute a three coat plastering project.

Interpret plastering details in print specifications.

**Units & Hours**

**Finish Applications**

**ACPL033:**
1.5 Units
This course covers the coating techniques for various types of finishing materials used in the plastering industry. Students will review construction drawings and specifications to identify finish materials and surface placement. Instruction will include mixing proportions, consistency, additives, and application procedures. The techniques for cement-based, acrylic and specialty materials will be the focus of the class. Students will coat multiple surfaces using the correct material and finish details on project prints. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
- Identify various styles and design factors.
- Explain how to achieve various finishes indicated on project plans.
- Prepare surfaces and materials.
- Ability to demonstrate proper tools motion for finish application.
- Use the proper coating method for assignments.
- Complete a finish application acceptable for skill level.
- Explain the coating procedures for each type of finish application.
- Develop the ability to work with colored mediums.
- Practice using coating procedures for several speciality finishes.

**Student Learning Outcomes:**
- Determine the correct finish materials for multiple surfaces using project prints.
- Demonstrate ability to apply selected plaster products to achieve surface finish as indicated on project prints.

**Units & Hours**

**Theme Plastering**

**ACPL034:**

1.5 Units

This course is designed to encourage the development of artistic skills and the ability to plan and execute the plastered imitation of natural rock formations. Students will study irregular surfaces, cracks, and color variations of real rock formations to aid the creative process. Students will employ specialty tooling and material techniques to replicate live like rock features. Painting, highlighting, and carving skills will be explored and utilized to complete assignments. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
Describe natural settings suitable for replication in plaster.
List ways visual cues contribute to the creative process.
List three types of rock formation, their names and origin.
Use proper layout techniques for rock positioning.
Demonstrate ability to recreate natural appearance of rock surfaces.
State the procedures used to recreate real rock colorations.
Demonstrate ability to color plaster in varying hues for rock-like appearance.
Apply plaster coats to shade and recreate the look of natural rocks.
Interpret architectural drawings to identify materials for job planning.
Create rock formations to project specifications.
Prepare mixtures to proper consistency for project coating.
Demonstrate safe carving techniques for a rock formation.

**Student Learning Outcomes:**

- Accurately interpret drawings and prints to complete manufactured and carved in place rock projects.
- Transfer the visual characteristics viewed during study of natural rock formations.

**Units & Hours**

**Cosmetology Apprentice**

**ACS035:**

0.5 - 14.0 Units

Provides the related and supplemental instruction required for cosmetology apprentices leading to a cosmetology license. 0.5 unit earned for each 8 hours of successfully completed coursework. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

0.5

**Learning Outcomes**

**Course Objectives:**

- Practice the application of cosmetology chemistry and hazardous chemicals in the workplace.
- Demonstrate proficiency in the technique of permanent waving.
- Demonstrate proficiency in the technique of hair coloring.
- Demonstrate proficiency in the techniques of manicuring, pedicuring and artificial nails.
- Demonstrate an understanding of professional ethics and communication.
- Demonstrate proficiency in the technique of chemical relaxing.
- Demonstrate proficiency in the techniques of scalp treatment and hair conditioning.
- Understand, practice and apply the theories of bacteriology.
Apply the principles of anatomy and physiology as it relates to cosmetology.

Demonstrate proficiency in the technique of haircutting.

Demonstrate proficiency in the technique of wet hairstyling.

Follow the Consumer Affairs guidelines regarding thermal styling, pressing and curling.

Demonstrate an understanding of the theory of electricity.

Demonstrate proficiency in the techniques and terminology of makeup.

Demonstrate proficiency in the technique of eyebrow arching and hair removal.

Demonstrate application for proper procedures in working with patrons on facials.

**Student Learning Outcomes:**

- Follow Board of Barbering and Cosmetology safety and sanitation rules and regulations when working with patrons in a cosmetology salon, performing all procedures required to be a successful, licensed cosmetologist.
- List, explain, articulate and apply chemistry, anatomy and physiology principles used in cosmetology.

**Units & Hours**

**Minimum Units:**

0.5

**Maximum Units:**

0.5

**Total Hours:**

9.0

**Sound and Communication Apprentice 1**

AEL021:

4.0 - 4.5 Units

Provides related and supplemental instruction for Sound Electrician Apprentices in the structure and requirements of the International Brotherhood of Electrical Workers (IBEW) and the National Electrical Contractors Association (NECA) Apprenticeship program, tools and test instruments and electricity in Direct Current (DC) Theory Series Circuits. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

- Examine this course and achieve personal goals
- Recognize the attributes of an IBEW/NECA Apprenticeship
- Interpret Apprenticeship and responsibilities
- Examine the International Brotherhood of Electrical Workers (IBEW) and its history
- Examine the National Contractors Electrical Association (NECA) structure and heritage
Recognize your job and the future it holds for you

Distinguish Sexual Harassment

Recognize Safety never takes a Break

Identify Basic Tools of the Trade

Identify Basic Telecom Tools of the Trade

Choose Test Instruments

Identify Voice-Data-Video (VDV) Test Instruments

Practice the Proper use of Ladders

Choose Fastening Devices

Demonstrate Basic Knots

Identify Electrical Energy Sources

Identify Electrical Switches

Calculate Conductors, Conductor Resistance and Wattage Loss

Identify Electrical Devices

Explain Current, Voltage and Resistance in a Circuit

Analyze Electrical Units and Ohm’s Law

Define Power in DC Series Circuits

Illustrate DC Series Circuits

Calculate Resistance in DC Series Circuits

Calculate Current in DC Series Circuits

Calculate Voltage in a DC Series Circuits

Calculate How Current Reacts in DC Parallel Circuits

Calculate Resistance in DC Parallel Circuits

Recognize Resistors of Equal Value in Parallel

Recognize Resistors in Parallel

Calculate Voltage in DC Parallel Circuits

Calculate Power in DC Parallel Circuits

Calculate Voltage in DC Combination Circuits

Calculate Power in DC Combination Circuits

Illustrate Voltage and Current Dividers

Demonstrate the Principles of Magnetism

Demonstrate the Principles of Electromagnetism

**Student Learning Outcomes:**

Analyze the attributes of an IBEW-NECA Apprenticeship Program and identify basic tools of the trade.

Demonstrate electricity and describe how power, current and resistance works in direct current (DC) series and parallel circuits.

**Units & Hours**

**Minimum Units:**

4.0
Maximum Units
4.0

Total Hours
81.0

Sound and Communication Apprentice 2
AEL022:

4.5 Units

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in Commercial Building Telecommunications Cable Standards, Residential and Light Commercial Telecommunications Wiring and Fiber Optic Cabling. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.5

Learning Outcomes
Course Objectives:
Interpret TIA/EIA standards and codes
Discuss structured cabling systems overview
Review safety codes
Discuss cabling system performance
Identify unshielded twisted pair sonnecting hardware
Identify telecommunications pathways and spaces
Describe telecommunications cabling administration
Demonstrate telecommunications grounding and bonding
Identify telecommunications cabling
Identify UTP cabling system
Demonstrate terminating multi-pair cables on 110-terminal blocks
Recognize fiber-optic terminology
Distinguish fiber-optic communications
Identify fiber-optic transmission systems and components
Select optical fiber
Use fiber-optic cable
Identify connectors and splices
Demonstrate fiber-optic testing
Illustrate fiber-optic network design
Practice addition, subtraction, multiplication and division of whole numbers

Practice fractions, decimals and the metric system

Practice prefixes and powers of ten

Practice basic algebra equations to solve problems

Student Learning Outcomes:
   Read, interpret and apply Standards and Codes relating to Structured Cabling Systems.
   Understand Fiber Optic Terminology and Install and Test Fiber Optic Cables and Devices.
   Apply Proper Math Computations as used on Construction Jobsites.

Units & Hours

Minimum Units:
4.5

Maximum Units:
4.5

Total Hours:
81.0

Sound and Communication Apprentice 3
AEL023:

4.0 - 4.5 Units

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in the International Brotherhood of Electrical Workers (IBEW), National Electrical Code, Alternating Current (AC) theory, analog and digital telephone systems and Distributed/Paging systems. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Discuss and interpret the IBEW constitution
Discuss and interpret the local union by-laws
Practice and discuss parliamentary procedures
Calculate AC resistive circuits
Recognize inductance and how it affects a circuit
Interpret inductive reactance
Identify vectors in circuits
Identify basic characteristics of AC circuits
Examine parameters of series RL circuits
Recognize capacitance
Illustrate capacitive reactance
Demonstrate working safely with capacitors
Calculate inductors in series and parallel
Interpret basics of power quality
Illustrate safety
Demonstrate using the right tool
Demonstrate monitor setup
Record data collection and analysis
Explain telephone definitions
Demonstrate an understanding a telephone system
Identify and calculate telephone circuitry
Demonstrate basic telephone cabling
Identify analog vs. digital signals
Distinguish constant voltage and self-amplified systems
Identify mixers, amplifiers and interface devices
Identify telephone interface devices
Demonstrate speakers, horns and installation techniques
Recognize distribute sound systems
Demonstrate design and layout
Illustrate sound masking systems

Student Learning Outcomes:
- Read and Interpret the IBEW Constitution and By-Laws. Review Applications of DC Theory and compare to AC Theory.
- Calculate ampacity, voltage and resistance in Alternating Current (AC) Circuits.
- Identify and install Analog and Digital Telephone Systems and Distributed Sound and Paging Systems.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
81.0

Sound and Communication Apprentice 4
AEL024:

4.0 - 4.5 Units

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in commercial building grounding and bonding requirements for telecommunications, security systems and installing Local Area Networks (LAN). Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Discuss and explain the terms and definitions
Identify, select and use magnetic contacts
Identify, select and use motion sensors
Identify, select and use glassbreak sensors
Identify, select and use control panels, keypads and modules
Review and illustrate security system design
Interpret and identify access control
Identify and choose cards, codes and biometrics
Identify and choose doors, gates, turnstiles and electric locks
Identify sensor technology used in EAC
Explain computers and communications
Illustrate electronic access control system design
Interpret fundamentals and system requirements
Choose and use initiating devices
Choose and use notification appliances
Recognize and interpret wiring and wiring methods
Identify and describe system interfaces and safety control functions
Describe emergency communication systems
Describe emergency voice/alarm communication systems
Practice and record inspection, testing and maintenance
Review network definitions
Explain ethernet basics
Identify Local Area Networks (LAN)
Explain network operating systems
Identify and use switches, routers and Network Attached Storage (NAS)
Describe and identify TCP/IP internet addressing
Examine technologies and protocols
Illustrate circuit basics and overcurrent protection
Demonstrate code arrangement and application
Identify grounding electrodes and grounding electrode system
Illustrate bonding requirements
Identify Equipment Grounding Conductors (EGC's)
Describe and illustrate grounding for communications systems
Describe sizing of wire
Examine conduit and raceway basics
Examine wiring methods and materials
Identify conductors for general wiring
Identify power and limited circuits
Interpret fire alarm systems requirements
Select optical fiber and raceways
Identify communications circuits

Student Learning Outcomes:
Read, interpret, and apply electrical drawings and the National Electrical Code to install fire alarm life safety systems and grounding and bonding requirements.
Read, interpret, and apply electrical drawings and the National Electrical Code to install security alarm systems and computer networks.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
81.0

Sound and Communication Apprentice 5
AEL025:

4.0 - 4.5 Units

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in basic semiconductor diodes, transistors and rectifiers in electronic applications and Closed Circuit Television (CCTV) distribution systems. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Practice pride in your industry
Discuss National Electrical Benefit Fund (NEBF)
Discuss after apprenticeship
Demonstrate motivation and leadership
Discuss and review the economics of unemployment
Discuss and identify semiconductors
Recognize and illustrate diodes
Recognize and illustrate rectifiers
Identify and choose power supplies in electronic circuits
Examine and select transistors
Examine and select amplifiers
Recognize and calculate SCR circuits
Illustrate photoconductive cells
Discuss and identify Light Emitting Diodes (LED's)
Discuss and identify lasers and phototransistors
Calculate power ratios
Recognize and use power/frequency applications
Illustrate and use filters
Identify waveforms and harmonics
Choose antennas
Analyze video security systems
Interpret video technology
Discuss and recognize lenses, optics and lighting characteristics
Identify camera types and characteristics
Illustrate signal transmission methods
discuss and classify switchers, quads and multiplexers
Identify and explain motion detectors

Student Learning Outcomes:
Read, interpret and apply electrical drawings and the National Electrical Code to install solid state semiconductor transistor circuits.
Read, interpret and apply electrical drawings and the National Electrical Code to install Closed Circuit Television Monitoring Equipment.
Analyze the National Electrical Benefit Fund and Demonstrate Motivation and Leadership Skills to become a Supervisor in the Sound Industry.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
81.0
Sound and Communication Apprentice 6
AEL026:

4.0 Units

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in Closed Circuit Television Cameras (CCTV), Fiber Optic Certification, and prepares students for state required Fire Alarm and Voice Data Video Exam. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:
Select and use pan/tilt, mechanisms
Select and use cameras, housing and accessories
Analyze and use video motion detectors
Identify system power sources
Illustrate and practice remote monitoring and video communications control
Interpret National Electrical Code (NEC) article 760
Employ the NEC table of contents
Organize NEC article outlines
Discuss and review the NEC index study guide
Discuss and review the NFPA 72 fire alarm standards
Interpret National Electrical Code (NEC) Article 725, 770, 800, 810 and 820
Employ the NEC table of contents
Organize NEC article outlines
Discuss and review the NEC index study guide
Examine and describe CFOS (Certified Outside Plant Fiber Optic Specialist)
Analyze and illustrate FTTA (Fiber to the Antenna)
Analyze DAS (Distributed Antenna Systems)
Review Data centers
Prepare for the CPCT (Premesis Cabling Systems) certification

Student Learning Outcomes:
Read, interpret, and apply electrical drawings and the National Electrical Code to install Closed Circuit Television Cameras (CCTV).
Read, interpret, and apply electrical drawings and the National Electrical Code to install fiber optics.
Read, interpret, and apply the National Electrical Code to pass Fire Alarm and Voice Data Video (VDV) state exam as required.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
81.0

Sound and Communication Apprentice 7
AEL027:

4.0 Units


Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:

Recognize codes and standards
Illustrate layout systems
Demonstrate installation
Demonstrate acceptance testing
Analyze troubleshooting and servicing
Recognize codes and standards
Demonstrate cable testing and troubleshooting
Identify and use category 6 connectors
Analyze and illustrate bonding and grounding
Examine and assemble installing premises cabling
Examine and review management of premises cabling
Demonstrate terminating premises cabling

Student Learning Outcomes:

Identify, analyze and install Category 6 cabling, connectors for premises cabling installations as required by Building Industry Consulting Services International (BICSI) and AMP ACT 1 exam requirements.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
81.0

Sound and Communication Apprentice 8
AEL028:

4.0 Units


Requisites
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Demonstrate cable stripping and cleaning
Analyze preparing for a splice
Demonstrate toning, testing and troubleshooting 25 pair splices
Recognize and use manhole and confined space training
Recognize and discuss the ins and outs of connectors
Examine and assemble connectors used in the audio, video, and communications system industry
Analyze and demonstrate distribution networks basics and configurations
Examine and explain headend equipment; alignment basics
Select distribution and amplifiers

Student Learning Outcomes:
Strip, clean, prepare, tone, test, and troubleshoot high pair count copper slicings.
Select and install connectors used in the audio, video, and communications systems industry.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0
Total Hours
81.0

Intelligent Transportation Systems Electrician Apprentice 1
AEL031:

4.0 - 4.5 Units
Provides the related and supplement instruction required for apprentice electricians in the intelligent transportation industry in tools and fasteners, National Electrical Code (NEC), math, building materials, conduit bending, electrical safety and proper use of tools and ladders. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Choose personal goals

Understand and appreciate the attributes of the International Brotherhood of Electrical Workers (IBEW) and National Electrical Contractors Association (NECA)

Review the history of apprenticeship

Review NECA's structure and heritage

Identify sexual harassment

Understand the economics of employment

Practice jobsite safety

Identify basic tools of the trade

Discuss the workplace of an electrical worker

Choose and install masonry fasteners

Calculate alignment and measurement

Understand electrical shock

Practice electrical safety

Understand the function of ground-fault circuit interrupters

Select the safe safety procedures on overhead work

Choose how to hoist loads properly

Select the proper hand signal communications

Evaluate building wire construction, insulation properties

Demonstrate how to size building wire

Choose firestop applications
Demonstrate working with fractions
Demonstrate basic trigonometric functions
Practice hand bending offsets, 90's, kicks and saddles
Choose the correct conduit for the application
Demonstrate basic lighting circuitry, 3-way and 4-way switching
Select and properly use aluminum conductors
Evaluate and identify electrical material
Calculate using prefixes and powers of 10
Calculate using the metric system and algebra
Interpret articles 90, 100, 110 and conductor insulation
Choose wiring devices
Identify general wiring requirements relating to installing wiring devices
Distinguish specific receptacle and switch installation requirements
Identify and choose industrial wiring

Student Learning Outcomes:
Use trigonometry to hand bend pipe, offsets, 90’s, kicks and saddles.
Identify the proper use of tools and ladders.
Understand and apply Article 100 & 110 of the NEC (National Electrical Code).

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 2

AEL032:

4.0 - 4.5 Units

Provides the related and supplement instruction for Intelligent Transportation Apprentice Electricians in Direct Current (DC) theory, the National Electrical Code, safe work practices, series circuits, combination circuits and hand bending. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
- Understand what electricity is
- Explain Ohm’s law
- Calculate Power in DC circuits
- Distinguish electrical and electronic devices
- Describe potential hazards of electrical circuits
- Calculate and solve power, resistance, current and voltage in DC series circuits
- Illustrate electrical circuits
- Calculate and solve power, resistance, current and voltage in DC combination circuits.
- Demonstrate ratios and proportions
- Calculate and solve power, resistance, currents and voltage in combination DC theory circuits
- Illustrate the operation and design and operation of the three-wire single phase system
- Recognize electrical generators
- Review principles of superposition
- Apply DC theory principles to solve real world problems
- Use overcurrent protections
- Identify Ground Fault Circuit Interrupters (GFCI)

Student Learning Outcomes:
- Calculate power, resistance, currents and voltage in DC series circuits, parallel circuits and combination circuits.
- Demonstrate knowledge of Ohm’s law regarding current, voltage and resistance in DC circuits.
- Demonstrate knowledge of hand bending conduit.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 3
AEL033:

4.0 - 4.5 Units

Provides the related and supplemental instruction for Intelligent Transportation Apprentice Electricians in Codeology, Direct Current (DC), Alternating Current (AC) and commercial blueprints. Continued study of Caltrans Plans and Specifications. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable
Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
- Interpret local-union bylaws
- Interpret the International Brotherhood of Electrical Workers (IBEW) constitution
- Discuss how parliamentary procedure
- Evaluate and understand the COMET program
- Show pride in the electrical industry
- Discuss American labor history
- Analyze hazards of drug abuse
- Analyze the layout, language, and structure of the (NEC) National Electrical Codebook.
- Demonstrate the system used to search and understand the (NEC) National Electrical Codebook.
- Recognize keywords and phrases in (NEC) National Electrical Codebook
- Interpret and utilize the plan, build, use system of information lookup in (NEC) National Electrical Codebook.
- Discuss and review of DC (Direct Current) theory
- Illustrate circuit calculations for basic circuits
- Analyze DC (Direct Current) compared to AC (Alternating Current sine waves voltages)
- Explain the basic characteristics of AC (Alternating Current) circuits
- Explain inductance and how it affects a circuit
- Recognize inductive reactance
- Illustrate frequency, inductance, and inductive reactance
- Analyze inductors in series
- Analyze inductors in parallel
- Demonstrate capacitance and how it affects a circuit
- Analyze RC time constant
- Become familiar with capacitive reactance
- Differentiate capacitance, frequency, and capacitive reactance
- Analyze the basic fundamentals of blueprints and how they are drawn
- Identify architectural views
- Recognize common scales used on blueprints
- Interpret and understand blueprint specifications, elevations, and schedules
- Illustrate electrical symbols
- Illustrate mechanical symbols

Student Learning Outcomes:
- Read, interpret, and articulate blueprints, drawings, and specifications to calculate the cost of a job.
- Use codeology to understand the layout of the (NEC) National Electrical Code using the Plan, Build, Use method.
- Calculate Direct and Alternating Current used in Electrical Circuits.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 4
AEL034:

4.0 - 4.5 Units

Provides the related and supplemental instruction for Intelligent Transportation Apprentice Electricians in Electrical Alternating Current (AC) theory, transformers and National Electrical Code applications. Continued study of Caltrans Plans and Specifications. Open Entry/Open Exit.

Requisites
Requisites: None

Transferability & General Education Options
Transferable: Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Analyze and calculate series RL circuits
Analyze and calculate series RC circuits
Analyze and calculate series RLC circuits
Analyze and calculate parallel RL circuits
Analyze and calculate parallel RC circuits
Analyze and calculate parallel RLC circuits
Analyze and calculate LC circuits
Analyze and calculate series and Parallel RLC circuits
Analyze and calculate combination RLC circuits
Identify inductors in series and/or parallel
Analyze and solve series RC circuits
Analyze and solve series RLC circuits
Analyze and solve parallel RL circuits
Analyze and solve parallel RC circuits
Analyze and solve parallel RLC circuits
Analyze and solve series and parallel RLC circuits
Calculate sizing of building wire
Calculate conductor ampacity
Identify branch circuits 1
Identify branch circuits 2
Identify and locate outside branch circuits and feeders
Identify and locate services
Identify and illustrate switches, receptacles and luminaires
Recognize conduit and raceways
Recognize cable assemblies
Interpret and demonstrate wiring methods and material
Recognize conductors for general wiring
Recognize Electrical Nonmetallic Tubing (ENT)
Recognize liquidtight flexible conduit
Recognize and select boxes and fittings defined by the NEC (National Electrical Code)
Illustrate magnetism and electromagnetism
Demonstrate transformer operation principles
Identify transformer connections
Apply real world transformer connections
Explain power generation and distribution

Student Learning Outcomes:
Calculate ampacity, voltage and resistance in Alternating Current (AC) circuits.
Read, interpret and apply the NEC to calculate ampacity, circuits, wiring and conduits for wiring installations.
Identify, install and connect transformers.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 5
AEL035:

4.0 - 4.5 Units
Provides the related and supplemental instruction required for Intelligent Transportation Apprentice Electricians in Rigging, Hoisting, Signaling, National Electrical Code, Grounding and Bonding and Electrical Safety Related Work Practices. Continued study of Caltrans Plans and Specifications. Open Entry/Open Exit.

Requisites
Requisites:
None
Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Identify and discuss overcurrent protection types
Identify and calculate overcurrent protective device categories, protective device ratings
Identify circuit breakers
Identify fuses
Recognize conductor tap rules
Demonstrate ground fault protection
Interpret electrical safety culture
Recognize electrical hazard awareness
Demonstrate OSHA considerations
Demonstrate lockout tagout
Analyze 3-Phase bolted fault currents
Demonstrate hoisting safety
Recognize and employ cranes
Organize lift planning
Demonstrate the proper use of signaling
Practice load and weight balance
Choose proper slings and sling hitches
Choose proper rigging hardware

Student Learning Outcomes:
Ground an AC (Alternating Current) system, electrode system, equipment and conductors. Understand and identify overcurrent protection and types of overcurrent.
Find the corresponding references and information in the NEC (National Electrical Code), given grounding related questions.
Properly rig and hoist equipment with signals, slings or chains.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 6
AEL036:

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
4.0 - 4.5 Units

Provides the related and supplemental instruction required for Intelligent Transportation Apprentice Electricians in grounding and bonding, fire alarm systems, transformers and electrical safety-related work practices for Intelligent Transportation Apprentices. Continued study of Caltrans Plans and Specifications. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:
- Interpret NFPA 70E
- Identify arc flash hazards
- Demonstrate energized work practices
- Calculate fault current magnitude and duration
- Describe overcurrent protection
- Interpret code arrangement and application
- Analyze grounding electrodes
- Describe services and grounded conductors
- Identify bonding requirements
- Solve grounding electrical equipment
- Describe and install grounding circuits and receptacles
- Recognize fire alarm systems
- Analyze system requirements
- Describe initiating devices
- Describe notification appliances
- Apply wiring and wiring methods
- Use plans and specifications

Transformers Level 2:
- Demonstrate transformer connections
- Recognize harmonics
- Analyze power generation and distribution
- Identify reactors and isolation transformers
- Explain autotransformers

Student Learning Outcomes:

Read, interpret and apply the National Electrical Code as it applies to grounding and bonding.
Plan design and implement Transformers.
Plan, design and implement fire alarm systems.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 7
AEL037:

4.0 - 4.5 Units

Provides the related and supplemental instruction required for Intelligent Transportation Apprentice Electricians in Code Calculations, Blueprints, Electrical Grounding and Bonding and Motors. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Recognize special occupancies
Choose electrical equipment
Choose special equipment
Distinguish cable tray systems
Recognize surface metallic raceways
Calculate ampacity of conductors in cable trays
Review and analyze industrial specifications
Review and analyze industrial prints I
Review and analyze industrial prints II
Review and analyze industrial prints III
Identify grounding at separate buildings or structures
Practice grounding electrical Systems
Interpret grounding requirements for separately derived systems
Identify special occupancies
Select ground-fault circuit interrupters (GFCI) and ground-fault protection of equipment (GFPE)
Analyze and demonstrate grounding systems and earth ground test instruments
Explain magnetism and induction
Examine motor nameplates
Recognize Alternating Current (AC) alternators
Recognize three-phase motors
Recognize squirrel-cage motors
Recognize wound rotor motors
Recognize single phase motors
Solve motor protection

Student Learning Outcomes:
Compute Electrical Calculations for Electrical Equipment, Special Occupancies, Special Equipment and Ampacity of Cable Trays. Read and interpret blueprints for industrial job applications. Understand bonding and grounding requirements for separate buildings, separately derived systems, ground-fault circuit interrupters (GFCI) and ground-fault protection of equipment (GFPE) and use of ground earth test instruments.

Units & Hours
Minimum Units:
4.0
Maximum Units
4.0
Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 8
AEL038:
4.0 - 4.5 Units

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Interpret and demonstrate magnetic motor control
Recognize, select and use manual pilot devices
Recognize, select and use automatic pilot devices
Recognize, select and use magnetic control relays
Recognize, select and use control transformers
Recognize, select and use magnetic contactors
Recognize, select and use basic motor starters
Recognize, select and use basic timers
Identify and select electrical devices
Discuss swimming pools and fountains
Explain emergency and standby systems installation requirements
Illustrate over 600-volt and 1000-volt installations
Discuss changes to the NEC-part I
Discuss changes to the NEC-part II
Calculate conductor ampacity
Practice ampacity calculations
Calculate box size and fill conductor
Calculate raceway fill
Explain electrical load calculations

**Student Learning Outcomes:**
- Research, Identify and Implement Codes, Standards and Specifications to Install an Electrical System.
- Install, Troubleshoot and Maintain Motor Control Devices.
- Pass mock versions of the California State Electrical Exam.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
99.0

**Intelligent Transportation Systems Electrician Apprentice 9**

**AEL039:**

4.0 - 4.5 Units

Ninth semester of a five-year program. Provides related and supplemental instruction in becoming a Journeyworker in the Intelligent Transportation Systems Industry. Torquing methods and requirements for electrical equipment, Solid State Systems and OSHA 30 safety practices in construction for intelligent transportation systems apprentices. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321a64eb18
Learning Outcomes

Course Objectives:
Evaluate the National Electrical Benefit Fund (NEBF)
Differentiate After Apprenticeship to Journeyworker Status
Demonstrate Motivation and Leadership
Calculate and Assess Economics of Unemployment
Examine the Realities of Construction
Describe Electronics for Motor Control Devices
Identify and Choose Solid-State Motor Control Pilot Devices
Identify and Choose Solid-State Relays
Examine Motor Control Centers
Choose Fall Protection
Recognize Electrocuton
Choose Personal Protective Equipment
Operate Scaffolds
Recognize and Solve Excavations
Recognize and List Confined Space Areas
Demonstrate Proper Use of Hand and Power Tools
Examine Threaded Fastener Basics
Demonstrate Torque Applications
Identify Torque Products / Tools
Define Electrical Torque Applications

Student Learning Outcomes:
Identify and explain the National Electrical Benefit Fund, understand and relate to being a journeyworker intelligent transportation systems in the Electrical Industry, practice motivation, and leadership skills on the job.
Research, identify and implement codes, standards, and specifications to install an electrical system.
Recognize and choose Electrical Devices for Motor Control and Equipment Operation.
Recognize and identify safe work practices described in OSHA 30 training.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Intelligent Transportation Systems Electrician Apprentice 10 AEL040:
4.0 - 4.5 Units
Provides related and supplemental instruction required for Intelligent Transportation Apprentice Electricians in Torquing methods and requirements for electrical equipment, Photovoltaic Systems and OSHA 30 safety practices in construction for inside wireman apprentices. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

- Demonstrate Managing Employees
- Setup Managing the Job
- Categorize Documents Required by Job Foreman
- Relate Safety Updates
- Analyze Lighting systems and light sources
- Recognize Lighting systems control devices, dimmers, photosensors, occupancy sensors, ballasts
- Apply Lighting system control applications
- Review Advanced lighting control systems
- Interpret Title 24
- Explain Daylighting
- Explain Solar radiation
- Appraise Site surveys and preplanning
- Identify System components and configuration
- Recognize Modules, and Arrays
- Describe Inverters

**Student Learning Outcomes:**

- Determine how to handle the job site in the most successful and profitable way, given a series of employee and job site situations.
- Demonstrate competence, proper safety techniques, and teamwork to install commercial solar installations, including the determination of the type and size of solar systems to comply with customer needs.
- Evaluate, understand and install devices under Title 24 requirements regarding energy efficient lighting control systems.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units:**

4.0

**Total Hours**

99.0
Inside Wireman 1  
AEL051:

4.0 - 4.5 Units

First semester of a five-year program. Provides related and supplemental instruction in tools and fasteners, National Electrical Code (NEC), math, building materials, conduit bending, electrical safety, and proper use of tools and ladders required for entry-level inside wireman apprentices. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Choose personal goals

Understand and appreciate the history of IBEW and NECA

Identity signs of sexual harassment and how to report incidents

Practice jobsite safety for themselves and others

Identify basic tools of the trade

Choose and install correct masonry fasteners

Align and measure equipment material

Understand what causes electrical

Practice safety when dealing with electricity

Understand the function and design of ground-fault interrupters

Select the safe procedure when doing overhead work

Choose how to hoist loads properly

Select the proper hand signal for communication

Evaluate Building wire construction, insulation properties

Choose How to size building wire

Choose Firestop Applications

Apply Fractions and use trigonometry

Practice Hand bending pipe, offsets, 90’s, kicks, and saddles

Practice bending conduit

Choose the correct conduit for the application

Demonstrate Basic lighting circuitry, 3 way, and 4 way switching

Select and properly use aluminum conductors

Evaluate and identify electrical material
Practice Prefixes and powers of 10
Calculate with the Metric System and algebra
Interpret Article’s 90, 100 & 100 of the NEC (National Electrical Code)
Choose wiring devices
Identify correct installation requirement for wiring devices
Distinguish installation requirements of receptacles and switches
Identify industrial wiring

**Student Learning Outcomes:**
- Use trigonometry to hand bend pipe, offsets, 90’s, kicks, and saddles.
- Identify the proper use of tools and ladders. Understand and Applying Article 100 & 110 of the NEC (National Electrical Code).

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
99.0

**Inside Wireman 2**

**AEL052:**
4.0 - 4.5 Units

Second semester of a five year program. Provides related and supplemental instruction in Direct Current (DC) theory, the National Electrical Code, safe work practices, series circuits, parallel circuits, combination circuits and hand bending conduit for inside wireman apprentices. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
4.0

**Learning Outcomes**

**Course Objectives:**
- Interpret what electricity is
- Explain Ohm’s Law
- Calculate Power in DC circuits
- Distinguish Electrical and electronic devices
- Describe potential hazards of electrical circuits
- Calculate and solve power, resistance, current and voltage in DC series circuits
Illustrate electrical circuits
Calculate and solve power, resistance, current and voltage in DC parallel circuits
Demonstrate ratios and proportions
Calculate and solve power, resistance, currents and voltage in combination circuits
Illustrate the Operation of the Three-Wire, Single Phase System
Recognize Electrical generators
Calculate Principles of superposition
Apply DC theory principles to solve real world problems
Use Overcurrent protections
Identify Ground fault circuit interrupters

**Student Learning Outcomes:**
- Calculate power, resistance, currents and voltage in DC series circuits, parallel circuits, and combination circuits.
- Demonstrate knowledge of Ohm's Law regarding current, voltage and resistance in DC Circuits.
- Demonstrate knowledge of Hand Bending Conduit

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
99.0

**Inside Wireman 3**

**AEL053:**

4.0 - 4.5 Units

Third semester of a five year program. Provides related and supplemental instruction in codeology, Direct Current (DC), Alternating Current (AC), and commercial blueprints, for inside wireman apprentices. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
4.0

**Learning Outcomes**

**Course Objectives:**
- Interpret the local union by-laws
- Interpret the International Brotherhood of Electrical Workers (IBEW) Constitution
- Discuss how parliamentary procedure is used
Evaluate and understand the COMET program
Show pride in the electrical industry
Discuss american labor history
Analyze hazards of drug use
Analyze the layout, language and structure of the National Electrical Code (NEC) electrical code book
Demonstrate the system used to search and understand the (NEC) National Electrical Codebook
Recognize keywords and phrases in the (NEC) National Electrical Codebook
Interpret and utilize the plan, build uses system of information lookup in the (NEC) National Electrical Codebook
Discuss and review of DC theory
Illustrate circuit calculations for basic circuits
Analyze DC (Direct Current) compared to AC (Alternating Current)
Analyze Direct Current and AC (Alternating Current) sine wave voltages
Explain the basic characteristics of AC (Alternating Current) Circuits
Explain inductance and how it affects a circuit
Recognize inductive reactance
Illustrate frequency, inductance and inductive reactance
Analyze inductors in series
Analyze inductors in parallel
Demonstrate capacitance and how it effects a circuit
Analyze RC time constant
Demonstrate familiarity with capacitive reactance
Differentiate capacitance, frequency, and capacitive reactance
Analyze the basic fundamentals of blueprints and how they are drawn
Identify architectural views
Recognize common scales used on blueprints
Interpret and understand blueprint specifications
Illustrate electrical symbols
Illustrate mechanical symbols

Student Learning Outcomes:
Read, interpret, and articulate blueprints, drawings, and specifications to calculate the cost of a job.
Use codeology to understand the layout of the (NEC) National Electrical Code using the plan, build use method.
Calculate direct and alternating current used in electrical circuits

Units & Hours
Minimum Units:
4.0

Maximum Units:
4.0

Total Hours
99.0
Inside Wireman 4
AEL054:

4.0 - 4.5 Units

Fourth semester of a five-year program. Provides related and supplemental instruction in electrical alternating current (ac) theory, transformers, and National Electrical Code application for inside wireman apprentices. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:
Analyze and Calculate Series RL Circuits
Analyze and Calculate Series RC Circuits
Analyze and Calculate Series RLC Circuits
Analyze and Calculate Parallel RL Circuits
Analyze and Calculate Parallel RC Circuits
Analyze and Calculate Parallel RLC Circuits
Analyze and Calculate LC Circuits
Analyze and Calculate Series and Parallel RLC Circuits
Analyze and Calculate Combination RLC Circuits
Identify Inductors in Series and/or Parallel
Analyze and solve Series RC Circuits
Analyze and solve Series RLC Circuits
Analyze and solve Parallel RL Circuits
Analyze and solve Parallel RC Circuits
Analyze and solve Parallel RLC Circuits
Analyze and solve Series and Parallel RLC Circuits
Calculate Sizing of Building Wire
Calculate Conductor Ampacity
Identify Branch Circuits 1
Identify Branch Circuits 2
Identify and Locate Outside Branch Circuits and Feeders
Identify and Locate Services
Identify and Illustrate Switches, Receptacles and Luminaires
Recognize Conduit and Raceways
Recognize Cable Assemblies
Interpret and Demonstrate Wiring Methods and Material
Recognize Conductors for General Wiring
Recognize Electrical Nonmetallic Tubing (ENT)
Recognize Liquidtight Flexible Conduit
Recognize and Select Boxes and Fittings Defined by the NEC (National Electrical Code)
Illustrate Magnetism and Electromagnetism
Demonstrate Transformer Operation Principals
Identify Transformer Connections
Apply Real World Transformer Connections
Explain Power Generation and Distribution

Student Learning Outcomes:
- Calculate ampacity, voltage and resistance in Alternating Current (AC) Circuits.
- Read, interpret, and apply the NEC to calculate ampacity, circuits, wiring, and conduits for wiring installations.
- Identify, install, and connect transformers.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Inside Wireman 5
AEL055:

4.0 - 4.5 Units

Fifth semester of a five year program. Provides related and supplemental instruction in rigging, hoisting and signaling, national electric code, grounding and bonding, electrical safety related work practices and blueprints for inside wireman apprentices. Open Entry/Open Exit.

Requisites
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Identify and discuss overcurrent protection and types
Identify and calculate overcurrent protective device categories, protective device ratings

Identify circuit breakers

Identify fuses

Recognize conductor tap rules

Demonstrate ground fault protection

Interpret electrical safety culture

Recognize electrical hazard awareness

Demonstrate OSHA considerations

Demonstrate lockout tagout

Analyze 3-Phase bolted fault currents

Demonstrate hoisting safety

Recognize cranes

Organize lift planning

Demonstrate the proper use of signaling

Practice load and weight balance

Choose proper slings and sling hitches

Choose proper rigging hardware

Illustrate blueprints and how they are drawn

Analyze laying out circuits

Analyze job cost and takeoffs

Review blueprint specifications

Identify components on blueprints

**Student Learning Outcomes:**

Ground an AC system, electrode system, equipment, and conductors. Understand and identify overcurrent protection and types of overcurrent. Find the corresponding references and information in the NEC, given grounding related questions.

Properly rig and hoist equipment with signals, slings or chains.

Interpret and practice electrical safety, hazard awareness following OSHA consideration with lockout tagout procedures.

Review, analyze and interpret blueprints to comply with specifications, circuitry and layout of projects.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

99.0

**Inside Wireman 6**

**AEL056:**

4.0 - 4.5 Units
Sixth semester of a five year program. Provides related and supplemental instruction in Grounding and Bonding, Fire Alarm Systems, Transformers and Electrical Safety Related Work Practices for inside wireman apprentices. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

Transferable:
Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

Interpret NFPA 70E

Identify Arc Flash Hazard

Demonstrate Energized Work Practices

Calculate Fault Current Magnitude and Duration

Describe Overcurrent Protection

Interpret Code Arrangement and Application

Analyze Grounding Electrodes

Describe Services and Grounded Conductors

Identify Bonding Requirements

Solve Grounding Electrical Equipment

Ground Circuits and Receptacles

Recognize Fire Alarm Systems

Analyze System Requirements

Describe Initiating Devices

Describe Notification Appliances

Apply Wiring and Wiring Methods

Use Plans and Specifications

Demonstrate Transformer Connections

Recognize Harmonics

Analyze Power Generation and Distribution

Identify Reactors and Isolation Transformers

Explain Autotransformers

**Student Learning Outcomes:**

Plan, design and implement Fire Alarm Systems.

Read, interpret and apply the National Electrical Code as it applies to Grounding and Bonding.

Plan, design and implement Transformers.

**Units & Hours**

**Minimum Units:**
Maximum Units
4.0

Total Hours
99.0

Inside Wireman 7
AEL057:

4.0 - 4.5 Units

Seventh semester of a five year program. Provides related and supplemental instruction in Code Calculations, Blueprints, Electrical Grounding and Bonding and Motors. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Recognize Special Occupancies
Choose Electrical Equipment
Choose Special Equipment
Distinguish Cable Tray Systems
Recognize Surface Metallic Raceways
Calculate Ampacity of Conductors in Cable Trays
Identify Grounding at Separate Buildings or Structures
Practice Grounding Electrical Systems
Interpret Grounding Requirements for Separately Derived Systems
Identify Special Occupancies
Select Ground-Fault Circuit Interrupters (GFCI) and Ground-Fault Protection of Equipment (GFPE)
Analyze and Demonstrate Grounding Systems and Earth Ground Test Instruments
Review and Analyze Industrial Specifications
Review and Analyze Industrial Prints I
Review and Analyze Industrial Prints II
Review and Analyze Industrial Prints III
Explain Magnetism and Induction
Examine Motor Nameplates
Identify Alternating Current (AC) Alternators
Recognize Three-Phase Motors
Recognize Squirrel-Cage Motors
Recognize Wound Rotor Motors
Recognize Single Phase Motors
Solve Motor Protection

Student Learning Outcomes:
Compute Electrical Calculations for Electrical Equipment, Special Occupancies, Special Equipment and Ampacity of Conductors in Cable Trays.
Read and Interpret Blueprints for Industrial Job Applications.
Understand Bonding and Grounding Requirements for Separate Buildings, Separately Derived Systems, Ground-Fault Circuit Interrupters (GFCI) and Ground-Fault Protection of Equipment (GFCI) and use Earth Ground Test Instruments.
Differentiate between Magnetism and Induction, Single Phase and Three Phase Motors, DC Motors and Generators, and Motor Branch Circuit Protection and Motor Overload Protection.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Inside Wireman 8
AEL058:

4.0 - 4.5 Units


Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Interpret and Demonstrate Magnetic Motor Control
Recognize Select and Use Manual Pilot Devices
Recognize Select and Use Automatic Pilot Devices
Recognize Select and Use Magnetic Control Relays
Recognize Select and Use Control Transformers
Recognize Select and Use Magnetic Contactors
Recognize Select and Use Basic Motor Starters
Recognize Select and Use Basic Timers
Identify and Select Electrical Devices
Discuss Swimming Pools and Fountain Installations
Explain Emergency and Standby Systems Installation Requirements
Illustrate Over 600-Volt and 1000-Volt Installations
Discuss Changes to the NEC-Part I
Discuss Changes to the NEC-Part II
Calculate Conductor Ampacity
Solve Ampacity Calculations
Calculate Box Size and Fill Conductors
Calculate Raceway Fill
Explain Electrical Load Calculations

**Student Learning Outcomes:**

- Research, Identify, and Implement Codes, Standards and Specifications to Install and Electrical System.
- Install, Troubleshoot, and Maintain Motor Control Devices.
- Pass Mock Versions of the California State Electrical Examination.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units:**
4.0

**Total Hours:**
99.0

**Inside Wireman 9**

**AEL059:**

4.0 - 4.5 Units

Ninth semester of a five year program. Provides related and supplemental instruction in becoming a Journeyworker in the Electrical Industry, Torqueing methods and requirements for electrical equipment, Solid State Devices for Motor Control and OSHA 30 safety practices in construction for inside wireman apprentices. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

4.0
Learning Outcomes

Course Objectives:
Evaluate the National Electrical Benefit Fund (NEBF)
Differentiate After Apprenticeship to Journeyworker Status
Demonstrate Motivation and Leadership
Calculate and Assess Economics of Unemployment
Examine the Realities of Construction
Describe Electronics for Motor Control Devices
Identify and Choose Solid-State Motor Control Pilot Devices
Identify and Choose Solid-State Relays
Examine Motor Control Centers
Choose Fall Protection
Recognize Electrocution
Choose Personal Protective Equipment
Operate Scaffolds
Recognize and Solve Excavations
Recognize and List Confined Space Areas
Demonstrate Proper Use of Hand and Power Tools
Examine Threaded Fastener Basics
Demonstrate Torque Applications
Identify Torque Products / Tools
Define Electrical Torque Applications

Student Learning Outcomes:
Identify and Explain the National Electrical Benefit Fund, understand and relate to being a journeyworker in the Electrical Industry,
practice motivation and leadership skills on the job.
Research, identify, and implement codes, standards and specifications to install an electrical system.
Recognize and Identify safe work practices described in OSHA 30 training.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Inside Wireman 10

AEL060:
4.0 - 4.5 Units
Final semester of a five year program. Provides related and supplemental instruction in jobsite management, lighting control and photovoltaic systems for inside wireman apprentices. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:

Demonstrate Managing Employees

Setup Managing the Job

Categorize Documents Required by Job Foreman

Relate Safety Updates

Analyze Lighting systems and light sources

Recognize Lighting systems control devices, dimmers, photosensors, occupancy sensors, ballasts

Apply Lighting system control applications

Review Advanced lighting control systems

Interpret Title 24

Explain Daylighting

Explain Solar radiation

Appraise Site surveys and preplanning

Identify System components and configuration

Recognize Modules, and Arrays

Describe Inverters

Student Learning Outcomes:

Determine how to handle the jobsite in the most successful and profitable way, given a series of employee and job site situations. Demonstrate competence, proper safety techniques, and teamwork to install both residential and commercial solar installations, including the determination of the type and size of solar systems to comply with customer needs. Evaluate, understand and install devices under Title 24 requirements regarding energy efficient lighting control systems.

Units & Hours

Minimum Units:

4.0

Maximum Units

4.0

Total Hours

99.0

Electrical Safety and First Aid
AEL061:

1.5 Units

Provides related and supplemental instruction in Occupational Safety and Health Administration (OSHA) workplace requirements, the identification and use of safe work practices, coping with accidents and emergency situations, and one person CPR for inside wireman apprentices. American Red Cross certification available upon successful completion. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify required policies and procedures
Identify and use safe work practices
Recognize and properly react to emergency situations

Student Learning Outcomes:
- Safely and properly interpret and follow Occupational Safety and Health Administration (OSHA) requirements in workplace settings.
- Identify and perform the proper treatment for various sudden illnesses and injuries given a set of emergency workplace situations.
- Interpret policies and procedures, study skills and record keeping required in the Inside Wireman apprenticeship program.

Units & Hours
Orientation
AIN021:

1.5 - 2.0 Units

This course provides an overview of the construction industry, safety, and green building awareness. Upon successful completion, students will receive Occupational Safety and Health Administration (OSHA) 10 hour and Powder Actuated Tool certification, and United Brotherhood of Carpenters (UBC) Fall Protection qualification cards. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Define 10 construction safety regulations to complete OSHA 10 Hour Safety Certification
Match safety hazards and precautions for tools, equipment and PPE using manufacturers guidelines
Calculate measurements and accurately perform basic math functions for assigned tasks
Explain the importance of proper interpersonal communication and respectful conduct

Identify the proper procedures for using fall protection systems using UBC Construction Fall Protection Qualification guidelines

Comprehend trade terms, industry roles and responsibilities, and basic skills

Identify the Focus Four safety hazards and accident prevention practices

Select and safely use hand and power tools for assigned tasks

Set up and fire powder actuated tool to standards required for Operator Certification

Discuss trade applications, quality, and productivity practices

**Student Learning Outcomes:**
- Evaluate potential hazards and cite the appropriate accident prevention measures.
- Demonstrate safe operating procedures for selected tools and equipment.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5

**Total Hours**
36.0

**Safety and Health Certifications**

**AIN022:**

1.5 - 2.0 Units

This course covers the safe and appropriate use of scaffolds, aerial lift and fork lift equipment, and emergency response procedures. Upon successful completion, students will be issued American Red Cross First Aid and cardiopulmonary resuscitation (CPR) certification and United Brotherhood of Carpenters (UBC) scaffold, Aerial Lift and Forklift Qualification Cards. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

**AIN021 - Orientation**

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**
- Demonstrate the safe operation of the selected lift truck
- Identify lift truck components and applicable OSHA regulations
- Identify aerial lift components and applicable OSHA regulations
- Discuss health emergencies and name first aid and CPR techniques
- Properly stage, assemble, and disassemble selected scaffolding
Conduct lift truck safety inspections
Meet UBC criteria for the proper operation of the selected lift truck
Conduct scaffold safety and equipment inspections
Conduct aerial lift safety inspections
Match safety hazards and precautions for aerial lift equipment
Identify scaffold components and applicable OSHA regulations
Demonstrate the safe operation of two types of aerial lifts
Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly
Perform emergency response techniques and pass American Red Cross first aid, CPR and AED training tests
Match safety hazards and precautions for scaffold erection rules
Match safety hazards and precautions for lift truck equipment
Meet UBC criteria for the proper operation of aerial lift equipment

Student Learning Outcomes:
Apply the appropriate first aid and CPR/AED techniques for specific emergencies.
Identify scaffold regulations and correctly apply them to complete scaffold erection projects.
Identify and demonstrate safe operating procedures for aerial lift and Forklift equipment.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Insulation Basics
AIN023:
1.5 Units

This course provides an introduction into insulation as an energy efficiency technology and covers common types of insulating products and typical industry applications. Job planning, preparation and personal protective equipment will be included in performance exercises. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
- Demonstrate proper handling and attachment of selected faced and un-faced batt insulation
- Calculate material quantities in lineal and square footage
- Employ jobsite communication methods and production practices
- Describe respirators characteristics, and the importance inspection, fit tests and maintenance procedures.
- Discuss the value good communication has on worksite safety
- Install sound blankets at surface locations using information on project prints
- Utilize proper ventilation, and respiratory PPE
- Categorize types of commonly used insulation products
- Define residential/commercial building terms and applicable building codes
- Stress the importance of communication and identify the proper chain-of-command
- Discuss the impact of R-Values on energy efficiency
- Explain the importance of work efficiency and describe productivity tips
- Apply procedures for the safe and appropriate use of tools, materials and equipment
- Evaluate insulation scenarios and problem-solve inadequacies or possible air infiltration at the building envelope

Student Learning Outcomes:
- Interpret project prints to determine insulation methods, codes and materials.
- Employ proper procedures to place and secure batt insulation to wall cavities.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Construction Methods
AIN024:
1.5 Units

This course presents the theory, methods, and procedures required to frame basic walls. Hands-on practice using proper tool techniques and appropriate materials will enhance fundamental skill development. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN021 - Orientation

AND

Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Calculate horizontal and vertical layout using prints
Create a list of the materials and hardware used for wall framing
Construct, lift and connect framed walls using proper techniques
Execute wall layout using the 3,4,5 method, and complete plating-detail tasks
Identify basic wall framing components and material types
Plumb and align structures to 1/8" accuracy
Install required bracing to print specifications
Demonstrate safe and appropriate use of tools, materials and equipment

Student Learning Outcomes:
Demonstrate proficient use of basic math for construction preparation.
Interpret prints to determine wall elements, codes and materials.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Print Reading
AIN025A:
1.5 - 2.0 Units

This course introduces basic visualization skills needed for reading and interpreting construction prints. Views, elevations and the role of specifications as they relate to insulation details on prints will be discussed. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN021 - Orientation
AND
Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Locate beginning and ending measuring points and calculate dimensions
Locate beginning and ending measuring points and calculate dimensions
Define terms and categorize print according to specific characteristics
Use plans to accurately set up a construction layout
Interpret views to find component details and layout features

Complete written tests and final evaluations
Describe and use conventional lines, symbols and dimensioning methods
Label the standard views used in orthographic projection
Complete a detailed material list from print specifications (insulation)
Interpret views to find components details and layout features

Identify drawing methods used to create prints

Student Learning Outcomes:

Apply the principles of orthographic projection to visualize three-dimensional images from two-dimensional graphic representations.
Interpret prints to determine construction elements, size and arrangement.

Units & Hours

Minimum Units:

1.5

Maximum Units

1.5

Total Hours

36.0

Advanced Print Reading

AIN025B:

1.5 - 2.0 Units

In this course, students will analyze multi-view drawings to determine construction type, locate benchmark and building elements; review codes, references, and perform calculations for construction/insulation planning. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

AIN021 - Orientation

AND

Prerequisite

AIN022 - Safety and Health Certifications
Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Calculate material take-offs from representations in specific views and schedules
Read beam and column schedules and determine material
Record site location and orientation information from plot plan
Explain what is included in specifications and find selected topics.
Reference views and determine benchmark and reference dimensions on prints
Practice sketching views using orthographic method
Estimate time and labor for project based on print information
Interpret prints to identify project elements, code compliance and construction type
Find framing/insulation details on drawings

Student Learning Outcomes:
Apply the orthographic projection drawing method to sketch a three dimensional object in standard views.
Estimate costs based on construction elements and insulation methods found on prints.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Sound Control and Weatherstripping
AIN026:

1.5 Units

This course explores building construction systems and materials used to control sound. How sound travels and/or is absorbed by building materials will be presented. Practical experience will be gained during installation of wall systems, weatherstripping, and insulating materials designed to absorb, diffuse, disperse and/or control sound. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN021 - Orientation

AND

Prerequisite
AIN022 - Safety and Health Certifications
Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
- Identify adhesive characteristics and safety precautions
- Evaluate soundproofing scenarios and problem solve inadequacies
- Demonstrate proper tool techniques and correct use of adhesives
- List the various types and styles of weatherstripping products
- Compare noise reduction and noise absorption characteristics
- State the sound rating for selected types of soundproofing materials
- Interpret prints to determine materials requirements and fabrication details
- Install selected sound control systems and weatherstripping material to industry standards
- Describe terms, sound theory, and identify sound ratings
- Describe characteristics of various weatherstripping products and application methods

Student Learning Outcomes:
- Assess potential sound transmission at building envelope to determine the appropriate insulation and weatherstripping solution.
- Install insulation and weatherstripping to form suitable noise control for building.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Flexible Foam Insulation
AIN027:

1.5 Units

This course covers the identification of flexible foam materials, installation methods, and industry applications. The procedures and tool techniques used to fabricate and install several types of equipment covers using flexible foam insulation will be presented and practiced shop floor exercises. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite

AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable: 
Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Prepare and install materials based on print specifications and industry standards
List steps for flexible foam installation and inspection procedures
Interpret prints to determine materials requirements and fabrication details
Describe thermal principles, terms, codes, methods, and common applications
Identify open/closed cell foam properties and state the product thermal values
Demonstrate proper tool techniques and correct use of adhesives
List steps for flexible foam fabrication procedures
Identify adhesive characteristics and safety precautions
Explain the steps used to fabricate flexible foam equipment covers

Student Learning Outcomes:
Interpret prints to determine the proper application of insulation materials.
Create patterns and fabricate selected types of equipment covers.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Green Building and Weatherization
AIN031:
1.5 Units

This course explains in detail building envelope science. Audit procedures, as well as testing and reporting mechanisms used to measure inefficiencies will be covered. Training will provide novice workers with fundamental skills to properly install the beneficial ["green"] and cost effective energy efficient retro-fits for residential buildings. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN021 - Orientation

AND

Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Prepare and discuss audits reports and retro-fits recommendations
Observe proper procedures for recognition and safe removal/control of hazardous materials
Discuss energy efficient retro-fits; renewable and local materials
Explain the tenants of sustainable construction practices and related green building/products rating systems
Inspect and evaluate installed materials and components
Analyze Energy Conservation Codes, including any State Green Building Code Discuss renewable, "local" and "green rated materials
Perform audits in both as found and post retro-fit condition
Compare and contrast and cost effective retro-fit measures
Define sustainable and efficient use of energy; technology and terminology
Install retro-fit measures using the proper techniques and procedures
Select and utilize the correct levels of personal protective equipment
Explain how testing equipment is used to collect pre/post audit measurements
Comprehend insulation, window, Heating, Ventilation, and Air-Conditioning (HVAC), and lighting ratings

Student Learning Outcomes:
Assess site conditions and select retro-fit materials based on efficiency levels.
Install building components to meet green codes and audit energy efficiency goals.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Specialty Insulation
AIN032:
1.5 Units

This course describes insulation systems materials and installation methods that usually performed by specialty contractors. Instruction will include refrigeration, curtain walls, plenums, access hatches, and spray systems. Students will calculate and prepare materials, and utilize the proper installation techniques during shop exercises. Open Entry/Open Exit.

Requisites

Prerequisite
AIN021 - Orientation
AND
Prerequisite

AIN022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Explain how typical insulating techniques and procedures are adapted to specialty insulation projects.
Describe the components prefabricated panels, curtain walls and plenums
Describe the inherent characteristics and insulation methods associated with various specialty applications
Discuss façade metal framing structure and function of curtain wall
Install selected specialty insulation systems and weatherstripping material to meet industry standards
State the purpose of thermal insulation and saffing at curtain walls and plenums
Explain the purpose and use prefabricated panel system, curtain walls, and plenums
Interpret prints to determine materials requirements and fabrication details
Evaluate insulation scenarios using building codes to problem solve stated issues
Demonstrate proper tool techniques and correct use of adhesives

Student Learning Outcomes:
Utilize project plans to identify components, determine appropriate insulation methods and materials.
Use the proper procedures to install specialty insulation to print specifications.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Energy Audit

AIN033:

1.5 Units
This course covers the building envelope-science, audit procedures, testing and reporting mechanisms used to measure inefficiencies and identify beneficial and cost effective energy efficient retro-fits for residential buildings. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

AIN021 - Orientation
Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Explain the tenants of sustainable construction practices and related green building/products rating systems
Identify industry standard for whole house audits and reports; applicable codes
Discuss how testing equipment is used to collect pre/post audit measurements
Prepare and discuss audits reports and retro-fits recommendations
Comprehend insulation, window, HVAC (heating, ventilating, and air conditioning) and lighting ratings
Define green building and whole house science terminology
Identify common building components that lead to energy losses
Perform audits in both as found and post retro-fit condition

Student Learning Outcomes:
Assess residential energy efficiency using whole house testing approach.
Record and analyze building envelope data; report cost effective retro-fits.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
40.0

Firestop/Fireproofing Procedures
AIN034:
1.5 Units
This course will focus on the correct methods, technical skills, and firestop/fireproofing materials required in the work place today. Strict building codes mandate the importance of certified training. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN021 - Orientation
Prerequisite

AIN022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:

Explain methods of controlling and fighting fires

Describe building construction elements where sealing is necessary to prevent fire spreading

Describe the functions of three different firestop/fireproof technologies

Utilize selected materials to form a firestopping seal

Identify the characteristics of a firestop/fireproof system

Discuss the standards and testing methods for firestop/fireproof systems

Utilize selected materials to form a firestopping seal

List typical firestop/fireproof system failures and abatement solutions

Describe product firestop and fireproofing characteristics and application method

Evaluate application method, tool and equipment operation and maintenance

List typical firestop/fireproof system failures and abatement solutions

Student Learning Outcomes:

Articulate the importance of fire and building codes applicable in firestop and fireproofing systems.

Apply the proper firestop and fireproofing methods and application techniques.

Units & Hours

Minimum Units:

1.5

Maximum Units

1.5

Total Hours

40.0

Infiltration and Moisture Control

AIN035:

1.5 Units

This course covers air infiltration and how it affects the energy efficiency of a building, as well as the techniques, strategies and insulation installation skills designed to prevent energy loss, and damage due to condensation and infiltration described as “moisture build up” inside the building envelope. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
AIN021 - Orientation

AND

Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Describe potential and kinetic energy and define “R” values and British thermal unit’s (BTU)
Demonstrate safe and appropriate use of tools, materials and equipment
Identify safety practices and use of personal protection equipment (PPE)
Describe the characteristics of various sealing methods and products
Evaluate insulation scenarios and problem-solve inadequacies or possible air infiltration at the building envelope
Explain the difference between conduction, convection and radiant heat
Compare calculated “R” values with specific environment “R” value recommendation
Install selected heat transfer and infiltration systems
Calculate BTU for selected examples
Describe the cause and affect for air infiltration and moisture issues at entry or building envelope contact points
Detect air leaks and apply proper sealing/weatherstripping materials

Student Learning Outcomes:
Communicate the effects of air movement in respect to moisture migration, and discern potential issues for air and vapor barrier effectiveness.
Determine and select barrier type and insulation to form suitable thermal boundary for building components.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
40.0

Loose Fill and Spray Insulation
AIN036:
1.5 Units
This course presents the differences between batt, ridged, loose-fill, and spray types of thermal insulation. The product distinctions, thermal advantages, and variation of typical installation practices will be covered. An in depth discussion of safety precautions and operating procedures for spray equipment and blow rigs (trucks) used in loose fill applications will be presented. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

AIN021 - Orientation

AND

**Prerequisite**

AIN022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Identify terms and explain thermal characteristics for building energy efficiency and related codes
- Use proper care and maintenance procedures for cleaning and storing equipment
- Calculate materials, stage product and install cellulose insulation to project specifications.
- List and name the parts of a typical blow rig; spray equipment
- Classify and describe the characteristics for the selected insulation types
- Identify all safety and equipment procedures for rigs, vacuums, feeders and sprayers
- Install selected spray and foam insulating products to surfaces indicated on project prints
- Demonstrate safe operation of selected blow rigs, vacuums and feeders; sprayer

**Student Learning Outcomes:**

- Differentiate between loose-fill and spray foam materials and application methods.
- Demonstrate proficiency in the use of spray insulation equipment.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Rigid Foam and Cellular Glass Insulation Installations**

AIN037:

1.5 Units
This course covers the identification of rigid and cellular glass materials, installation methods, and industry applications. The proper handling and installation techniques for molded and extruded polystyrene foam boards, and cellular glass insulation will be stressed during shop exercises. Open Entry/Open Exit.

**Requisites**

**Prerequisites:**

AIN021 - Orientation

AND

AIN022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- List steps for handling rigid foam and cellular glass for installation
- Explain expansion/contraction of joints and vapor stops
- Interpret prints to determine materials requirements and installation details
- Demonstrate proper tool techniques and correct use of mastics
- Identify open/closed cell foam properties and state the product thermal values
- Prepare and install materials based on print specifications and industry standards
- Explain the steps used to fabricate rigid foam and cellular foam equipment covers
- Discuss temperatures; moisture effects; stress cracking;
- Describe thermal principles, terms, codes, methods, and common applications
- List the steps used to install rigid and cellular glass insulation
- List steps for rigid foam and cellular glass installation and inspection procedures
- Identify adhesive characteristics and safety precautions
- Identify open/closed cell foam properties and state the product thermal K values

**Student Learning Outcomes:**

- Apply thermal principles to assess the suitability of rigid and cellular glass insulation based on specific project information.
- Employ the proper procedures to fabricate and install selected rigid and cellular glass insulation to industry standards.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units:**

1.5

**Total Hours:**

40.0
S/B Crew Lead Training
AIN041:

2.5 Units

This course covers the supervisory and leadership skills required for professional development, including the typical work processes, communication methods, motivational concepts, and problem-solving techniques, that when employed, result in the efficient and effective management of construction projects. Open Entry/Open Exit. Former Title: Apprenticeship Insulation 041, Supervisory Training (2020)

Requisites
Requisites:
Prerequisite
AIN021 - Orientation

AND

Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify and list the responsibilities associated with lead-man management's role

Describe the contributing factors and personal attributes that motivate individuals to want leadership

Record ways to improve communication and address diversity with management and others

Practice a systematic approach to developing problem solving skills

Complete productivity analysis, scheduling and project documentation worksheet

List ways to carry out quality control measures

List ways to carry out quality control measures

Conduct a mock job site safety meeting

Student Learning Outcomes:
Developed and create a plan for scheduling crew work assignments.
Produce an accurate project timeline and coordinate material orders.
Apply tools for effective and clear communication in a diverse work environment.

Units & Hours
Tool/Equipment Applications
AIN043:

1.5 Units

This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and aerial lift safety and operating procedures will also be covered. Upon successful completion, interior systems students will be issued United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AIN021 - Orientation

AND

Prerequisite
AIN022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Apply the appropriate tool/equipment manipulative techniques to complete assigned interior systems tasks
Identify drywall, finishing, and acoustical ceiling measuring techniques for accuracy
Utilize proper fastener placement and driving techniques
Practice using the math techniques presented to lay out materials
Conduct aerial lift safety inspections
Identify boom/scissor aerial lift components and applicable OSHA regulations
Meet UBC criteria for the proper operation of aerial lift equipment
Math Operations: Conversion, formulas, calculating quantities
Match safety hazards and precautions for scaffold erection procedures
Assignments: Measuring, material calculations, and layout techniques for various interior systems/drywall applications
Identify drywall, finishing and acoustical ceiling material preparation and layout techniques for productivity and accuracy
Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly
Match safety hazards and precautions for aerial lift equipment operation
Properly stage, assemble, and disassemble selected scaffolding
Select appropriate hand and power tools/equipment for assigned tasks
Select appropriate math operations to measure and calculate materials
Demonstrate the safe operation of two types of aerial lifts
Identify scaffold components and applicable Occupational Safety and Health Administration (OSHA) regulations
Conduct scaffold safety and equipment inspections

Student Learning Outcomes:
Identify and demonstrate safe operating procedures for aerial lift truck equipment.
Demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.
Assess interior systems construction tasks to determine the appropriate tools, equipment and construction methods.

Units & Hours
Period 1
AME021:
4.0 - 4.5 Units
Provides the related and supplemental instruction required for the first level Maintenance Electrician Apprentice in mathematics, industrial safety and health, using hand and portable power tools, basic measurements, basic electricity, and basic mechanics. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Demonstrate knowledge of safety practices with machinery and electricity
Practice safe techniques when using hand tools
Identify hazards in different work environments
Recognize the required PPEs required by MWD safety policy
Demonstrate safe use tools such as electric drills, hammers, saws, screwdrivers, grinders, shears, and sharpening tools
Identify correct tool and use according to application
Determine the best practice of efficiency using tools
Calculate problems using trigonometry and algebra
Identify the correlation of math as a necessity when working with mechanics and electricity
Apply the math to measurements
Recognize the risks and precautions required with electricity
Calculate generated leverage when using mechanical advantages with torque, lever, screw, and pulleys
Describe the required lubrication necessary for different bearings
Identify the correct bearing required for different applications

Student Learning Outcomes:
Accurately measure items in the plant using various measuring instruments.
Recognize, identify, and follow required industrial health and safety practices while using the personal protective equipment, hand and power tools in performing operations and maintenance tasks.
Apply, manipulate, and perform basic electrical and mechanical math calculations and concepts to determine equipment conditions in the plant, given a sample mechanical/electrical component.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0
Period 2
AME052:

4.5 Units

Provides the related and supplemental instruction required for the second level Maintenance Electrician Apprentice in basic principles of electricity, Direct Current (DC) circuit components and calculations, electric power and energy, batteries, electromagnetism, electrical safety in the workplace (NFPA 70E), electrical protective devices, introduction to industrial rigging for electricians, and introduction to the National Electric Code (NEC). Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.5

Learning Outcomes

Course Objectives:
Recognize electrical hazards; importance of grounding and bonding; and identify fuses and circuit breakers

Practice electrical safety by demonstrating proper use of Personal Protective Equipment (PPE); fall protection devices; lockout/tagout procedures; National Electric Code (NEC); and Standard for Electrical Safety in the Workplace (NFPA 70E)

Describe principles of electricity

Identify properties of circuit components, conductors, and insulators, and resistors.

Describe principles of electron theory and flow.

Use Ohm’s Law to calculate voltage, current and resistance.

Describe basic principles of static electricity; and solar and thermal energy.

Apply the fundamentals of magnetic fields and the use of electromagnets.

Identify the different types of chemical cells.

Practice proper application, charge, and maintenance of lead-acid, nickel-alkaline, and nickel-cadmium batteries.

Maintain service and storage records for batteries.

Recognize the fundamentals of DC circuits.

Practice techniques to solve simple Series, Parallel and Series-Parallel circuits.

Identify electrical symbols.

Discuss basic electrical diagrams.

Identify machine parts from machine drawings

Identify basic rigging equipment, calculate loads, calculate angle loading of rigging devices

Demonstrate basic rigging practices, bridge crane operations and signals

Student Learning Outcomes:
Manipulate the fundamental components of volts, ohms, and amperes to solve circuit parameters.
Identify and interpret symbols used for equipment and component identification on circuit diagrams, schematics, and drawings.
Properly operate, maintain, and store batteries safely.
Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
117.0

Period 3
AME053:

4.0 - 4.5 Units

Provides the related and supplemental instruction required for the third level Maintenance Electrician Apprentice in reading blueprints, schematics, symbols, drawings and diagrams; rigging principles and practices for electricians; AC/DC equipment and controls; AC generation, transmission and distribution; over-current protective devices; and continuing education with the NEC and NFPA 70E Workplace Electrical Safety. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Demonstrate proper application and operation of various electrical test instruments to include: voltmeter, ammeter, wattmeter, ohmmeter, and megohmmeter

Discuss AC metering, split-core ammeter, use of current and potential transformers

Demonstrate use of multimeters and oscilloscopes

Apply principles of AC generation; transmission and distribution; and troubleshooting of same

Read time-current curves

Demonstrate coordination of AC power distribution

Distinguish between AC and DC circuits

Describe AC power relationships in single-phase and three-phase circuits

Use vectors to solve AC circuits

Calculate impedance in circuits containing inductance and capacitance.

Apply principles of transformer maintenance

Identify power applications in industry

Recognize types of DC relays, AC relays, and AC/DC controllers

Demonstrate knowledge of overspeed and overload protection and AC/DC maintenance practices.
Identify and select proper fuse, breaker and relay for protection
Understand GFCI circuits
Discuss use of grounded conductors and branch circuits
Calculate arc-flash and incident energy

**Student Learning Outcomes:**
- Identify, install, maintain, modify, and troubleshoot control equipment in both Alternating Current (AC) and Direct Current (DC) circuits used for electrical industrial processing systems.
- Manipulate relays, fuses, and breakers for motor control and over-current protection
- Operate electrical measuring and metering instruments.
- Apply principles of AC power generation, transmission, and distribution.
- Distinguish between and solve various types of circuits.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units:**
4.0

**Total Hours:**
99.0

**Period 4**
**AME054:**

4.5 Units

Provides the related and supplemental instruction required for the fourth level Maintenance Electrician Apprentice in the application of code requirements; intermediate electricity; single phase motors; three phase systems; AC/DC equipment control and generators; and electrical troubleshooting skills. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
4.5

**Learning Outcomes**

**Course Objectives:**
- Recognize types of generators
- Discuss operating characteristics of motors
- Explain DC armature principles, maintenance and repair
- Troubleshoot AC/DC motors, a motor starter, and power and control components
- Troubleshoot single-phase and three-phase motors
- Operate test equipment for troubleshooting
- Demonstrate on-delay and off-delay troubleshooting
Manipulate limit switches, float switches, pressure switches, and sequence control
Recognize different applications of technical drawings and diagrams
Determine sequence of operations using schematic diagrams
Practice communication within the trade when troubleshooting
Identify branch circuits and feeders
Identify unmarked leads on three-phase delta and Y-connected motors
Build diagrams and single-line diagrams
Apply intermediate-level troubleshooting fundamentals and techniques
Calculate various temperatures between Fahrenheit and Celsius
Demonstrate over-current protection and grounding
Apply the National Electrical Code (NEC) to maintenance involving motors; heating, ventilation, air conditioning and refrigeration (HVACR); generator; and transformer installations
Comply with Occupational Safety and Health Administration (OSHA) standards and Metropolitan Water District (MWD) policies

Student Learning Outcomes:
- Apply the theory of three-phase motors to troubleshoot and maintain pumps, sump pumps, machine-tool equipment, and other power conversion equipment.
- Apply the theory of single phase motors to troubleshoot and maintain chemical feed pumps, sump pumps, machine-tool equipment, and room ventilation fans.
- Select, install and troubleshoot industrial electrical systems using the principles of coordinated sequence of overcurrent protection and the rules of the National Electrical Code (NEC).

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
117.0

Period 5
AME055:

4.0 - 4.5 Units

Provides the related and supplemental instruction required for the fifth level Maintenance Electrician Apprentice in the application of code requirements, variable frequency drives (VFD), VFD faults and troubleshooting, input/output devices, semi-conductors, and power supplies. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0
Learning Outcomes

Course Objectives:
- Demonstrate various techniques to measure current
- Determine wire type and bundle methods for various applications
- Identify and explain application of circuit components
- Describe the components and applications of variable frequency drives (VFD)
- Demonstrate speed and torque controls for VFD's
- Wire and program VFD's
- Perform fault diagnosis and troubleshoot VFD
- Discuss the fundamental principles of semi-conductors, computers and power supplies
- Demonstrate proper application of codes, instruments, and techniques for troubleshooting electrical problems

Student Learning Outcomes:
- Install, modify, maintain, and troubleshoot Variable Frequency (Speed) Drives (VFDs).
- House, support, transmit and terminate basic circuits.

Units & Hours

Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
99.0

Period 6

AME056:
4.5 Units

Provides the related and supplemental instruction required for the sixth level Maintenance Electrician Apprentice in the application of code requirements, introductory programming, programmable logic controllers (PLC), and advanced electricity. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.5

Learning Outcomes

Course Objectives:
- Describe process controls, control loops, data transmission and computers in process controls
- Apply fundamentals of PLC programming and basic troubleshooting techniques
- Define and discuss event sequencing, timer controls, and counter controls
Demonstrate competency in Logix Pro
Demonstrate Karnaugh Map for ladder logic
Apply practical code – capacitors, resistors, reactors, hazard classifications and equipment greater than 600V
Discuss mechanical and solid state switches
Discuss applicable codes for solar installation, fire pumps and generators
Discuss emergency systems

Student Learning Outcomes:
- Install, program and troubleshoot programmable logic controllers (PLC).
- Apply practical code to hazard classification and equipment greater than 600V.

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
117.0

Period 7
AME057:

4.0 - 4.5 Units
Provides the related and supplemental instruction required for the seventh level Maintenance Electrician Apprentice in water treatment plant and water distribution system operations and advanced electricity and electrical systems. Open Entry/Open Exit.

Requisites
Requisites:
None
Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
- Calculate flows, grades, elevations, pressure, and feed rates in water treatment plants and water distribution systems.
- Identify and apply distribution system configuration, components and controls
- Identify associated regulatory procedures as they apply to operations and maintenance in water treatment and distribution
- Apply proven skills to apply single and three-phase circuits – vector relationship for current, voltage and power factor
- Apply commercial and industrial transformers appropriately
- Demonstrate advanced troubleshooting of AC motors, generators, DC circuits, and machinery
- Discuss energy savings through the use of energy-efficient electric motors, properly sizing existing motors, and effective process control
- Perform hazard analysis
Demonstrate testing resistance of line and load circuits to ground
Perform fuse check
Describe the three phase system design
Describe the single phase system design
Describe the high leg system design
Discuss considerations in lighting design
Troubleshoot lighting systems
Identify types and functions of luminaries, lamps, and lamp holders
Identify types of lighting circuits (loop-in, junction box)

Student Learning Outcomes:
- Identify, operate, and maintain the process of wholesale water treatment and delivery through component recognition, configuration and control while adhering to Federal and State regulations for delivering water to the public.
- Design, install, maintain and troubleshoot electrical systems using vector analysis as a relations of dependent components acting with differing time relations.
- Calculate flows, grades, elevations, pressure, and feed rates in water treatment plants and water distribution systems.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
99.0

Period 8
AME058:

4.5 Units
Provides the related and supplemental instruction required for the eighth level Maintenance Electrician Apprentice in the application of code requirements, advanced electricity and electrical systems, maintenance and operations procedures, project planning, layout, estimating and scheduling. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.5

Learning Outcomes
Course Objectives:
Demonstrate advanced application of industry codes and standards in maintenance and operations procedures
Demonstrate safe operation of testing equipment
Identify hazardous locations
Prove advanced competency in equipment sizing
Prove advanced competency in over-current protection; and grounding and bonding.
Develop a written rough draft of Project Plan
Determine a logistics plan for project
Determine control of labor for project
Determine a plan to maximize assets and materials for project
Determine method to control budget for project
Prepare a final written Project Plan

**Student Learning Outcomes:**

- Perform a battery of electrical testing to maintain the serviceability of electrical systems and equipment with proven competency applying industrial safety codes and standards for electricity.
- Develop a project plan that includes layout of task details and schedule; estimate of materials, equipment, and labor required; research and implementation of special techniques; and coordination with other crafts for a hypothetical project involving comp

**Units & Hours**

**Minimum Units:**
4.5

**Maximum Units:**
4.5

**Total Hours**
117.0

**Orientation**

**AMF021:**

1.5 - 2.0 Units

This course provides an overview of the construction industry, safety, and green building awareness. Upon successful completion, students will receive Occupational Safety and Health Administration (OSHA) 10 Hour and Powder Actuated Tool Certifications, and United Brotherhood of Carpenters (UBC) Fall Protection Qualification Card. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an applied understanding of measuring and layout of modular furnishings.
- Demonstrate an applied understanding of power actuated tool operation.
Demonstrate an applied understanding of occupational safety and health matters with regard to modular furnishings installation.

Demonstrate an applied understanding of introductory trade terms, apprenticeship and career advancement.

Demonstrate an applied understanding of workplace environments and expected behaviors therein.

Demonstrate an applied understanding of safety precautions and operation of hand and power tools.

**Student Learning Outcomes:**

- Evaluate potential hazards and cite the appropriate accident prevention measures.
- Demonstrate safe operating procedures for selected tools and equipment.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5

**Total Hours**
36.0

**Safety and Health Certifications**

**AMF022:**

1.0 - 1.5 Units

This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and equipment operating procedures will also be covered. Financial and life skills will be presented to help them survive in the construction industry. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Scaffold Erector-Welded Frame Qualification Card. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
1.5

**Learning Outcomes**

**Course Objectives:**

- Create a financial worksheet and sample budget
- Conduct scaffold safety and equipment inspections
- Meet UBC criteria for erecting and dismantling scaffolds correctly
- Properly stage, assemble, and disassemble selected scaffolding
- Utilize proper fastener placement and driving techniques
- Match safety hazards and precautions for scaffold erection procedures
- Apply the appropriate manipulative techniques for projects
- Practice using the math techniques presented to layout materials
- Identify scaffold components and applicable OSHA regulations
Select appropriate math operations to measure and calculate materials
Select appropriate hand and power tools/equipment for assigned tasks
Identify the effect of economic cycles on construction careers

Student Learning Outcomes:
- Apply the appropriate first aid and CPR/AED techniques for specific emergencies.
- Demonstrate proficiency with various tools and equipment appropriate for the assigned construction tasks.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
40.0

Modular Cabinets, Doors and Drawers
AMF023:

1.5 Units
This course details cabinetry fabrication from design and function through the complete production process. Students will use the methods and procedures presented to build a typical base unit. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
- Identify terms, components and construction procedures
- Assemble cabinet components according to drawing specifications
- State the classes and sizes of typical modular base and wall cabinets
- Correctly use hand and power saws to construct components
- Demonstrate accurate measuring and cutting of various cabinetry joints
- Complete attachment of hardware and install doors to base unit
- Calculate materials and cut list dimensions
- Inspect and adjust door and drawer fit and function
- List the common types of wood used to make cabinets
- Demonstrate proper cutting and assembly of door and drawer components
- Interpret project shop drawings to determine components
Use hand and power saws correctly to construct components

**Student Learning Outcomes:**
- Interpret shop drawings to determine base cabinet components and dimensions for construction purposes.
- Fabricate and assemble a typical door/drawer style base cabinet to industry standards.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours:**
45.0

**Tool/Equipment Applications**

**AMF023C:**
1.5 Units

This course promotes hand/power tool and equipment skill development for various construction applications used in the installation of modular furnishings. Scaffold building and Aerial lift safety and operating procedures will also be covered. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

AMF021 - Orientation

**AND**

**Prerequisite**

AMF022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**
- Demonstrate the safe operation of two types of aerial lifts
- Utilize proper fastener placement and driving techniques
- Practice using the mathematic techniques presented to complete layout of products and materials
- Identify boom/scissor aerial lift components and applicable OSHA regulations
- Match safety hazards and precautions for aerial lift equipment operation
- Select appropriate mathematic operations to measure and calculate materials
- Conduct scaffold safety and equipment inspections
Apply the appropriate tool/equipment manipulative techniques to execute assigned modular furnishing installation tasks

Meet UBC criteria for the proper operation of aerial lift equipment

Conduct aerial lift safety inspections

Properly stage, assemble, and disassemble selected scaffolding

Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly

Identify scaffold components and applicable Occupational Safety and Health Administration (OSHA) regulations

Select appropriate hand and power tools/equipment for assigned tasks

Match safety hazards and precautions for scaffold erection procedures

**Student Learning Outcomes:**

- Identify and demonstrate safe operating procedures for aerial lift truck equipment.
- Demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.
- Assess modular furnishing design plan to determine the appropriate tools, equipment and installation methods to apply.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Introduction to Modular Furnishing**

**AMF024:**

1.5 Units

This course introduces the students to modular furnishing design concepts. Students will identify the elements that are incorporated into a basic educational design for functionality, productivity and durability. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Describe the purpose of function of elements in design examples
- Describe workplace considerations and site specific requirements and restrictions
- Install classroom and storage components using correct sequence and procedures
- List the types and functions of UL listed electrical components
- Conduct pre-job preparation and coordinated planning
Form an industry perspective based on past, current and transformative designs
Demonstrate the proper care and maintenance of finished surfaces
Recognize manufactured products’ characteristics and applications
Evaluate the sustainability and environmental characteristics of industry products
Install lab stations and common area furnishings to project specifications
Utilize project plans to determine measurements and layout configuration
Apply inspection criteria for installation quality control
Recognize types of components commonly used the modular furnishing industry
Recognize manufactured products’ characteristics and applications
Execute wall layout using geometric 3,4,5 method, and complete detail tasks

Student Learning Outcomes:

State the purpose and function of various elements of modular furnishing product designs.
Assemble and install selected components for basic design configurations used in educational applications.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Educational and Seismic Installations
AMF025:

1.5 Units

This course showcases modern modular furnishing designs for creating interactive educational spaces. In addition, students will be presented with state and local seismic codes, and those that are site specific for schools, hospitals and/or required by building engineers. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:

Explain the needed and implementation of seismic safety controls
Assess seismic codes and site specific requirements on project plans
Evaluate modular furnishing products for “flexibility” and “productivity” value based on criteria provided for defined spaces
Inspect and verify seismic installations meet codes and requirements
Complete pre-job checklist
List pros and cons of creating learning spaces in "common areas"
Identify installation and inspection criteria for various types of seismic restraints
Install modular components according to design plan
Discuss the modernization of manufacturers’ design concepts for creating collaborative learning environments in educational facilities
Utilize project plans to determine multi-area configuration and layout

**Student Learning Outcomes:**
- Assess the adaptability, and productivity characteristic of various modular furnishing products for suitability in modern educational designs.
- Assemble and install selected components for collaborative learning space configurations, and seismic applications.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours**
45.0

**Hospital Modular Installations**

**AMF026:**

1.5 Units

Modular furnishing design concepts for hospital environments will be a focus of this course. Students will identify job planning and “best practices” procedures to facilitate special requirements for installations in the healthcare industry. Multi-Station layouts, components, specialty accessories, and finishes will be included. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**
- Discuss the types of components utilized in the medical industry
- List the types and functions of UL listed electrical components
- Assess project criteria for professional installation
- Use proper methods and materials to seal heating, ventilation and air conditioning (HVAC) and work area
- Discuss types of components commonly used the modular furnishing industry
- Demonstrate the proper preparation and installation of hard and soft walled enclosures
Inspect and verify layout and installations meet applicable codes and restrictions

Describe the purpose of function of elements in design examples

Complete the layout and installation of components for designated facility purpose

Identify hazardous materials and typical activities and paths leading to possible cross contamination

Identify use and functionality of layouts for nursing and laboratory stations

Interpret project plans to determine placement for components in design

Student Learning Outcomes:

State the importance of infection control and describe the protection methods and safe work practices for installations in hospital facilities.

Assemble and install selected components for Multi-Station design configurations used in hospital applications.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Wall and Overhead Attachments

AMF029:

1.5 Units

This course will highlight the use of various wall and overhead attachments and explain how they are integrated into the modular designed space. Students will identify the wall and overhead elements that are incorporated into a multi-station design using selected manufacturers’ products. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:

Calculate linear measurements and convert units of measure

Identify appropriate repairs based on damage assessment

Discuss wall and overhead assembly methods

Discuss quality controls for best installation practices

Identify type and function of wall and overhead attachments

Complete assigned repairs using industry standards

List material types and finishes for panels
Identify wall panel assembly methods
Install selected panel types
Complete basic component installation

**Student Learning Outcomes:**
- Perform the proper calculations and to demonstrate competence, safety techniques, and teamwork to locate, install, align, connect, and level the walls in specific modular furnishing projects.
- Perform the proper calculations and to demonstrate competence, safety techniques, and teamwork to locate, install, align, connect, and level the overhead attachments in specific modular furnishing projects.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units:**
1.5

**Total Hours:**
40.0

**Crew Lead Customer Service Training**
**AMF030:**

2.5 Units

This course covers the supervisory and crew leadership skills required for professional development in the modular furnishing industry. An emphasis will be placed on the importance of providing excellent customer service. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

Transferable:
Not transferable

**Weekly Lecture Hours:**
2.5

**Learning Outcomes**

**Course Objectives:**
- Describe methods and techniques used to motivate others
- List the duties of a supervisor and the differences in leadership styles
- Explain procedures for effective cost and production control
- Use job site scenarios to complete forms and reports
- Use job site scenarios to provide solutions to customer service and project needs during role play exercises
- Analyze selected problem solving scenarios
- Employ problem solving skills to improve safety and prevent accidents
- Employ problem solving skills to improve quality and productivity
- Use job site scenarios to complete work assignment forms and productivity reports
- List the ways supervisors, management and customers communicate
Use job site scenarios to complete forms and reports

Discuss management policy as a tool to minimize and/or eliminate project losses

Identify and explain the purpose of forms used in the work flow process

Discuss methods for setting goals and developing action plan

Discuss how various factors or conditions can increase or decrease motivation

**Student Learning Outcomes:**

- Explain the characteristics and qualities of an effective leader and provider of customer service
- Demonstrate leadership skills to solve problems and control project productivity

**Units & Hours**

**Minimum Units:**

2.5

**Maximum Units:**

2.5

**Total Hours:**

45.0

**S/B Modular Pre-Cut Glass: Handling and Installation**

**AMF031:**

1.5 Units

This course covers the applications, methods, and procedures required to install modular glass products. Learn hands-on practice using proper tools, product handling techniques and appropriate sequence of installation will provide students with fundamental skills. Open Entry/Open Exit. Former Title: Modular Glass: Handling and Installation (2020)

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

- Identify components used in glass walls, panels and door openings
- State the codes and standards associated with installing modular glass products
- Determine project configuration and layout using project plan and elevation views
- Calculate horizontal and vertical layout using dimensions located on prints
- Complete an material estimate and component take-off
- List steps in pre-job site visit and discuss project coordination/planning
- Use proper lifting and safe transport procedures for glass products
- Execute wall layout using geometric 3,4,5 method, and complete detail tasks
- Prepare aluminum track and cut to size based on project dimensions
- Recognize manufacturers’ product characteristics and applications
Employ correct procedures for installation of workstation inserts and pivot doors to print specifications

Describe static and operable partition wall types

Employ proper sequence to install full height partition walls to print specifications

**Student Learning Outcomes:**
- Identify modular (pre-cut) glass wall types and product installation specifications.
- Complete layout and installation for various types of glass partition wall to industry standards.

**Units & Hours**

**Basic Framing and Retro-Fits**

**AMF032:**

1.5 Units

This course presents the methods and procedures required to frame basic walls for retro-fit of modular interior spaces. Hands-on practice using proper tool techniques and materials will provide experience in the framing and finishing of a basic wall. Open Entry/Open Exit.

**Requisites**

Requisites:

None

**Transferability & General Education Options**

Transferable:

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**
- Install required bracing to print specifications
- Discuss retro-fit and repair considerations
- Demonstrate safe and appropriate use of tools, materials and equipment
- Create a list of the materials and hardware used for wall framing
- Plumb and align structures to 1/8” accuracy
- Identify basic wall framing components and material types
- Calculate horizontal and vertical layout using prints
- Execute wall layout using the 3,4,5 method, and complete plating-detail tasks
- Construct, lift and connect framed walls using proper techniques

**Student Learning Outcomes:**
- Demonstrate proficient use of basic measurements for construction preparation.
- Interpret prints to construct framed walls, using appropriate codes and materials.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5
Total Hours
40.0

Solid Surface and Stone Countertops
AMF034:

1.5 Units

This course covers both basic and advanced assembly and installation techniques for solid surface, natural stone, and manufactured materials. Various products, designs, materials, accessories, and safety considerations will be included. Students will use the procedures presented to fabricate countertops with backsplash and create a design inlay. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMF021 - Orientation

AND

Prerequisite
AMF022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify solid surface terms, materials, hardware and special tooling.

Interpret prints and plan views to find dimensions, and identify materials for job planning and construction.

Calculate dimensions, and apply math formulas to determine materials, create cut lists, and to verify angle layouts.

Select and use the appropriate layout techniques and tools to mark material for locating joints.

Accurately measure and cut materials to lengths per countertop specification.

Assemble and properly fasten cut members to form countertop joints.

Install and securely connect countertops using proper procedures to complete project according to plan.

Assemble and properly fasten cut material for edge, backsplash and inlay specifications.

Install and securely connect edge, backsplash and inlay design using the proper procedures.

Demonstrate proper use of equipment and implementation of safety precautions.

Student Learning Outcomes:
Analyze prints to determine design and stone/solid surface material requirements.

Fabricate and install stone/solid materials to surfaces indicated in specifications.

Units & Hours
Period 1
AMM021:

3.0 - 4.5 Units
Provides the related and supplemental instruction required for the first level Maintenance Mechanic Apprentice in mathematics, industrial safety and health, hand and portable power tools, basic measurements, basic electricity, and basic mechanics. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

- Calculate problems using trigonometry and algebra
- Identify the correlation of math as a necessity when working with mechanics and electricity
- Recognize the risks and precautions required with electric
- Demonstrate knowledge of safety practices with machinery and electricity
- Practice safe techniques when using hand tools
- Identify hazards in different work environments
- Recognize the required PPEs required by MWD safety policy
- Demonstrate safe use tools such as electric drills, hammers, saws, screwdrivers, grinders, shears, and sharpening tools
- Identify correct tool and use according to application
- Determine the best practice of efficiency using tools
- Apply the math to measurements
- Calculate generated leverage when using mechanical advantages with torque, lever, screw, and pulleys
- Describe the required lubrication necessary for different bearings
- Identify the correct bearing required for different applications

**Student Learning Outcomes:**

- Accurately measure items in the plant using various measuring instruments.
- Recognize, identify, and follow required industrial health and safety practices while using the personal protective equipment, hand and power tools in performing operations and maintenance tasks.
- Apply, manipulate, and perform basic electrical and mechanical math calculations and concepts to determine equipment conditions in the plant, given a sample mechanical/electrical component.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

99.0

**Period 2**
AMM022:

3.0 - 4.5 Units

Provides the related and supplemental instruction required for the second level Maintenance Mechanic Apprentice to include awareness of electrical safety and protection; interpreting symbols and reading technical drawings; introduction to building and construction codes, standards and specifications; and introduction to metallurgy, oxygen cutting, welding and metal fabrication. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Discuss electric shock symptoms, protection, and responses

Summarize basic rules of electric safety

Demonstrate proper use of PPE

Summarize OSHA and MWD lockout procedure

Identify electrical symbols and components of electrical control system

Discuss the operation of electrical components

Distinguish between overcurrent and overload protection

Discuss mechanical properties and uses of metals or alloys common to the industry

Demonstrate how to evaluate a spark test

Discuss the properties of surface oxide and its effects

Explain the properties of different stainless steels

Discuss the potential difference of metals and how that effects electrolysis

Discuss safety and standard steps in torch cutting

Explain the use of gouging, scarfing and washing

Demonstrate how to use oxy-fuel to cut in different positions

Demonstrate the proper torch settings for cutting and welding

Explain safety related to fabrication

Describe proper placement of tack welds

Explain how the point of reference will determine the finish product accuracy

Demonstrate location and alignment points when assembling a project

Describe how to control weld distortion

Identify key components and their purpose

Discuss the use of prints to communicate existing mechanics and electrical

Interpret of symbols used to construct
Discuss the critical need for standards to avoid ambiguity with parts, buildings, electrical, and mechanics.

Discuss standards set by the governing authorities to ensure compliance the enforcement of codes.

**Student Learning Outcomes:**
- Apply industry and MWD standard safety practices while working on water and power distribution systems.
- Maintain compliance with codes, standards, and specifications when installing and maintaining plant and distribution systems.
- Interpret and communicate location of components and tolerance of parts.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
99.0

**Period 3**

**AMM023:**
3.0 - 4.5 Units

Provides the related and supplemental instruction required for the third level Maintenance Mechanic Apprentice in industrial rigging and hoisting principles and practices; basic hydraulics and pneumatics; mechanical and fluid drive transmission systems; and equipment installation, alignment, and maintenance. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Demonstrate proper rigging procedures
- Calculate the load angle factor
- Practice safe working loads for various slings, ropes, chains, lifting attachments, and hoisting equipment
- Identify crane and lifting equipment capacities, precautions, and limitations
- Apply basic hydraulic principles to accumulators and control valves
- Apply basic pneumatic principles to compressors, air treatment, actuators, and valves
- Interpret symbols as components in hydraulic and pneumatic applications
- Prepare foundation by grouting the base
- Perform mechanical equipment installation, maintenance, and troubleshooting
- Maintain and adjust gear, chain and coupling components
- Identify mechanical and electrical brakes and clutches
Apply the principles of physics to leverage and friction
Calculate the work and power formula
Identify basic machines such as levers, pulleys, wheels, screws, and wedges
Apply rim and face technique when performing shaft alignment
Describe and discuss vibration analysis and balance of components
Calculate and determine diametral pitch
Evaluate shafting in relation to maximum runout with proper materials and dimensions
Identify type and application of various couplings
Calculate force with applied pressure
Distinguish between bevel and miter, helical, worm, and herringbone gears
Distinguish between roller, silent, and standard chains

Student Learning Outcomes:
- Apply industry and MWD standard safety practices to determine appropriate equipment to safely lift, transport, or relocate material or machinery and avoid injury.
- Analyze, troubleshoot, and repair various hydraulic and pneumatic devices located at different facilities and on distribution systems.
- Properly align shafting and machinery.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
99.0

Period 4
AMM024:

3.0 - 4.5 Units

Provides the related and supplemental instruction required for the fourth level Maintenance Mechanic Apprentice in pump types and applications; piping systems; pump hydraulics; tubing and hose applications, installation and maintenance; installation and maintenance pipefitting; and troubleshooting skills. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Interpret electrical schematics
Determine sequence of steps in troubleshooting
Identify key components and non-working parts
Demonstrate predictive maintenance with proper measuring and monitoring tools
Apply oil analysis to determine condition of oil when performing preventive maintenance.
Apply vibration analysis when measuring amplitude and frequency, and monitoring temperature
Identify application of various pumps
Distinguish between dynamic and positive displacement pumps
Perform single and double flare on tubing
Identify swagelok and compression fittings
Perform pipefitting and tube bending
Demonstrate proper valve maintenance procedures
Determine appropriate standard tubing types
Perform pipe threading
Perform pipe welding
Illustrate tubing and hose system installation and maintenance
Identify different types and applications of actuators
Describe electrolysis and passive and active protection

Student Learning Outcomes:
- Determine pump system characteristics and operating requirements, component diagnostics, and perform proper system maintenance, given a pump circuit.
- Perform piping system calculations for system sizing, line and component losses and expansion rates.
- Install, repair, and maintain piping systems of various materials and sizes including tubing and hose systems.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
99.0

Period 5
AMM025:

3.0 - 4.5 Units

Provides the related and supplemental instruction for the fifth level Maintenance Mechanic Apprentice to include an introduction to metallurgy; welding principles; oxy-fuel welding and cutting operations; arc welding operations; and application of welding codes and standards established by the American Welding Society. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Distinguish between ferrous and nonferrous metals
Perform proper fusion of tacks, stitches, and stringers using SMAW processes
Read welding symbols
Demonstrate proper polarity setup of welder
Describe the standard operating procedures for welding
Lay out and trace parts
Select proper electrodes for given applications
Demonstrate hard-facing and resurfacing
Perform flat and horizontal weld using GMAW
Weld ferrous and nonferrous metals using GTAW
Demonstrate the proper setup of cylinders, regulators, hoses, and cutting torch
Perform cut, weld, and resurface with oxy-fuel techniques
Perform brazing and soldering
Identify different alloys
Perform vertical and overhead welding
Explain preheat and postheat

Student Learning Outcomes:
  Identify basic metals and determine material compatibility.
  Determine welding operation and equipment requirements, given sets of drawings or directives.
  Weld stringers in flat, horizontal, vertical, and overhead assignments using SMAW processes.
  Perform torch cutting effectively and safely.
  Describe GMAW, GTAW, SAW, and Oxy-fuel welding practices.
  Identify hazards and potential dangers when using Oxy-fuel and welding equipment in different environments.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
99.0

Period 6
AMM026:
3.0 - 4.5 Units
Provides the related and supplemental instruction required for the sixth level Maintenance Mechanic Apprentice in machine shop safety; milling, drilling, and shaping with the mill and lathe; layout work; precision measurements; and cutting tool geometry. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Demonstrate the difference between rough and finish turning
- Perform safe techniques when using precision tools and machinery
- Demonstrate safe practices when working with the lathe
- Identify components of the lathe and their purpose
- Demonstrate grinding a single-point tool to correct geometry for cutting purposes
- Demonstrate sharpening a drill bit
- Demonstrate ability to use the lathe to remove material from a workpiece
- Identify the sequence of turning a workpiece to maximize efficiency
- Perform threads on the lathe with a single tip tool
- Setup and turn parts to desired dimensions on the lathe
- Illustrate locating an edge of workpiece using edge finder
- Determine sequence of milling operations to accomplish an accurate workpiece
- Setup and verification of head of mill and vise accuracy
- Identify mill component and application
- Calculate chord dimension of a circle pattern and drill layout to print
- Machine workpiece to the required dimensions and finish
- Identify the correlation of setup to efficiency of accomplishing milling operations
- Recognize the correlation of speeds and feeds during milling operations
- Describe milling tolerances that are interference fit, clearance fit, and transition fit

**Student Learning Outcomes:**
- Calculate and adjust feed and speed rates in relation to size of cutter and material composition.
- Perform milling, drilling, and shaping operations using the mill and lathe.
- Accurately measure shapes using precision instruments.
- Identify most efficient, accurate, and safe practice when selecting a machine and a method of turning or milling metals.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

Total Hours
99.0

Period 7
AMM027:

3.0 - 4.5 Units

Provides the related and supplemental instruction required for the seventh level Maintenance Mechanic Apprentice in water treatment plant operations; water distribution systems; automatic control valves; backflow prevention; surge protection; dewatering sequence; and cross connection. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Calculate flows, grades, elevations, pressure, and feed rates in water treatment plants and water distribution systems.

Identify associated regulatory procedures as they apply to operations and maintenance in water treatment and distribution

Identify distribution system configuration, components and controls

Identify possible cross-connection and proper back flow devices necessary

Ability to determine the necessary equipment and coordination when operating and maintaining large valves

Determine the applications of pilots used in the flow control and pressure relief protection

Recognize the hazards of dewatering and precautions that mitigate damage caused by surges

Student Learning Outcomes:

Calculate flows, grades, elevations, pressure, and feed rates in water treatment plants and water distribution systems.

Troubleshoot, repair, overhaul, adjust and operate flow control, pressure reducing, sustaining, and relief valves in a water treatment plant and water distribution system.

Identify a cross connection; various backflow prevention devices and their applications, and make the proper modifications for regulatory compliance.

Evaluate the necessary precautions and procedures when dewatering systems and reestablishing service connections.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
99.0
Period 8
AMM028:

3.0 - 4.5 Units

Provides the related and supplemental instruction required for the eighth level Maintenance Mechanic Apprentice in mechanical systems; maintenance and operations procedures; and project planning, layout, estimating, and scheduling. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Develop a written rough draft of Project Plan
Identify line of production for given project
Determine a logistics plan for given project
Determine control of labor for given project
Determine a plan to maximize assets on a given project
Determine a plan for time efficiency on a given project
Prepare a final written Project Plan
Perform shaft alignment
Demonstrate metal fabrication
Perform pipefitting
Perform tube bending
Demonstrate welding in the 5G and 6G positions
Demonstrate complete joint penetration
Demonstrate use of smaller electrodes for thinner gauge metal
Layout and cut and weld a fishmouth connection
Discuss and demonstrate different types of electrodes
Demonstrate rigging an offset and unequal load
Demonstrate rotating a load without shock to rigging hardware
Identify aeration and cavitation
Calculate net positive head required and available
Demonstrate practical knowledge of all apprenticeship topic areas throughout the program

Student Learning Outcomes:

Demonstrate advanced competency in maintenance and operations procedures to include rigging, pipefitting, shaft alignment, welding and fabrication, given a sample complex mechanical system.
Develop a project plan, layout task details, estimate and schedule resources, materials, and equipment, and coordinate operations for a hypothetical project involving a complex mechanical system.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
99.0

Orientation
AMW021:
1.5 - 2.0 Units

This course provides an overview of the construction industry for millwrights, 16-hour safety, and green building awareness. Successful students will receive Occupational Safety and Health Administration (OSHA) 10 Certification and United Brotherhood of Carpenters (UBC) Millwright 16-Hour Safety Qualification Cards. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Match safety hazards and precautions for tools, equipment and personal protective equipment (PPE)
Calculate linear measurements and convert units of measure
Identify the trade history rules and apprenticeship regulations
Define the basic elements, views and symbols used on construction prints
Discuss trade installations, quality, and productivity practices
Complete OSHA 10 safety training
Accurately determine measurements using precision instruments
Demonstrate proper use of selected hand and power tools

Student Learning Outcomes:
Evaluate the potential hazards and site the appropriate accident prevention measures.
Demonstrate safe operating procedures for selected tools and equipment.
Perform precision measurements within .001".

Units & Hours
Minimum Units:
1.5
Maximum Units
1.5

Total Hours
36.0

Safety and Health Certifications

AMW022:

1.5 - 2.0 Units

This course covers the safe and appropriate use of forklift, aerial lift equipment in industrial setting, and emergency response procedures. Upon successful completion, students will be issued First Aid and CPR Certification and UBC Scaffold, Aerial Lift and Forklift Qualification Cards. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Conduct scaffold safety and equipment inspections
Match safety hazards and precautions for lift truck equipment
Discuss health emergencies and identify first aid and CPR techniques
Identify scaffold components and applicable OSHA regulations
Meet UBC criteria for the proper operation of aerial lift equipment
Match safety hazards and precautions for scaffold erection procedures
Conduct aerial lift safety inspections
Match safety hazards and precautions for aerial lift equipment
Conduct lift truck safety inspections
Complete and pass American Red Cross first aid, CPR and AED training
Demonstrate the safe operation of the selected lift truck
Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly
Properly stage, assemble, and disassemble selected scaffolding
Identify lift truck components and applicable OSHA regulations
Meet UBC criteria for the proper operation of the selected lift truck
Identify aerial lift components and applicable OSHA regulations
Demonstrate the safe operation of two types of aerial lifts
Student Learning Outcomes:

- Apply the appropriate first aid and CPR/AED techniques for specific emergencies.
- Identify scaffold regulations, and correctly apply them to complete scaffold erection projects.
- Identify and demonstrate safe operating procedures for aerial lift and forklift equipment.

Units & Hours

Minimum Units:

1.5

Maximum Units:

1.5

Total Hours:

36.0

Millwright General Skills - A

AMW023A:

1.5 Units

Students will identify and use hand and power tools, machining equipment and precision instruments at a fundamental level. Students will complete various bench layout tasks using shop drawings. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

AMW021 - Orientation

AND

Prerequisite

AMW022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:

- List the steps used in the inspection and operation of equipment and processes
- Discuss the operating principles, methods and application for fundamental skills
- Identify inspection criteria and perform maintenance procedures
- Identify terms and label tools and machinery equipment components
- Review inspection reports on select machinery
- Accurately layout and machine holes and slots to shop drawing specifications
- Identify the procedures to safely change blades, discs and drill bits for tools and equipment
- Describe measuring and layout tool practices
- Perform metal layout tasks and verify layout accuracy to prints specifications
Discuss importance of safety and maintenance
Interpret prints to determine layout pattern
Identify procedures for safe operation
List the steps used to prepare materials for layout and marking
Distinguish between standard (proper) practices and poor craftsmanship

Student Learning Outcomes:
- Interpret prints to layout/locate and mark patterns on metal parts.
- Utilize machine shop tools to fabricate parts.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Millwright General Skills - B
AMW023B:

1.5 Units
Building on basic machine shop skills, students will use hand and power tools, shop equipment and precision instruments to complete various machining operations. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

AND

Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Perform metal layout tasks and verify layout accuracy to prints specifications
Discuss the methods and application for advanced machine shop skills
List the steps used to prepare materials for layout and marking
Demonstrate the proper selection and use of precision tools to verify tolerances
Identify the appropriate machine practices to complete operations

Identify the appropriate machine practices to complete operations

Accurately layout and part features as provided in shop drawings

Discuss the operating principles, methods and application for fundamental skills

Identify inspection criteria and perform maintenance procedures

Utilize lathe procedures to accurately form part features to tolerances given

List the steps used in the inspection and operation of equipment and processes

Identify terms and label tools and machining equipment components

Distinguish between standard (proper) practices and poor craftsmanship

Distinguish between standard (proper) practices and poor craftsmanship

List the steps used in the safe set-up and operation of mill equipment and processes

Interpret prints to determine layout pattern

Utilize milling procedures to accurately form part features to tolerances given

Identify procedures for safe operation

Review inspection reports on select machinery

List the steps used in the safe set-up and operation of lathe equipment and processes

Complete inspection reports on select machinery

**Student Learning Outcomes:**

Apply machining methods and operations to complete shop tasks to project specifications. Precisely measure and verify stated tolerances for machined parts.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

40.0

**S/B Print Reading**

**AMW024:**

2.0 Units

This course introduces the basic visualization skills needed for reading and interpreting construction prints. Views, elevations, and the role of specifications as they relate to prints will be discussed. Open Entry/Open Exit. Former Title: Apprenticeship Millwright 024, Printreading (2020)

**Requisites**

**Requisites:**

**Prerequisite**

AMW021 – Orientation

AND
Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Define terms and categorize print according to specific characteristics
Locate beginning and ending measuring points and calculate dimensions
Identify drawing methods used to create prints
Label the standard views used in orthographic projection
Describe and use conventional lines, symbols and dimensioning methods
Interpret views to identify machine components details and layout features
Complete a detailed material list from print specifications
Use plans to accurately establish construction layout

Student Learning Outcomes:
Apply the principles of orthographic project to visualize three dimensional images from two dimensional graphic.
Interpret prints to determine construction elements, size and arrangement.

Units & Hours
Welding Fabrication
AMW025:
1.5 Units

This course is designed as an introduction to layout, and basic welding and fabrication. The students will be introduced to the basic skills of measuring, equipment set-up and cutting, shaping, grinding, welding, filing, heating and bending of metal parts. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation
AND
Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Utilize proper techniques to complete cutting and burning assignments.

Demonstrate proper setup and adjustment for torch welding equipment

Discuss safety practices/Personal Protective Equipment (PPE), and operating procedures for arc welding

Identify terms, regulations, and welding equipment components

Demonstrate proper setup and adjustment for torch cutting equipment

Discuss and evaluate arc welding methods, electrode characteristics, equipment use and storage.

Utilize proper techniques to complete torch welding assignments

Recognize fabrication symbols on prints.

**Student Learning Outcomes:**

- Demonstrate proper procedures to safely operate torch and arc welding equipment.
- Perform torch cutting, and arc welding techniques to fabricate parts.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Cutting and Burning**

**AMW026:**

1.5 Units

This course provides safety instruction, equipment operation, and basic skills needed for successful layout and fabrication of metal parts using an oxy-acetylene torch. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

AMW021 - Orientation

**AND**

**Prerequisite**

AMW022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Utilize proper techniques to complete torch welding assignments
Define and describe the proper use of applicable regulations and safety awareness

Recognize fabrication symbols on prints

Utilize safety practices and procedures including proper personal protective equipment (PPE)

Utilize proper techniques to complete cutting and burning assignments

Demonstrate proper setup and adjustment for torch cutting equipment

Identify terms; safety practices/Personal Protective Equipment (PPE), and operating procedures for cutting torch and gas equipment

Discuss and evaluate oxy-acetylene methods, fuel characteristics, equipment use and storage

Demonstrate proper setup and adjustment for torch welding equipment

**Student Learning Outcomes:**
- Demonstrate proper procedures to safely operate oxy-acetylene equipment.
- Perform torch cutting techniques to cut shape metal parts.

**Units & Hours**

**Minimum Units:**
1.5

**Maximum Units**
1.5

**Total Hours**
45.0

**Optics and Machinery Alignment**

**AMW027:**

1.5 Units

This course covers the terms, characteristics, and operating principles for the transit and laser levels. Procedures for establishing machinery and equipment elevation and alignment will be demonstrated and practiced. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

AMW021 - Orientation

AND

**Prerequisite**

AMW022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Accurately sight and record elevation readings on select machinery
Establish a level surface using a laser level
Perform a vertical alignment using a transit level
List the steps used in the set up and recording of readings
Discuss the operating principles, methods and application of precision levels
Identify terms, characteristics and transit and laser level components
Accurately site target alignment points and record and assess alignment readings
List the steps performed in the laser set up and use of targets
Distinguish the increments on various reading rods and circular veneer scale
Interpret plans to determine horizontal and vertical requirements for equipment
Accurately read and record elevation and on equipment surfaces
Interpret plans to determine elevation requirements for equipment
Discuss how light passing through lenses is controlled to establish a measurable line of sight
Correctly set up levels and establish benchmarks

Student Learning Outcomes:
Identify and follow manufacturers procedures to properly set-up various optical instruments.
Apply optical principles to accurately align machinery components in an assembly.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Machinery Shaft Alignment
AMW028:

1.5 Units

This course covers the terms, characteristics, and methods for aligning machine shafts. Conventional dial indicator and computer aided methods will be included in the training. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite

AMW021 - Orientation
AND

Prerequisite

AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Correctly set up computer aided alignment methods; correct sag and soft foot
Accurately read and record elevation and side readings on machine shafts
List the steps used in the set up and recording of readings;
Perform a vertical alignment
Determine location and mating surfaces for aligning (correcting misalignment) equipment components
Distinguish the increments on indicators
Identify shaft alignment terms, and dial indicator and computer system components
Correctly set up for straight edge alignment method; correct sag and soft foot
Discuss the shaft alignment principles, methods and applications
Accurately read and record elevation and side readings on machine shafts
Correctly set up rim & face alignment method; correct sag and soft foot
Correctly set up for double reverse alignment method; correct sag and soft foot
List the steps used in the set up and recording of readings
Accurately read and record elevation and side readings on machine shafts
Establish shaft alignment within tolerances provided by manufacturer prevention
Distinguish the increments on indicators
Accurately read and record elevation and side readings on machine shafts
Establish shaft alignment within tolerances provided by manufacturer prevention
Distinguish the increments on indicators
Establish shaft alignment within tolerances provided by manufacturer prevention
List the steps used in the set up and recording of readings
Establish shaft alignment within tolerances provided by manufacturer prevention
Distinguish the increments on indicators
List the steps used in the set up and recording of readings
Complete math calculations using indicator readings

Student Learning Outcomes:
Discern and correct three fundamental types of shaft misalignment.
Apply the principles and proper procedures for four standard methods of shaft alignment.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0
Structural Welding - AWS A
AMW029A:

1.5 Units

This course is designed to prepare the student to obtain an American Welding Society (AWS) structural welding certificate per AWS D1.1 Structural Welding Code, the welding of plates that are 1/8" to unlimited thickness. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

AND

Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Utilize safety practices and procedures, including proper PPE

Identify and explain the requirements needed to successfully obtain an AWS Certification

Demonstrate proper setup and adjustment for welding equipment

Define and describe the proper use of applicable welding codes and print symbols

Apply proper techniques selected SMAW welding assignments

Demonstrate proper use of personal protective equipment (PPE)

Evaluate performance and complete written tests

Identify the proper electrode selection, position and movement to form specific weldments.

Discuss shielded metal arc welding (SMAW) methods and equipment used throughout the industry

Discuss the important role current and polarity play in welding process and the impact on weld types

Discuss components of safe welding practices

Student Learning Outcomes:

Demonstrate correct shielded metal arc welding (SMAW) procedures and observe safe welding practices.

Perform fillet, butt and vertical fillet welds to meet certification criteria.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5
Total Hours
45.0

Structural Welding - AWS B
AMW029B:

1.5 Units

This course is designed to prepare the student to obtain an AWS structural welding certificate per AWS D1.1 Structural Welding Code, the welding of plates that are 1/8” to unlimited thickness. Practical assignments will include metal inert gas (MIG) and tungsten inert gas (TIG) welding. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

AMW021 - Orientation

AND

Prerequisite

AMW022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:

Demonstrate proper setup and adjustment for MIG and TIG welding equipment

Discuss components of safe welding practices

Identify and describe four welding methods associated with American Welding Society (AWS) Certifications

Utilize safety practices and procedures including proper personal protective equipment (PPE)

Describe the proper use of applicable welding codes and print symbols

Discuss MIG, TIG welding methods and equipment used throughout the industry

Apply proper techniques to selected TIG/MIG welding assignments

Demonstrate proper use of personal protective equipment

Evaluate performance and complete written tests

Discuss the differences each process has on the productivity and skill level required

Identify the proper electrode selection, position and movement for forming various weldments (welding Symbols)

Student Learning Outcomes:

Identify and describe four different welding processes.

Identify standard welding symbols and form corresponding weldments.

Units & Hours

Minimum Units:

1.5
Maximum Units
1.5

Total Hours
45.0

Rigging Hardware and Procedures
AMW030:

1.5 Units

This course presents both lifting theory and practical rigging methods and procedures. Rigging attachment procedures, lifting equipment, limits of operation and communication practices will be covered. Successful students will receive United Brotherhood of Carpenters (UBC) Rigging Qualification Cards. Open Entry/Open Exit.

Requisites

Requisites:
Prerequisite
AMW021 - Orientation
AND
Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Demonstrate proper movement and placement of load using various signaling methods
Demonstrate ability to correctly attach hardware
Demonstrate ability to correctly attach slings
Identify the theories, historical and modern rigging tools and inventions
Identify the design, construction, and safe working load of various slings
Describe industry accepted safety standards and rigging regulations
Perform center of gravity calculations for asymmetrical loads
Demonstrate ability to correctly attach slings; properly tie selected types of knots used in rigging
Locate load weight and path of travel within crane safe lifting capacity and operating range
List the types of rigging hardware and their safe application

Student Learning Outcomes:
Determine and apply rigging theories to determine proper rigging configuration for various types of loads.
Evaluate standard rigging practices and regulations to safely lift, move and place loads in designated locations.

Units & Hours

Minimum Units:
1.5

Maximum Units

1.5

Total Hours

40.0

Turbine Familiarization

AMW031:

1.5 Units

Students will explore the machines and auxiliary equipment used in the power production industry. This course will highlight the function and performance of a typical gas turbine, and will include hydraulic bolting procedures. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite

AMW021 - Orientation

AND

Prerequisite

AMW022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:

Describe characteristics, assembly and disassembly procedures

Describe the characteristics of three main types of scheduled maintenance

Explain the procedures for checking journal bearing clearances

List fastener characteristics including size, grade, and thread designation

List the steps used in the inspection, and assembly-disassembly of bearings

Review rigging and safety considerations

Accurately pre-tension and tension bolting using hydraulic tooling

Review drawings to locate machine features and key characteristics

Assemble and disassemble stainless steel tubing

Describe characteristics, assembly and disassembly procedures

Define terminology and operating principles; bolting theory

Student will be able to:

List the steps used in the inspection, and assembly-disassembly of combustion components and fuel lines

Discuss safety, hazards, jobsite policies and productivity issues
Identify turbine components and functions
Use the proper technique to install pantleg washer
Demonstrate the correct procedure for lock wiring fasteners
List the steps used in the inspection, and assembly-disassembly of bearings
Explain the procedures for checking journal bearing clearances

Student Learning Outcomes:
  Utilize turbine manufacturers' instructions to determine maintenance procedures and schedules.
  Apply hydraulic bolt tensioning procedures provided by the manufacturer.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Pumps
AMW032:

1.5 Units

This course will cover the identification, application, and installation skills for typical systems found in the petro-chemical industry. Demonstrations and practice exercises will focus on pump types, gaskets, seals and fans. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

AND

Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Correctly assemble and disassemble select pump, gaskets, seal and fan components
Correctly assemble and disassemble select pump, gaskets, seal and fan components
Utilize the proper procedures and pump installation sequence
Accurately fasten, align and inspect pumping system components
List the steps used in pump installation sequence

Position mating surfaces for aligning equipment components

List the steps used in reciprocating pump installation sequence

Determine location and mating surfaces for aligning equipment components

Identify terms and label pump and pumping components using mechanical shop drawings

Determine location and mating surfaces for aligning equipment components

Determine location and mating surfaces for aligning equipment components

Use rigging equipment to accurately locate set pump components in place

List the steps in the inspection and recording of pump maintenance data

Correctly assemble and disassemble select pump, gaskets, seal and fan components

List the steps used in pump installation sequence

Correctly assemble and disassemble selected pump components

Discuss pump specifications; calculate pressure and flow requirements

**Student Learning Outcomes:**

- Utilize pump specifications to determine proper installation procedures and inspection criteria.
- Use machinery alignment principles to verify proper pump and component positioning.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Conveyor Systems**

**AMW033:**

1.5 Units

This class will cover proper installation, alignment procedures, belt splicing, and explain how improper installation affects the maintenance and lifespan of equipment and conveyor systems. Open Entry/Open Exit.

**Requisites**

**Prerequisites:**

- **AMW021 - Orientation**

- **AMW022 - Safety and Health Certifications**

**Transferability & General Education Options**

**Transferable:**

Not transferable
Weekly Lecture Hours:
1.5

Learning Outcomes

Course Objectives:
Correctly disassemble bearings, chain drive and direct coupling components
Correctly assemble bearings; chain drive; direct coupling components
Identify terms and industry related conveyor applications
Demonstrate proper use of log-out tag-out procedures
Adjust take-up idlers and return rollers
Demonstrate proper inspection of installed system
Use rigging equipment to accurately locate set component in place
Determine location and mating surfaces for duo and tandem drive systems
Accurately align and track conveyor belting
Discuss machine drawings and specifications for selected equipment
List the steps used in the installation sequence
Discuss component functions and label conveyor components using prints

Student Learning Outcomes:

- Interpret prints to determine conveyor configuration and layout.
- Determine the proper methods and procedures to install and inspect conveyors.

Units & Hours

Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Drives, Pulleys and Belts

AMW034:

1.5 Units

Installation techniques focusing on power drive systems and equipment arrangements. Key skills presented will include system specifications, component identification and equipment alignment. Shop projects will focus on belt, chain and gear drive installations. Open Entry/Open Exit.

Requisites

Requisites:

Prerequisite
AMW021 - Orientation

AND

Prerequisite
AMW022 - Safety and Health Certifications
Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Demonstrate proper use of log-out tag-out procedures
Correctly align and properly fasten drive components
Identify terms and label drive components using mechanical drawings
Determine location and mating surfaces for aligning equipment components
Use rigging equipment to accurately locate set drive components in place
Determine location and mating surfaces for aligning equipment components
Utilize inspection, lubrication and maintenance criteria
Identify safety procedures
Determine location and mating surfaces for aligning equipment components
List the steps used in drive installation sequence
List the steps used in drive installation sequence
List the steps used in drive installation sequence
Determine location and mating surfaces for aligning equipment components
List the steps used in drive installation sequence
Discuss drive function and specifications; calculate drive speeds and tension requirements

Student Learning Outcomes:
Apply manufacturers' instructions to install, and inspect drive components.
List the steps used in drive installation sequence
Apply machinery alignment principles to verify drive and components are properly positioned.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
45.0

Machinery Installation and Erection - A
AMW036A :

1.5 Units

As an introduction, students will explore the machinery used in the manufacturing and package handling industry. Component descriptions and machine drawings illustrate the complex details and important considerations for assembly/disassembly tasks. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

AND

Prerequisite

AMW022 - Safety and Health Certifications

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

1.5

Learning Outcomes

Course Objectives:
Discuss machinery operating principles, installation methods and industry applications
Determine location and mating surfaces for aligning equipment components
Distinguish characteristics for proper machine function and operation
List the steps used in drive installation sequence
Describe the characteristics of shaft materials
Demonstrate proper use of log-out tag-out procedures
Complete inspection reports on select machinery
Correctly assemble and disassemble select machine components
List the steps used in the inspection, and assembly-disassembly of equipment
Determine location and mating surfaces for aligning equipment components
Layout machine baseline and reference lines to accurately locate components
Identify function and mounting techniques for keys used in mating parts
Identify terms and label machinery components using machine prints
List the steps used in drive alignment sequence

Student Learning Outcomes:
State the function and purpose of machinery components.
Determine the proper inspection criteria and allowable tolerances for machinery components.

Units & Hours

Minimum Units:

1.5

Maximum Units

1.5

Total Hours

45.0

Machinery Installation and Erection - B

AMW036B:

1.5 Units
This course will enhance machinery installation skills used in manufacturing applications. Exercises will focus on the importance of machine drawings to identify component tolerances and installation requirements and alignment of parts. Open Entry/Open Exit.

**Requisites**

**Prerequisites:**

AMW021 - Orientation

AND

AMW022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Determine location and mating surfaces for aligning equipment components

Determine location and mating surfaces for aligning equipment components

Demonstrate proper use of log-out tag-out procedures

Determine location and mating surfaces for aligning equipment components

Identify terms and label machinery components using machine prints

Identify clutch characteristics and functions

Measure and record bearing sizes

Accurately align and properly fasten machine component

Correctly assemble and disassemble bearing and coupling components

List the steps used in coupling installation sequence

Discuss bearing types, function, and tolerances

Identify safety hazards and accident prevention

Utilize inspection, lubrication and maintenance criteria

Discuss the machine drawings and specifications for selected equipment

Use rigging equipment to accurately locate set component in place

List the steps used in the coupling installation sequence

**Student Learning Outcomes:**

Apply safe rigging practices and proper bearing and coupling installation sequences.

Inspect and verify bearing and coupling tolerances.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**
1.5

Total Hours
45.0

Turbine Maintenance
AMW037:

1.5 Units

Students will use machinery maintenance skills and techniques for disassembly/assembly of a typical gas turbine. Couplings, bearings, and rotors will be inspected, and tolerances verified to complete onsite hands-on tasks. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

AND

Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Utilize the steps for the inspection, and assembly-disassembly of rotors

Utilize the steps for the assembly and disassembly of exhaust compartment

Utilize the steps for the inspection, and assembly-disassembly of combustion components and fuel lines

Employ the appropriate use of Personal Protective Equipment (PPE) and safe rigging practices

Review rigging and safety considerations

Utilize the sequence for removing casing and accessory equipment

Define maintenance procedures and sequences

Use optical instruments to set level and elevate machine frame bases

Utilize the steps for the assembly and disassembly of generator components

Perform the procedures for checking blade tip clearances

Mark, bag and tag all fasteners and machinery small component parts

Accurately pre-tension and tension coupling bolting using hydraulic tooling

Disassemble and Assemble a complete G.E. Frame 5 Gas Turbine

Discuss safety, hazards, jobsite policies and productivity issues

Utilize the steps for the inspection, and assembly-disassembly of couplings

Employ the steps for the inspection, and assembly-disassembly of bearings
Accurately pre-tension and tension bolting using hydraulic tooling

Perform the procedures for checking journal bearing clearances

Identify turbine components and functions

Utilize the correct sequence to reassemble turbine components.

Review the correct sequence to reassemble turbine components.

Review drawings to identify bolting criteria and disassembly features

**Student Learning Outcomes:**

- Apply safe rigging practices and proper turbine components disassembly/assembly sequences.
- Determine inspection criteria and alignment tolerances.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Compressor Theory and Maintenance AMW039:**

1.5 Units

This course will cover the compressor operating principles, safety, assembly, and maintenance skills for industrial compressors. Exercises will focus on the disassembly, inspection, and reassembly of compressor components. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

AMW021 - Orientation

**AND**

AMW022 - Safety and Health Certifications

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

- Demonstrate proper use of lock-out tag-out procedures
- Demonstrate proper use of lock-out tag-out procedures
- Explain criteria for inspection and maintenance checks
- Discuss air compressor specifications, temperature and pressure parameters
Complete maintenance inspection using manufacturer's guidelines

Identify terms, operating principles and label air compressor components using mechanical shop drawings

Students will be able to:

Correctly assemble/disassemble compressor components

List assembly/disassembly procedures and safety precautions

**Student Learning Outcomes:**

- Identify the components and functions of reciprocating air compressors.
- Perform compressor component clearance checks.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units**

1.5

**Total Hours**

45.0

**Tool/Equipment Applications**

**AMW043:**

1.0 - 1.5 Units

This course promotes hand/power tool and equipment skill development for various construction applications. Scaffold building and aerial lift safety and operating procedures will also be covered. Upon successful completion, students will be issued United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Prerequisite**

**AMW021 - Orientation**

AND

**Prerequisite**

**AMW022 - Safety and Health Certifications**

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.0

**Learning Outcomes**

**Course Objectives:**

- Properly stage, assemble, and disassemble selected scaffolding
- Conduct scaffold safety and equipment inspections
- Match safety hazards and precautions for scaffold erection procedures
- Demonstrate the safe operation of two types of aerial lifts
Select appropriate hand and power tools/equipment for assigned tasks
Utilize proper fastener placement and driving techniques
Practice using the mathematic techniques presented to lay out materials for wall construction
Conduct aerial lift safety inspections
Meet United Brotherhood of Carpenters (UBC) criteria for erecting and dismantling scaffolds correctly
Select appropriate mathematic operations to measure and calculate materials
Apply the appropriate tool/equipment manipulative techniques to complete wall construction tasks assigned
Match safety hazards and precautions for aerial lift equipment operation
Identify boom/scissor aerial lift components and applicable OSHA regulations
Meet UBC criteria for the proper operation of aerial lift equipment
Identify scaffold components and applicable Occupational Safety and Health Administration (OSHA) regulations

Student Learning Outcomes:
- Identify and demonstrate safe operating procedures for aerial lift truck equipment.
- Demonstrate the proper erecting/dismantling procedures for welded frame scaffolds.
- Assess construction tasks to determine the appropriate tools, equipment and construction methods to apply when completing projects.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Solar Installer Level 1
AMW051:
1.5 Units

This course covers the design and function of several types of solar installation. The methods, sequences and procedures for mounting layout, elevation/positioning, and assembly for solar construction will be presented to apprentices. Open Entry/Open Exit.

Requisites
Requisites:
Prerequisite
AMW021 - Orientation

AND
Prerequisite
AMW022 - Safety and Health Certifications

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Construct foundation forms to print specifications
Explain criteria for inspect and test photovoltaic (PV) modules and devices
Identify the characteristics and function of PV system devices
Demonstrate safe operation and proper use of personal protective equipment (PPE), tools and equipment
Examine the steps for measuring and analyzing system performance and operating parameters
Determine materials, equipment, and installation sequences necessary to maximize installation efficiency
Identify components and characteristic of several solar panel systems
Explain the tenants of sustainable construction practices and related green building/products rating systems
Assemble solar modules, panels, or support structures, as specified
Describe methods for laying out, orienting, and mounting modules or arrays

Student Learning Outcomes:
Describe electrical and solar power components of roof top, ground mount and large scale photovoltaic (PV) systems.
Install several rooftop and ground mount photovoltaic (PV) systems in accordance with codes and standards using drawings, schematics, and manufacturers’ instructions.

Units & Hours
Minimum Units:
1.5
Maximum Units
1.5
Total Hours
45.0

Introduction to Cultural Anthropology
ANTH100:
3.0 Units
A cross-cultural survey of the major areas of cultural anthropology including subsistence patterns, economic and political systems, family and kinship, religion, and cultural change. Also includes contemporary issues facing humankind such as the environment, resource depletion, ethnic conflict, globalization, and warfare. Emphasis is on understanding cultural diversity and cultural universals.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A

Area B2: Social and Behavioral Sciences: Social Science Elective

Area D: Cultural Breadth

CSU GE - Plan B

Area D: Social Sciences

IGETC - Plan C

Area 4: Social and Behavioral Sciences

Course Identifier (C-ID)

Anthropology

Learning Outcomes

Course Objectives:

Gain an understanding of the challenges involved in understanding humanity.

Compare and contrast the subfields of anthropology (cultural, physical, archaeology, linguistics, and applied) and their various contributions to a holistic perspective of humankind.

Assess the distinctive, yet complementary, roles of the sciences and the humanities in shaping anthropology as a discipline.

Understand the ways anthropology differs from and complements other academic disciplines.

Analyze the ways anthropology studies both human universals and human diversity, utilizing a biocultural approach.

Explore and assess the role of “otherness” in creating conflict both within and between different cultures.

Identify and critically analyze the historical origins and intellectual development of various anthropological theories used to explain human similarities and differences.

Analyze the concept of culture and its role in human adaptation.

Delineate the characteristics of culture (learned, shared, based on symbols, integrated, and dynamic).

Assess the relationship between culture, society and the individual.

Evaluate the various functions of culture utilizing the comparative method.

Evaluate the effectiveness of various cultures in meeting physical, social, and psychological needs of their members.

Assess the various ways any culture strikes a balance between the needs of individuals and group members.

Understand the historical origins and contemporary importance of the concepts of ethnocentrism, absolute cultural relativism, and critical cultural relativism.

Distinguish the material from the non-material aspects of culture and assess the significance of norms, values, attitudes, morals and beliefs in influencing human behavior.

Distinguish and critique the contributions of early ethnographers.

Demonstrate familiarity with the history and current trends in participant-observation as the primary method of anthropological research.

Explain the biological basis of language and identify the evolutionary changes necessary for the evolution of human language.

Comprehend the importance of language as the foundation of human culture.

Assess the symbolic nature of human language and explain the differences between animal communication systems and human language.

Recognize the major forms of nonverbal communication and evaluate the roles of paralanguage and kinesics in the diverse expressions of human behavior.

Appreciate the role of linguistic anthropology in comparing and contrasting human languages and making culture accessible during fieldwork.

Understand the field of descriptive linguistics and distinguish phonemes, morphemes, syntax and grammar as features of language.
Synthesize the relationship between language, culture and reality.

Evaluate the importance of understanding linguistic relativity.

Recognize the contributions of historical linguistics in understanding the nature and causes of language change and analyzing the relationships of language groups.

Explain the various contributions of sociolinguistics in delineating the distinction between standard and non-standard varieties of language and the social consequences of the speech communities that use them based on varying ethnic, cultural, class, or gender.

Analyze the role of the enculturation process as a method each culture uses to “humanize” its children by teaching their specific social codes (norms, values, attitudes and beliefs) that will enable them to be functioning and contributing members of their society.

Comprehend the concept and development of self-awareness.

Explain the role of culture in shaping the behavioral environment, including object orientation and learning spatial, temporal, and normative orientations.

Critically evaluate the relationship between the enculturation process and personality development.

Recognize the role of individual genetic inheritance in shaping broad human potentials and limitations. Assess the validity of various nature-nurture paradigms considering cross-cultural data.

Compare and contrast cross-cultural child rearing practices and their relationship to differing personality formations (e.g., dependence and independence training, and combinations of the two).

Analyze and evaluate anthropological studies of the relationship between culture and group personality.

Understand the concept of modal personality and evaluate the limitations of this research methodology in non-Western cultures.

Critique the historical contributions of national character studies and contrast these studies with those focusing on core values.

Analyze the distinction between sex and gender and apply these distinctions to cross-cultural gender models (e.g., intersexuals, transgenders).

Comprehend the role of culture in defining standards of normal and abnormal behavior or deviance.

Recognize the cultural bias in diagnosing some forms of mental illness and the role of applied anthropologists as cultural brokers between Western medical practitioners and their culturally diverse clients.

Understand and evaluate the role of culture in allowing a wide range of creative human solutions in adapting to radically different environments.

Assess the process of cultural adaptation as consisting of ideas, activities, and technologies that enable a particular culture to survive and thrive.

Critically distinguish the difference between cultural evolution and the ethnocentric doctrine of progress.

Distinguish the anthropological concepts of culture area, culture type and culture core.

Identify and synthesize the distinctive characteristics of foraging, horticulture, pastoralism, intensive agriculture, industrialism, and post-industrialism.

Assess the relationship between subsistence patterns, social organization, and aspects of a culture’s superstructure (e.g., beliefs, religion, and art).

Understand the role of surplus production and its influence on social inequality, task specialization, and patterns of gender-based division of labor.

Evaluate the role of anthropologists in the study of agricultural development.

Understand the relationship between intensive agriculture and the development of non-industrial cities.

Distinguish the anthropological definition of economy and economic systems from those of western economics and evaluate its cross-cultural validity.

Identify the three parts of economic systems: production, consumption and exchange (or distribution).

Analyze the reasons why western economic principle and theories have limited applicability to economic systems that do not produce and exchange goods for profit.
Compare and contrast the variety of economic systems of non-industrial peoples and analyze their reasons for promoting relationships over profits.

Illustrate the ways the economic sphere is not separated from the social, political, and religious spheres in non-industrial societies.

Trace the changes over time that have occurred in human economic systems and evaluate the significant cultural, non-economic aspects of exchange that have characterized most of human evolution.

Understand labor as a key resource in any economic system and analyze the distinguishing features of culturally diverse patterns of labor.

Evaluate the cultural differences that determine the way valuable resources are allocated.

Recognize the evolutionary and cultural significance of leveling mechanisms.

Explain the differences between differing cultural patterns of distribution and exchange: reciprocity, redistribution, and market exchange.

Analyze the modern globalization process and its consequences.

Assess and evaluate the history and global economic consequences of the World Bank, the International Monetary Fund (IMF) and the World Trade Organization (WTO).

Understand marriage, family and kinship systems as adaptive mechanisms of survival.

Analyze the reasons for both the universal character of marriage and its diverse cultural expression.

Become aware of rare types of marriage and their cultural explanations.

Compare and contrast the variety of ways cultures mark the onset of marriage.

Delineate the various economic aspects of marriage that occur either before or after the marriage (bride-price, bride service, gift exchange, exchange of females, dowry and indirect dowry), and understand their cultural explanations.

Synthesize and evaluate the cultural restrictions on marriage.

Explain the variety of cultural reasons for decisions about whom one should marry, how many does one marry, and the reasons most cultures prefer arranged marriage over romantic love.

Distinguish the differences between family and household and understand the variation in family form (single-parent, nuclear, and extended families).

Assess the research explanations for the increase in one-parent families in many Western countries.

Evaluate the reasons that most cultures prefer extended-family households.

Understand patterns of marital residence and the reasons most couples in the world live near kinsmen.

Compare and contrast kinship systems (unilineal, ambilineal, and bilineal) and be able to explain the ways kinship structures provide the conduit for social action in noncommercial societies.

Assess the functions of descent groups and distinguish the features of lineages, clans, moieties.

Delineate the differences in kinship terminology as reflections of the way cultures distinguish relatives.

Explain the differences between the anthropological definitions of: politics, power, authority, influence and legitimacy.

Trace the evolution of human forms of political organization: bands, tribes, big-man/woman complex, chiefdoms, early states, nation states and identify their distinguishing characteristics.

Evaluate the costs and benefits of centralized versus de-centralized systems of political organization. Understand the primary role of kinship organization (segmentary lineage systems) as the foundation of political authority.

Compare and contrast the means by which cultures maintain order internally and manage their affairs with other societies and cultures externally.

Analyze the role of global power structures: World Bank, IMF and WTO and their impact on the sovereignty of the nation-state.

Distinguish between internalized mechanisms of social control (e.g., cultural values) and externalized mechanisms of social control (e.g., sanctions such as witchcraft and law) and evaluate their relative effectiveness and social consequences.
Analyze the factors that influence the relationship between gender and public power. Distinguish the ways women have access to influence and power in less visible ways.

Critique the diverse ways political systems obtain popular support and legitimize their power.

Analyze the ways political systems all over the world legitimize their power through recourse to supernatural ideas.

Distinguish among different motives, objectives, methods and scales of warfare as forms of organized violence.

Synthesize the ways applied anthropologists utilize their cross-cultural and evolutionally knowledge in modern dispute resolution and peace making.

Recognize the universality of religion and assess its role in shaping cultural cosmology and worldview.

Compare and contrast the distinctive features of religion, magic and witchcraft as cultural mechanisms used by people to appeal to, seek influence, or manipulate spiritual or supernatural beings and powers. Distinguish religion from spirituality.

Analyze and evaluate religions for identifying features: beliefs and rituals, supernatural beings and powers, skilled practitioners, and a body of myths that explains the system.

Delineate and synthesize psychological and social functions of religion.

Analyze the reasons religion gives meaning to individual and group life. Assess the continuing strength of religion worldwide in the face of the spread of Western scientific rationalism.

Distinguish the features of culturally diverse supernatural beings and powers: gods and goddesses, ancestor spirits, animism and animatism.

Evaluate the various anthropological theories used to explain the origin of religion.

Recognize the role of mythology in maintaining and rationalizing religious beliefs and practices.

Distinguish the cultural roles of priests, priestesses and shamans.

Understand ritual as "religion in action" and delineate the differences between rites of passage and rites of intensification.

Recognize and assess the significant impact of culture change on religious systems world wide and compare the variety of revitalization movements as mechanisms of cultural response and reform.

Analyze the sources of conflict between religion and the nation-state as exemplified by contested sites and rites, and religious freedom as a human right.

Recognize and be able to explain art as a creative use of human imagination to interpret, express and enjoy life. Recognize that not all societies distinguish "art" as a special category.

Evaluate the unique human ability to use symbols to give shape and significance to the physical world beyond a utilitarian purpose.

Explain anthropologists' view of art as a reflection of both cultural values and the concerns of people.

Distinguish visual art as either representational or abstract and as the opposites of a continuum.

Explain the three ways the study of art can be approached: aesthetic, narrative, and interpretive.

Compare and contrast the diverse array of cultural oral traditions: narratives (myths, legends and tales), drama, poetry, incantations, proverbs, riddles and word games.

Recognize the specialized field of ethnomusicology as the study of music in specific cultural settings.

Comprehend the role of scale systems and their diverse cultural modifications as representing tonality in music.

Distinguish melody, harmony, and rhythm and recognize their diverse cultural expressions.

Analyze the functional aspects of art: setting standards, preserving customs and values, promoting solidarity, expressing political concerns, and influencing social change.

Evaluate the relationship between art and religion and understand how art provides insights into a culture's worldview.

Assess the role of art as an expression of cultural identity and the survival of non-Western peoples.

Recognize the universal nature of culture change and explain the issue of scale (degree and rate of change).

Evaluate the doctrine of progress as a relative term meaning different things to diverse cultures world-wide.
Compare and contrast and assess the impact of the mechanisms of culture change: innovation, diffusion, cultural loss, and acculturation.

Analyze the historical role and impact of applied anthropology.

Contrast traditional applied anthropology with action-oriented anthropology and advocacy for the rights of indigenous peoples, ethnic minorities, and repressed groups. Identify the causes of potential ethical conflicts.

Identify and explain the various reactions of indigenous groups to imposed changes from outside influences and agencies: syncretism, revitalization movements, rebellion and revolution.

Analyze and evaluate the process of modernization and distinguish its four sub processes: technological development, agricultural development, industrialization, and urbanization.

Identify structural differentiation and new forces of social integration that accompany modernization.

Evaluate the evidence for anthropologists’ claim that modernization has generally led to the deterioration rather than improvement of peoples’ quality of life.

Synthesize the reasons why anthropologists are well suited to understand the existing world situation and decisions affecting the future of humanity.

Explain the reasons most anthropologists are skeptical of the trend toward monoculture and critical of the ways industrial countries treat traditional societies as obsolete and obstacles to human ‘progress’.

Define and understand the role of multiculturalism as a tool to manage cultural diversity and reduce ethnic tension.

Analyze the historical origins and increasing power and wealth of transnational corporations and their role in worldwide integration despite cultural differences.

Distinguish the global forces of structural power, hard power and soft power, and critique their effects on both traditional and modern cultures.

Evaluate the claim that the current worldwide system is unstable, vulnerable and unpredictable.

Recognize the growing world-wide trend toward structural violence (physical or psychological) and its causes.

Explain the reasons for the growing ‘culture of discontent’ and assess the role of the media in raising cultural expectations.

Compare and contrast the environmental and cultural consequences of consumerism with the sustainability model and critique their relative merits for the future of humanity.

**Student Learning Outcomes:**

- Distinguish between the four basic fields of Anthropology and their focuses.
- Illustrate how Applied Anthropology can solve problems in forensics, language renewal and social/environmental impact studies.
- Determine the importance of Anthropological Ethics when conducting participant observation studies in human populations.
- Critically analyze the positive and negative aspects of globalization on traditional cultures around the world and determine if ethnocentrism is involved in the modernization process.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Honors Introduction to Cultural Anthropology**

**ANTH100H:**

3.0 Units
This is a seminar style course that is enriched beyond that of ANTH 100, Introduction to Cultural Anthropology. This cross cultural survey course will focus on the four major fields of Cultural Anthropology as well as Applied Anthropology. Cultural systems over time will be studied such as religion, subsistence patterns, economics, kinship and cultural change. Globalization will be addressed as well as contemporary issues of the environment, warfare, resource depletion and ethnic conflict. Emphasis will be on critical thinking, understanding cultural diversity and cultural universals.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area B2: Social and Behavioral Sciences: Social Science Elective

Area D: Cultural Breadth

**CSU GE - Plan B**

Area D: Social Sciences

**IGETC - Plan C**

Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**

Anthropology

**Learning Outcomes**

**Course Objectives:**

Explain the biological basis of language and identify the evolutionary changes necessary for the evolution of human language.

Trace the changes over time that have occurred in human economic systems and evaluate the significant cultural, non-economic aspects of exchange that have characterized most of human evolution.

Understand the field of descriptive linguistics and distinguish phonemes, morphemes, syntax and grammar as features of language.

Recognize the role of individual genetic inheritance in shaping broad human potentials and limitations. Assess the validity of various nature-nurture paradigms considering cross-cultural data.

Understand ritual as "religion in action" and delineate the differences between rites of passage and rites of intensification.

Explain the role of culture in shaping the behavioral environment, including object orientation and learning spatial, temporal, and normative orientations.

Synthesize and evaluate the cultural restrictions on marriage.

Evaluate the role of anthropologists in the study of agricultural development.

Evaluate the various anthropological theories used to explain the origin of religion.

Distinguish the anthropological concepts of culture area, culture type and culture core.

Understand the historical origins and contemporary importance of the concepts of ethnocentrism, absolute cultural relativism, and critical cultural relativism.

Understand patterns of marital residence and the reasons most couples in the world live near kinsmen.
Analyze and evaluate anthropological studies of the relationship between culture and group personality.

Critically distinguish the difference between cultural evolution and the ethnocentric doctrine of progress.

Delineate the various economic aspects of marriage that occur either before or after the marriage (bride-price, bride service, gift exchange, exchange of females, dowry and indirect dowry), and understand their cultural explanations.

Assess the functions of descent groups and distinguish the features of lineages, clans, moieties.

Identify and critically analyze the historical origins and intellectual development of various anthropological theories used to explain human similarities and differences.

Evaluate the costs and benefits of centralized versus de-centralized systems of political organization. Understand the primary role of kinship organization (segmentary lineage systems) as the foundation of political authority.

Understand the ways anthropology differs from and complements other academic disciplines.

Comprehend the role of scale systems and their diverse cultural modifications as representing tonality in music.

Identify structural differentiation and new forces of social integration that accompany modernization.

Analyze the functional aspects of art: setting standards, preserving customs and values, promoting solidarity, expressing political concerns, and influencing social change.

Analyze the reasons why western economic principle and theories have limited applicability to economic systems that do not produce and exchange goods for profit.

Compare and contrast the distinctive features of religion, magic and witchcraft as cultural mechanisms used by people to appeal to, seek influence, or manipulate spiritual or supernatural beings and powers. Distinguish religion from spirituality.

Analyze the role of the enculturation process as a method each culture uses to “humanize” its children by teaching their specific social codes (norms, values, attitudes and beliefs) that will enable them to be functioning and contributing members of their society.

Define and understand the role of multiculturalism as a tool to manage cultural diversity and reduce ethnic tension.

Evaluate the cultural differences that determine the way valuable resources are allocated.

Analyze and evaluate religions for identifying features: beliefs and rituals, supernatural beings and powers, skilled practitioners, and a body of myths that explains the system.

Analyze the ways political systems all over the world legitimize their power through recourse to supernatural ideas.

Explore and assess the role of “otherness” in creating conflict both within and between different cultures.

Explain anthropologists’ view of art as a reflection of both cultural values and the concerns of people.

Compare and contrast the environmental and cultural consequences of consumerism with the sustainability model and critique their relative merits for the future of humanity.

Comprehend the concept and development of self-awareness.

Assess the distinctive, yet complementary, roles of the sciences and the humanities in shaping anthropology as a discipline.

Become aware of rare types of marriage and their cultural explanations.

Delineate the differences in kinship terminology as reflections of the way cultures distinguish relatives.

Explain the differences between differing cultural patterns of distribution and exchange: reciprocity, redistribution, and market exchange.

Explain the variety of cultural reasons for decisions about whom one should marry, how many does one marry, and the reasons most cultures prefer arranged marriage over romantic love.

Distinguish between internalized mechanisms of social control (e.g., cultural values) and externalized mechanisms of social control (e.g., sanctions such as witchcraft and law) and evaluate their relative effectiveness and social consequences.

Analyze the sources of conflict between religion and the nation-state as exemplified by contested sites and rites, and religious freedom as a human right.

Evaluate the evidence for anthropologists’ claim that modernization has generally led to the deterioration rather than improvement of peoples’ quality of life.
Analyze the reasons for both the universal character of marriage and its diverse cultural expression.

Understand the concept of modal personality and evaluate the limitations of this research methodology in non-Western cultures.

Analyze the modern globalization process and its consequences.

Assess and evaluate the history and global economic consequences of the World Bank, the IMF and the WTO.

Evaluate the relationship between art and religion and understand how art provides insights into a culture's worldview.

Contrast traditional applied anthropology with action-oriented anthropology and advocacy for the rights of indigenous peoples, ethnic minorities, and repressed groups. Identify the causes of potential ethical conflicts.

Compare and contrast the variety of ways cultures mark the onset of marriage.

Recognize the universality of religion and assess its role in shaping cultural cosmology and worldview.

Illustrate the ways the economic sphere is not separated from the social, political, and religious spheres in non-industrial societies.

Compare and contrast kinship systems (unilineal, ambilineal, and bilineal) and be able to explain the ways kinship structures provide the conduit for social action in noncommercial societies.

Recognize the specialized field of ethnomusicology as the study of music in specific cultural settings.

Evaluate the claim that the current worldwide system is unstable, vulnerable and unpredictable.

Analyze and evaluate the process of modernization and distinguish its four sub processes: technological development, agricultural development, industrialization, and urbanization.

Assess the relationship between subsistence patterns, social organization, and aspects of a culture's superstructure (e.g., beliefs, religion, and art).

Assess the process of cultural adaptation as consisting of ideas, activities, and technologies that enable a particular culture to survive and thrive.

Assess the symbolic nature of human language and explain the differences between animal communication systems and human language.

Distinguish among different motives, objectives, methods and scales of warfare as forms of organized violence.

Recognize and assess the significant impact of culture change on religious systems worldwide and compare the variety of revitalization movements as mechanisms of cultural response and reform.

Critically evaluate the relationship between the enculturation process and personality development.

Compare and contrast cross-cultural child rearing practices and their relationship to differing personality formations (e.g., dependence and independence training, and combinations of the two).

Evaluate the reasons that most cultures prefer extended-family households.

Understand labor as a key resource in any economic system and analyze the distinguishing features of culturally diverse patterns of labor.

Identify and explain the various reactions of indigenous groups to imposed changes from outside influences and agencies: syncretism, revitalization movements, rebellion and revolution.

Delineate the characteristics of culture (learned, shared, based on symbols, integrated, and dynamic).

Recognize the role of mythology in maintaining and rationalizing religious beliefs and practices.

Demonstrate familiarity with the history and current trends in participant-observation as the primary method of anthropological research.

Recognize the major forms of nonverbal communication and evaluate the roles of paralanguage and kinesics in the diverse expressions of human behavior.

Distinguish the cultural roles of priests, priestesses and shamans.

Critique the diverse ways political systems obtain popular support and legitimize their power.

Evaluate the doctrine of progress as a relative term meaning different things to diverse cultures world-wide.
Understand marriage, family and kinship systems as adaptive mechanisms of survival.

Analyze the reasons religion gives meaning to individual and group life. Assess the continuing strength of religion worldwide in the face of the spread of Western scientific rationalism.

Recognize the cultural bias in diagnosing some forms of mental illness and the role of applied anthropologists as cultural brokers between Western medical practitioners and their culturally diverse clients.

Trace the evolution of human forms of political organization: bands, tribes, big-man/woman complex, chiefdoms, early states, nation states and identify their distinguishing characteristics.

Synthesize the ways applied anthropologists utilize their cross-cultural and evolutionally knowledge in modern dispute resolution and peace making.

Distinguish visual art as either representational or abstract and as the opposites of a continuum.

Distinguish the differences between family and household and understand the variation in family form (single-parent, nuclear, and extended families).

Assess the role of art as an expression of cultural identity and the survival of non-Western peoples.

Assess the relationship between culture, society and the individual.

Recognize the cultural bias in diagnosing some forms of mental illness and the role of applied anthropologists as cultural brokers between Western medical practitioners and their culturally diverse clients.

Trace the evolution of human forms of political organization: bands, tribes, big-man/woman complex, chiefdoms, early states, nation states and identify their distinguishing characteristics.

Synthesize the ways applied anthropologists utilize their cross-cultural and evolutionally knowledge in modern dispute resolution and peace making.

Distinguish visual art as either representational or abstract and as the opposites of a continuum.

Distinguish the differences between family and household and understand the variation in family form (single-parent, nuclear, and extended families).

Assess the role of art as an expression of cultural identity and the survival of non-Western peoples.

Assess the relationship between culture, society and the individual.

Recognize the growing world-wide trend toward structural violence (physical or psychological) and its causes.

Explain the reasons most anthropologists are skeptical of the trend toward monoculture and critical of the ways industrial countries treat traditional societies as obsolete and obstacles to human ‘progress’.

Understand the role of surplus production and its influence on social inequality, task specialization, and patterns of gender-based division of labor.

Evaluate the effectiveness of various cultures in meeting physical, social, and psychological needs of their members.

Appreciate the role of linguistic anthropology in comparing and contrasting human languages and making culture accessible during fieldwork.

Distinguish melody, harmony, and rhythm and recognize their diverse cultural expressions.

Compare and contrast the diverse array of cultural oral traditions: narratives (myths, legends and tales), drama, poetry, incantations, proverbs, riddles and word games.

Recognize the evolutionary and cultural significance of leveling mechanisms.

Recognize the contributions of historical linguistics in understanding the nature and causes of language change and analyzing the relationships of language groups.

Understand the relationship between intensive agriculture and the development of non-industrial cities.

Distinguish the material from the non-material aspects of culture and assess the significance of norms, values, attitudes, morals and beliefs in influencing human behavior.

Explain the various contributions of sociolinguistics in delineating the distinction between standard and non-standard varieties of language and the social consequences of the speech communities that use them based on varying ethnic, cultural, class, or g

Compare and contrast the variety of economic systems of non-industrial peoples and analyze their reasons for promoting relationships over profits.

Analyze the ways anthropology studies both human universals and human diversity, utilizing a biocultural approach.

Recognize and be able to explain art as a creative use of human imagination to interpret, express and enjoy life. Recognize that not all societies distinguish “art” as a special category.

Compare and contrast the means by which cultures maintain order internally and manage their affairs with other societies and cultures externally.

Explain the reasons for the growing ‘culture of discontent’ and assess the role of the media in raising cultural expectations.

Evaluate the various functions of culture utilizing the comparative method.

Comprehend the role of culture in defining standards of normal and abnormal behavior or deviance.

Synthesize the relationship between language, culture and reality.
Delineate and synthesize psychological and social functions of religion.

Distinguish the features of culturally diverse supernatural beings and powers: gods and goddesses, ancestor spirits, animism and animatism.

Identify the three parts of economic systems: production, consumption and exchange (or distribution).

Identify and synthesize the distinctive characteristics of foraging, horticulture, pastoralism, intensive agriculture, industrialism, and post-industrialism.

Analyze the factors that influence the relationship between gender and public power. Distinguish the ways women have access to influence and power in less visible ways.

Assess the various ways any culture strikes a balance between the needs of individuals and group members.

Compare and contrast and assess the impact of the mechanisms of culture change: innovation, diffusion, cultural loss, and acculturation.

Analyze the historical role and impact of applied anthropology.

Evaluate the importance of understanding linguistic relativity.

Analyze the distinction between sex and gender and apply these distinctions to cross-cultural gender models (e.g., intersexuals, transgenders).

Distinguish the anthropological definition of economy and economic systems from those of western economics and evaluate its cross-cultural validity.

Distinguish and critique the contributions of early ethnographers.

Explain the three ways the study of art can be approached: aesthetic, narrative, and interpretive.

Critique the historical contributions of national character studies and contrast these studies with those focusing on core values.

Understand and evaluate the role of culture in allowing a wide range of creative human solutions in adapting to radically different environments.

Analyze the role of global power structures: World Bank, IMF and WTO and their impact on the sovereignty of the nation-state.

Compare and contrast the subfields of anthropology (cultural, physical, archaeology, linguistics, and applied) and their various contributions to a holistic perspective of humankind.

Explain the differences between the anthropological definitions of politics, power, authority, influence and legitimacy.

Comprehend the importance of language as the foundation of human culture.

Analyze the historical origins and increasing power and wealth of transnational corporations and their role in worldwide integration despite cultural differences.

Gain an understanding of the challenges involved in understanding humanity.

Recognize the universal nature of culture change and explain the issue of scale (degree and rate of change).

Analyze the concept of culture and its role in human adaptation.

Evaluate the unique human ability to use symbols to give shape and significance to the physical world beyond a utilitarian purpose.

Distinguish the global forces of structural power, hard power and soft power, and critique their effects on both traditional and modern cultures.

Synthesize the reasons why anthropologists are well suited to understand the existing world situation and decisions affecting the future of humanity.

Assess the research explanations for the increase in one-parent families in many Western countries.

**Student Learning Outcomes:**

- Demonstrate understanding of the four basic tenets of anthropology and their focuses
- Differentiate among cultures and their outcomes
- Critically analyze the positive and negative aspects of globalization on traditional cultures around the world and determine if ethnocentrism is involved in the modernization process
Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 54.0

Introduction to Physical Anthropology
ANTH101:

3.0 Units
An introduction to humankind's place in nature, including evolutionary theory, principles of genetics, primate evolution and behavior, fossil evidence for human evolution, human biology and variation, growth and adaptability, and biomedical anthropology. Includes practical application of biological anthropology to human problems. Field trips may be required.

Requisites
Requisites: None

Transferability & General Education Options
Transferable: Transferable to both UC and CSU

Weekly Lecture Hours: 3.0

General Education Plan:
Local - Plan A
   Area A: Natural Sciences

CSU GE - Plan B
   Area B2: Life Sciences

IGETC - Plan C
   Area 5B: Biological Science

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Describe the scope and perspective of anthropology.
Identify the scope and objectives of biological anthropology, as a sub-discipline.
Demonstrate an understanding of science and the scientific method.
Use language, paradigms and methods of biological anthropology.
Explain reconstructing evolutionary histories.
Discuss the origins of the earth and the origins of life.
Describe continental drift and the effects on fossil and living species.
Describe the evolution cells and organelles.

Explain the evolution of DNA, DNA repair and sexual reproduction.

Differentiate DNA replication and protein synthesis.

Differentiate cellular division: mitosis and meiosis.

Identify the Five Kingdoms and the earliest animals.

Describe and compare the various contributions and theories related to evolution.

Apply principles of Mendelian genetics.

Define cytogenetics.

Discuss mutations and genetic variation.

Analyze populations, gene pools and population genetics.

Differentiate mechanisms of evolution: mutation, inbreeding, migration and genetic drift.

Contrast microevolution and macroevolution.

Illustrate speciation.

Explain evolution and behavior.

Define taxonomy and systematics.

Examine morphology, embryology, and paleontology.

Identify the origins and distinguishing traits of chordates.

Discuss the origins and distinguishing traits of vertebrates.

Discuss the first vertebrates: jawless fish, bony fish, fish with jaws.

Identify the origins and distinguishing traits of amphibians and reptiles.

Describe the origins and distinguishing traits of mammals.

Distinguish the traits of the Primate Order.

Explain prosimians: traits, evolution, and behavior.

Identify anthropoids: origins and evolution.

Describe the distinguishing traits of Old and New World monkeys.

Explain the study of primate behavior: history and significance of field study.

Discuss the development of behavioral modeling: ethological studies, inclusive fitness, sociobiology, socioecology.

Differentiate male and female reproductive strategies.

Discuss primate foraging and feeding.

Give examples of defenses against predation.

Compare communication: scent, visual, vocal, tactile.

Contrast aggression and dominance interactions.

Explain mother-infant behavior.

Interpret learning as adaptation: play behavior and sociality.

Identify origin and evolution of the hominoids.

Distinguish the characteristics of the apes.

Describe fossil hominoids in Africa and Eurasia.

Differentiate the early and late divergence hypotheses.
Examine the evolutionary relationships of hominoids: fossil and molecular date: DNA hybridization.

Describe the Lesser Apes: gibbons and siamangs.

Discuss the Great Apes: orangutans, gorillas, chimpanzees and bonobos.

Interpret the biological and evolutionary basis of human behavior.

Explain the role of the environment and culture in shaping human behavior.

Differentiate fixed-action patterns: possible “innate” behaviors, culture as mediator.

Identify human behavioral ecology.

Examine the interaction of culture, environment, and biology.

Define the characteristics of the Hominidae.

Identify the earliest hominids: distribution and physical traits.

Evaluate taphonomy and hominid paleoecology.

Differentiate australopithecine discoveries, sites, dates, morphological patterns and distinctions.

Explain possible evolutionary interpretations for early hominids: four hypotheses.

Distinguish the relationship between hominid morphology and behavior: the significance of bipedalism and brain size.

Describe australopithecine paleoecology and behavior.

Summarize methods used in interpreting the fossil record, including dating techniques.

Classify members of the genus Homo: habilis, erectus, and sapiens.

Examine possible new members of Homo: evidence and debate.

Describe the human brain and encephalization; teeth, crania and jaws.

Identify body size and limb proportions in relation to bipedalism.

Distinguish homo habilis: time, distribution, defining traits, paleoecology and behavior, first stone tools.

Differentiate homo erectus: time, distribution, defining traits, paleoecology and behavior; stone tools, culture.

Categorize homo sapiens: origins (multi-regionalism and the Out-of Africa hypothesis); time and distribution, defining traits, paleoecology and behavior; stone tools and culture; evolutionary relationships and the Neanderthal question.

Examine the problems in reconstructing the evolution of human social behavior: biases, limitations of the data; referential and conceptual models.

Contrast the insights and limitations of primate behavior: baboon models and ape models.

Classify the human cultural dimension: technology, language, cognition, and cosmology.

Discuss studies of modern carnivores.

Identify contributions from archaeology: artifacts, paleobehavior, the stone age evidence.

Recognize model building and ethnographic research: limitations of extrapolating from present to past cultures.

Distinguish historical reconstructions of early human behavior.

Differentiate new behavioral models: carrying, food gathering, energy-efficient locomotion, habitat change.

Compare human ancestors and scavengers and hunters.

Interpret competing selective pressures: bipedalism and increasing brain size.

Explain the human brain: cerebral laterality, human language and speech versus animal communication.

Discuss the evidence for the origins of speech.

Discuss the nature of human genetic variation and how it is measured.
Explain geographical isolation and speciation; subspecies or "races".

Describe early studies of human variation and the concept of "race"; inadequacies of traditional racial classifications.

Identify new views of human variation: genetic markers as measures of population relatedness; clinal distribution.

Recognize natural selection human variation: sickle-cell anemia and protection against malaria; GSPD-deficiency, thalassemia.

Summarize blood group polymorphism: ABO, Rh factor, the HLA system.

Describe lactose intolerance and skin pigmentation as expressions of human variation.

Discuss genetic influences on behavioral variation: twin studies, race, I.Q. and class, alcoholism, schizophrenia.

Distinguish human growth studies: definitions and measurement of growth; the seven stages of human growth; genetic and hormonal control of growth.

Explain growth and development: an evolutionary perspective.

Classify secular trends in growth and maturation.

Describe growth and development in different human groups.

Discuss responses to modernization and the urban environment.

Interpret human adaptability: heat and cold; light and solar radiation, high altitude.

Examine nutrition and dietary adaption.

Examine the premises and goals of applied biological anthropology.

Identify biomedical anthropology and evolutionary medicine: sudden infant death syndrome, neonatal jaundice, diseases of civilization.

Discuss human populations, infectious diseases and parasites.

Define forensic anthropology and applied anthropometry.

Review human rights investigations and eugenics.

Interpret evolutionary perspectives on the brain and behavior.

Distinguish anthropological contributions to cross-cultural education and human ecology.

**Student Learning Outcomes:**

- Demonstrate an understanding of the Scientific Method and its value in determining a level of confidence in evidentiary support of scientific theories.
- Gain a broad awareness of biological evolution, and the genetic processes and environmental factors by which it occurs.
- Identify the various lines of evidence in support of human evolution including hominin fossils, genetics, primatological comparison, and cultural evidence, and the biological and cultural factors responsible for modern human variation.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Physical Anthropology Laboratory**

ANTH101L :

1.0 Units
Laboratory exercises and experiments designed to explore and understand the primary areas of physical anthropology: evolutionary theory, principles of genetics, comparative anatomy, physiology, behavior and ecology of vertebrates with an emphasis on nonhuman primates, analysis of fossil evidence for human evolution, human biology and variation, growth and adaptability, and biomedical anthropology. Includes both traditional and virtual laboratory experiences. Field trips may be required.

**Requisites**

**Prerequisite**

ANTH101 - Introduction to Physical Anthropology

or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

Local - Plan A

Area A: Natural Sciences

CSU GE - Plan B

Area B3: Laboratory Activity

IGETC - Plan C

Area 5C: Laboratory Activities

Santa Ana College - Shared Course

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

- Explain laboratory equipment, procedures, and lab “etiquette”.
- Identify the distinguishing traits of H. erectus, archaic H. sapiens including Neandertals, and anatomically modern man.
- Identify and distinguish prokaryotic and eukaryotic cells.
- Identify the cellular structures and their functions related to evolution.
- Differentiate mitosis from meiosis.
- Describe chromosomal abnormalities.
- Describe the structure and primary functions of DNA (replication and protein synthesis) and the role of mutations in evolution to become familiar with uses and implications of biomedical genetic research.
- Explain the principles and patterns of genetic inheritance including Mendelian and non-Mendelian traits to become familiar with human pedigree analysis.
- Analyze and evaluate the concept of natural selection as outlined by Charles Darwin.
- Define mutations and genetic drift.
- Identify bones of the human skeleton.
- Define human osteology methods.
- Define purpose of science and the steps in the scientific method.
- Differentiate male or female skeletons based on pelvis or skull.
Determine age range of skeleton.

Define the principles of taxonomy including the differences between traditional taxonomy and cladistics to become familiar with the modern division of 5 kingdoms of life forms and criteria utilized for these distinctions.

Evaluate taxonomic conclusions disagreements.

Classify 'simulated' animals.

Identify the distinguishing traits of fish, amphibians, reptiles, birds, and mammals and to understand the relationship between structure and function.

Identify, record, and analyze the typical behaviors of strepsirrhines, monkeys, and apes.

Identify distinguishing traits of each group on living specimens.

Identify early primates and how they evolved over time.

Differentiate distinguishing traits of robust and gracile australopithecines.

Differentiate Australopithecus and Homo as distinctive genera.

Distinguish bones based on side of the body.

Student Learning Outcomes:

- Demonstrate an understanding of the Scientific Method, and its value in determining a level of confidence in evidentiary support of scientific theories, by applying basic experimental methods to anthropological problems.
- Apply an understanding of biological evolution, and the genetic processes and environmental factors by which it occurs.
- Identify, analyze and apply the various lines of evidence in support of human evolution including hominin fossils, genetics, primate anatomical comparison, and cultural evidence, and the biological and cultural factors responsible for modern human variation.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Introduction to Archaeology

ANTH103:

3.0 Units

This is a survey course in world archaeology. Methods of archaeological survey and excavation will be discussed as well as past and current concepts and theories. Material remains such as lithics, bone, ceramics and ecofacts will be discussed as to how they can be interpreted into social, political, economic, religious and ethnic terms. Optional field trips may be offered.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Anthropology

Learning Outcomes

Course Objectives:
Distinguish characteristics of various types of sites: hunters and gatherers, village and urban sites.

Explain the ethical conflicts and compromises raised by the question of “who owns these objects?”

Discuss and assess the evolutionary changes that have occurred beginning with band subsistence, followed by pre-agricultural groups and then the first agriculturalists in western Asia.

Gain familiarity with the sites and finds of Ur. Troy; and assess the evidence gathered from “The Ice Man” and Peruvian mummies.

Discuss the first excavations by Assyrians, Greeks, Thomas Jefferson, James Hill, L.S.B. Leakey, Lewis Binford and numerous other significant researchers who transformed artifact collection into the science of archaeology.

Describe the reasons archaeology is considered the most interdisciplinary science in academia.

Become aware of and evaluate the technical advances that assist archaeologists with both land and underwater sites.

Examine the relative merits of infra-red, slide, black and white, and color film along with the computer enhancement of photographs.

Evaluate the types of data provided by ground penetrating radar from the space shuttle, aircraft, and satellite platforms.

Students will discuss the evidence and research presented by scholars such as Julian Steward in the American Southwest, George Bass in Nautical Archaeology, Gordon Childe, Robert Braidwood, Giorgio Buccellati and Ofer Bar-Yosef in the Near and Middle East.

Assess the massive changes in lifestyle, subsistence, technology, kinship and pathologies as humans evolve from hunter and gatherers to sedentary agriculturalists.

Assess categories of archaeological evidence such as ceramics, osteology, metals, pollen, glass, lithics ecofacts and many other categories of evidence left behind by our extinct predecessors.

Evaluate housing, transportation and other forms of evidence.

Discuss several types of archaeological field surveys—by air, by foot, or by mule.

Discuss mapping of sites as they are found on a survey and consider the planning, funding, and purchases needed in order to excavate a site.

Discuss specific tools and needs for a hypothetical archaeological site.

Analyze discussions of relative and absolute dating of sites and artifacts in depth.

Evaluate Stratigraphy and problems with stratigraphy and discuss relative chronology.

Differentiate between absolute dating, such as 14C., tree ring, potassium-argon, amino-acid, thermoluminescence and other dating systems.

Study human social evolution from hunter-gathers to industrial societies and the changes that occur with social density and technology as it advances.

Explain and critique the emergence and locations of stratified societies from earlier egalitarian societies and various theories of their origins.

Understand how paleoenvironments are reconstructed by core samples in glaciers on land, and how coprolite analysis from both humans and animals provide evidence for environmental reconstructions.
Gain an understanding of how the intestinal remains from mummies provide data to enhance the understanding of subsistence patterns and paleo environmental data.

Understand how the paleopathology of ancient human remains provide scientific evidence to document ancient viruses and bacterium.

Delineate flora and fauna changes in worldwide stratigraphy as sources of data to document environmental changes and correlate them with artifact changes.

Contrast these sites with small sites that only contain lithic debitage.

Consider the sources of evidence such as cooking pots and dirt floors that can be found and interpreted into the life ways of a specific group of people and may also give indication of outside cultural contact.

Learn about the sourcing of various types of rocks and ceramics, including their chemical analyses using atomic absorption and neutron activation technology in order to determine the manufacture area (source of the objects which can tell archaeologist about...)

Assess various theories of the peopling of the New World and the reliability of their evidence.

Evaluate documentation of the evidence for cultural transmission in areas like the American southwest and in the near east.

Understand that categories of evidence for major cultural changes are provided by human osteology, ecofact migration, and artifact migration: artifact style and form and language dynamics.

Identify and distinguish the evidence for the evolution of human cognition seen in symbols, signs, artifacts, and the first burials.

Understand that rock art and writing illustrates cognitive development of the human lineage over time and provides evidence of the lifestyle of our extinct ancestors.

Visually compare and contrast rock art of various regions and offer interpretations.

Identify paleopathologies in bone from human burials and distinguish probable causes such as: inadequate nutrition, overwork, or infection with foreign pathogens via European contact.

Evaluate evidence for the global exchange of disease patterns.

Critique the various anthropological theories for cultural change such as those proposed by V.G. Childe and Julian Steward.

Define invention, innovation, and diffusion, delineating how these processes have changed human cultures.

Assess and evaluate evidence from the work of Dr. George Bass, marine archaeologist, and his marine ship excavations off the coast of Turkey.

Compare and contrast anthropological theories for pre-state and state development.

Analyze empirical evidence from the earliest state societies found in the Near East, Greece, and Asia, contrasted with New World state societies of the Inca, Maya and Aztec societies.

Analyze the evolution from relatively egalitarian to stratified complexes.

Identify the issues involved in cultural resource management and heritage preservation including the impact of laws such as C.E.Q.A. and N.E.P.A.

Summarize archaeological and environmental law and its application.

Develop an understanding of how heritage preservation serves to enhance an appreciation of ethnicity past and present on a cross cultural basis.

Appraise exemplary institutions conducting cultural heritage conservation, such as the Getty Conservation Institute, the United Nations, and the U.S. National Park Service, will be appraised.

Understand the potential for employment in cultural resource management using the instructor's research and field experience.

Evaluate the problems and challenges faced when doing contract archaeology and assess the role of relevant professional associations such as the Register of Professional Archaeologists.

Identify and critique the issues faced worldwide by museums and organizations such as the Getty Center and Villa who attempt to maintain ownership of artifacts from other countries.

Distinguish subsistence remains that are microscopic (pollen) from those that are macroscopic such as in sites like Ceren where entire cornfields have been preserved.

**Student Learning Outcomes:**
Acquire a detailed awareness of the various methods and techniques employed by archaeologists in survey and excavation, as processes dedicated to the systematic recovery of cultural artifacts, ecofacts, and constructions. Be able to apply finds interpretation and analyses for developing meaningful and data-supported cultural conclusions about past societies.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Language and Culture
ANTH104:

3.0 Units

General introduction to the processes of human communication. Includes the relationship between language and culture, acquisition of first and second languages, languages in contact, sociolinguistics and the effects of both language and culture on inter/intra group communication. Languages spoken in the local area are used as the basis of study.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)
Anthropology

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Identify the various definitions of Language and describe the characteristics of human language.

Determine the interrelationship between language, identity and power.

Identify the characteristics of a native speaker of any language and compare the characteristics to those of a non-native speaker.

Define the elements of the disciplines of theoretical and applied linguistics and recognize the role of linguistic knowledge in various disciplines, e.g., speech pathology, applied language teaching, translation.

Apply knowledge of phonetics, phonology, morphology and syntax to simple problems, and they will analyze the results.

Identify how language changes and evolves over time.

Identify changes in phonology, morphology and syntax over time.

Describe how languages are influenced by other languages in terms of sounds, grammar, and form.

Identify various definitions of culture and correlate these to linguistic concepts.

Describe the Sapir-Whorf Hypothesis and apply the weak and strong version of the hypothesis to cultural examples.

Describe and exemplify the concepts of emic and etic.

Analyze and exemplify the co-extensive nature of language and culture, including biocultural origins.

Analyze what occurs when languages come into contact.

Demonstrate examples of language change due to cultural contexts.

Describe why after language loss some cultures are investing in language conservation and renewal with the help of their elders and professional anthropological linguists.

Describe how language is important in the transmission of culture from one generation to the next generation.

Describe language change during European colonialism and modern Western globalization and the loss of traditional/indigenous languages.

Analyze the power of language loss and its impact on personal identity, culture, power and prestige.

Analyze the difference between Communication, the hypernym and Language.

Identify channels of communication.

Recognize the language families of the world.

Apply the concept of emic and etic to this topic in an intercultural review.

Apply their knowledge of culture and communication to the situational context of communication and intercultural mismatches.

Recognize the distinctions between animal and human communication with regard to the brain.

Describe brain lateralization.

Apply knowledge of the brain to what occurs during acquired brain injury.

Recognize the speech centers of the brain.

Describe the results of language deprivation before and after puberty.

Describe the elements of first language acquisition in relationship to culture.

Compare and contrast the elements of first and second language acquisition in children and then in adults.

Observe a monolingual demonstration and describe the elements that contribute to effective and ineffective language teaching strategies.

Describe a contrastive analysis between English and another language for the purpose of analyzing the problems of ESL learners.

Analyze the linguistic elements of African American Vernacular English (AAVE), Spanglish and other dialects.

Specify the elements of pidgins and creoles.

Exemplify slang and jargon.
Exemplify euphemisms and taboos.

Analyze the five registers of language.

Analyze the attribute of sexist language.

Differentiate the elements of male and female language in lexicon and grammar in several different languages.

Examine the differences between verbal and nonverbal communication and give examples.

**Student Learning Outcomes:**

- Discuss the origins of symbolic human communication based on contemporary theory and the evidence provided by paleoanthropology, archaeology and linguistic evolution.
- Illustrate the cross-cultural relationship between language and culture. Specifically, the ways in which beliefs and practices of a language have social consequences.
- Describe the factors and consequences of language change (such as loss) over time.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Construction Safety Inspector Apprentice 1 AOE011:**

4.0 Units

Provides the related and supplemental instruction required for operating engineer apprentices in First Aid – CPR – AED, worker safety regulations and standards, and reviewing and completing safety forms and/or records. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

- Assess and evaluate the different types of physical conditions that can be a cause of an worksite accident.
- Assess and Evaluate the proper life-saving techniques and procedures that are required for the current situation.
- Recall and demonstrate the required techniques of First Aid, CPR, and AED to obtain a First Aid, CPR, and AED certification card.
- Interpret labor worker safety regulations and standards from Cal-OSHA Title 8 and OSHA Code of Federal Regulations volumes 1910 and 1926.
- Demonstrate construction safety and health hazard identification, avoidance, control, and prevention.
- Recall and use the training provided from the OSHA Outreach Program in 10 and 30 hour construction industry safety awareness.
- Identify construction worker safety issues and liabilities, including proper correction of the issue in maintaining a safe work environment.
- Demonstrate the formal administrative processes of Safety Consultation and Training Section (SCATS), including safety training and programs in preventing conditions that could lead to worker safety issues and injury.
Student Learning Outcomes:
Recall the proper First Aid response techniques necessary when workplace injury and illness situation occurs, upon identifying the individual's symptoms.
Evaluate and assess a construction worksite to detect any worker safety violations and/or conditions to correct as required in worker protection regulations and standards.

Units & Hours
Construction Safety Inspector Apprentice 2
AOE012:
4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineer field. Covers basic safety for a worker on hazardous waste and materials project, including the General Industry Outreach 30-hour OSHA safety course. Apprentices successfully completing this course will receive up to two certifications: Occupational Safety and Health Administration (OSHA) HAZWOPER 40-hr Worker Certificate and OSHA General Industry Outreach 30-hr Worker Safety Certificate. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Demonstrate construction safety and health hazard identification, avoidance, control, and prevention.
Recall OSHA regulations, agencies, industrial hygiene, toxicology, medical surveillance, health and safety plans, medical monitoring and instruments, personal protective equipment, and respiratory protection involved in industry and worker safety.
Recall and explain OSHA excavation, electrical, fall protection, scaffold, and crane regulations including OSHA safety orders, and how to properly use personal protective equipment for worker safety.

Student Learning Outcomes:
Recall and interpret OSHA Regulations required for worker safety while participating in HAZWOPER worksite activities.
Recognize and evaluate worksite safety hazards to create a safe work environment free from accidents and personal injury.

Units & Hours
Construction Safety Inspector Apprentice 3
AOE013:
4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineer field. Covers basic safety for a worker on an asbestos-containing and/or remediation project and OSHA disaster site worker and safety topics. Apprentices successfully completing this course will receive up to two certifications: Occupational Safety and Health Administration (OSHA) 15-hr Disaster Site Worker Certificate and AHERA Asbestos Worker 32-hour safety training course. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Learning Outcomes

Course Objectives:
Recall and explain the following safety topics about asbestos and safe work procedures: health effects, applications in buildings, worker protection, abatement techniques, and proper decontamination along with disposal requirements for maintenance, removal and abatement.

Recall OSHA regulations, agencies, industrial hygiene, toxicology, medical surveillance, health and safety plans, medical monitoring and instruments, personal protective equipment, and respiratory protection involved in industry and worker safety.

Explain the importance of heat stress and stroke symptoms, including heat illness prevention, cooling stations, and the generation of exothermic energy (heat/body temperature) while wearing personal protective equipment.

Recall and interpret OSHA regulations that govern disaster site work zones, national response framework, incident command system, and communication issues in the event of a local or national disaster.

Recall and explain the current OSHA requirements of personal fall arrest systems (PFAS) and their components along with the limitations of fall arrest equipment.

Student Learning Outcomes:
Recall and explain the following safety topics about asbestos and safe work procedures: health effects, applications in buildings, worker protection, abatement techniques, and proper decontamination along with disposal requirements for maintenance, removal and abatement.

Recall and interpret OSHA regulations that govern disaster site work zones, national response framework, incident command system, and communication issues in the event of a local or national disaster.

Units & Hours

Construction Safety Inspector Apprentice 4
AOE014:

0.0 Units

Provides the related and supplemental instruction required for operating engineer apprentices in construction cranes. Covers terminology, equipment nomenclature, basic principles of operation, regulatory agencies, wire rope, and rigging, and personnel manlift safety. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Recall and demonstrate proper operating and best practice safety techniques, equipment inspection, maintenance, and crew teamwork while operating a construction crane and/or personnel manlift equipment.

Calculate using the formulas in determining load angle, hardware types and configurations. Recall and evaluate the proper use of slings, hooks, shackles, lifting eyes, hoisting rings, spreader bars, wedge sockets, and inspection procedures of rigging and hardware.

Interpret California Code of Regulations Title 8, OSHA Federal Regulations Code of Federal Regulations (CFR Title 29) 1926.1400 et.al., American Society of Mechanical Engineers (ASME) ASME B30.5, et.al.

Recall and interpret the limitations and manufacturer’s recommendations when operating personnel manlift booms and/or scissor lifts.

Student Learning Outcomes:
Demonstrate proper operating and best practice safety techniques, equipment inspection, maintenance, and crew teamwork while operating a construction crane and/or personnel manlift equipment.
Recall and interpret the approved safe working range and limitations, including the manufacturer’s recommendations when operating personnel manlift booms and/or scissor lifts.

Units & Hours

Construction Safety Inspector Apprentice 5

AOE015:

4.0 Units

Provides the related and supplemental instruction required for operating engineer apprentices in the New Miner safety procedures of MSHA 30 CFR Part 48 B (Mine Safety and Health Administration) for surface mine operations, miner rights and responsibilities, worksite and equipment safety inspections, and all information and regulations pertaining to New Miners Rights and Responsibilities training standards. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:

Recall and interpret MSHA New Miners Rights and Responsibilities information, including worker safety checklists and inspections, and best practice safety tasks while performing work tasks with multiple employees.

Recall and demonstrate best practice safety techniques concerning Lock-out/Tag-out, Noise, Electrical safety, equipment guarding, personal fall arrest systems (PFAS), hazards of the work environment, and working adjacent to heavy mining equipment at a facility.

Assess and evaluate the daily physical condition of highwalls, berms, haul roads, excavations, and safety slopes during required shift inspections for the safety of the Miners and the facility site.

Student Learning Outcomes:

Recall the required Miners Rights and Responsibilities provided by MSHA for training and safety standards.

Interpret Experienced and New Miner Training and safety regulations (30 CFR) provided by MSHA for miner work safety and mine facility safety standards.

Units & Hours

Construction Safety Inspector Apprentice 6

AOE016:

4.0 Units

Provide the related and supplemental instruction required for operating engineer apprentices in employer safety program protocols, local emergency response procedures, and the duties and responsibilities of the construction building safety inspector. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes
Course Objectives:
Review the effectiveness of an employer safety program on a construction site.
Review the administrative duties of owner-controlled and contractor-controlled insurance programs.
Distinguish which emergency contacts (fire, police, and family) locally will be notified in the event of an emergency situation.
Explain how to effectively communicate with emergency response personnel in the event of an accident or emergency.
Review the safety aspects, duties and responsibilities, and administrative processes of the special safety inspector.

Student Learning Outcomes:
Recall and explain the administrative duties required to manage an Employer Safety Program on a construction site.
Evaluate an employer safety program for a construction site that includes safety standards and protocols/procedures recognizable to OSHA and other related agencies and authorities.
Recall and explain the safety aspects, duties and responsibilities, and administrative processes of the special safety inspector.

Units & Hours
Plant Equipment Operator 1
AOE021:

4.0 Units
Provides the related and supplemental instruction required for Operating Engineer Apprentices in safety, first aid, industry terminology, operation and maintenance of equipment used in the aggregate processing industry; emphasis on preventive maintenance. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Express an applied understanding of the first steps toward becoming an Operating Engineer.
Implement an applied understanding of political science as it relates to the semi-annual membership meeting.
Demonstrate an applied understanding of First Aid - CPR.
Demonstrate an applied understanding of the rocks products industry.
Demonstrate an applied understanding of classifying.
Demonstrate an applied understanding of machinery used in processing rock products.
Demonstrate an applied understanding of concrete mixing plants.
Demonstrate an applied understanding of open storage methods and equipment.
Demonstrate an applied understanding of belt conveyors used in aggregate production.

Student Learning Outcomes:
Identify and explain the use of various types of machinery and materials used in the plant equipment operator field.
Recognize the symptoms of and perform the proper treatment for sudden illness and injuries, given a series of job-site emergency situations.
List, describe and articulate key points of labor and Local 12 history, policies and practices.
Units & Hours
Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
144.0

Plant Equipment Operator 1 - Journeyworker
AOE021J:

4.0 Units

Provides journeyworkers instruction required for Operating Engineers in safety, first aid, industry terminology, operation and maintenance of equipment used in the aggregate processing industry; emphasis on preventive maintenance. This course explores advanced topics and focuses on specific types of equipment used in various situations.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Demonstrate an applied understanding of operating engineer - Journey level.
Demonstrate an applied understanding of political science as it relates to the semi-annual general membership meeting.
Demonstrate an applied understanding of First Aid - CPR.
Demonstrate an applied understanding of the rock products industry.
Demonstrate an applied understanding of classifying.
Demonstrate an applied understanding of machinery used in processing rock products.
Demonstrate an applied understanding of concrete mixing plants.
Demonstrate an applied understanding of open storage methods and equipment.
Demonstrate an applied understanding of belt conveyors used in aggregate production.

Student Learning Outcomes:
- Identify and explain the use of various types of machinery and materials used in the plant equipment operator field.
- Recognize the symptoms of and perform the proper treatment for sudden illness and injuries, given a set of emergency workplace situations.
- List, describe and articulate key points of labor and Local 12 history, policies and practices.

Units & Hours
Minimum Units:
4.0
Maximum Units
4.0

Total Hours
144.0

Plant Equipment Operator 2
AOE022:

4.0 - 5.0 Units

Provides the related and supplemental instruction required for Operating Engineer Apprentices in the safe use of oxyacetylene cutting equipment, the technique of brazing and electric arc welding. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
5.0

Learning Outcomes

Course Objectives:
Demonstrate an applied understanding of cutting.
Demonstrate an applied understanding of brazing.
Demonstrate an applied understanding of electric arc welding (DC).
Demonstrate an applied understanding of electric arc welding (AC).
Demonstrate an applied understanding of political science as it related to decision making in the Local Labor Union.
Demonstrate an applied understanding of oxyacetylene cutting.
Demonstrate an applied understanding of brazing.
Demonstrate an applied understanding of electric arc welding (DC).
Demonstrate an applied understanding of electric arc welding (AC)

Student Learning Outcomes:

Demonstrate competence and safety techniques while operating oxyacetylene cutting, brazing and welding equipment.
Describe and articulate the terminology and processes as related to the above training.

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
144.0
Plant Equipment Operator 2 - Journeyworker  
AOE022J:

4.0 Units

Provides journeyworkers instruction required for Operating Engineers in the safe use of oxyacetylene cutting equipment, the technique of brazing and electric arc welding. This course explores advanced topics and focuses on specific types of equipment used in various situations.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:
Demonstrate an applied understanding of oxyacetylene cutting at the Journey level.

Demonstrate an applied understanding of brazing.

Demonstrate an applied understanding of electric arc welding (DC).

Demonstrate an applied understanding of electric arc welding (AC).

Demonstrate an applied understanding of political science by participating in the semi-annual general membership union meeting.

Student Learning Outcomes:

- Demonstrate competence and safety techniques while operating oxyacetylene cutting, brazing and welding equipment.
- Describe and articulate the terminology and processes as related to the above training.

Units & Hours

Minimum Units:

4.0

Maximum Units

4.0

Total Hours

144.0

Plant Equipment Operator 3  
AOE023:

4.0 Units

Provides the related and supplemental instruction required for Operating Engineers Apprentices in safety practices, pre-shift inspection, lubrication, maintenance and heavy equipment operation. Introduce the Apprentice to Green Technologies pertaining to this field. Emphasizes practical experience in performing the work processes. Open Entry/Open Exit.

Requisites

Requisites:
Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of operator manuals.

Learn, become knowledgeable and demonstrate an applied understanding of equipment operation.

Learn, become knowledgeable and demonstrate an applied understanding of operators manuals.

Learn, become knowledgeable and demonstrate an applied understanding of green technology.

Learn, become knowledgeable and demonstrate an applied understanding of political science through the operations of the labor union.

Student Learning Outcomes:
- Demonstrate competence, safety techniques and teamwork while operating heavy equipment used in plant operations.
- Demonstrate and use manuals in the performance of pre-shift inspections and maintenance of heavy equipment.
- Understand Green Technology and Green Construction Techniques in the field of Aggregate Processing.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
144.0

Plant Equipment Operator 3 - Journeyworker
AOE023J:

4.0 Units

Provides the journeyworker instruction required for Operating Engineers in safety practices, pre-shift inspection, lubrication, maintenance and heavy equipment operation. Introduce the Journeyworker to Green Technologies pertaining to this field. Emphasizes practical experience in performing the work processes. This course explores advanced topics and focuses on specific types of equipment used in various situations.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
Learning Objectives

Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of operator manuals.
Learn, become knowledgeable and demonstrate an applied understanding of equipment operation.
Learn, become knowledgeable and demonstrate an applied understanding of green technology.
Learn, become knowledgeable and demonstrate an applied understanding of political science as it related to labor union operations.
Learn, become knowledgeable and demonstrate an applied understanding of operators manuals.
Learn, become knowledgeable and demonstrate an applied understanding of equipment operation.
Learn, become knowledgeable and demonstrate an applied understanding of green technology.

Student Learning Outcomes:

- Demonstrate competence, safety techniques and teamwork while operating heavy equipment used in plant operations.
- Understand and use manuals in the performance of pre-shift inspections and maintenance of heavy equipment.
- Understand Green Technology and Green Construction Techniques in the field of Aggregate Processing.

Units & Hours

Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
144.0

Plant Equipment Operator 4

AOE024:

4.0 Units

Provides the related and supplemental instruction required for Operating Engineer Apprentices in pneumatics, power hydraulics, filtration, piping/sealing devices and electricity, emphasizing troubleshooting three phase industrial motor control systems. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of introduction to pneumatics.
Learn, become knowledgeable and demonstrate an applied understanding of introductory hydraulics.
Learn, become knowledgeable and demonstrate an applied understanding of electricity.
Learn, become knowledgeable and demonstrate an applied understanding of political science through participation in the labor union process.

Learn, become knowledgeable and demonstrate an applied understanding of introductory pneumatics.

Learn, become knowledgeable and demonstrate an applied understanding of introductory hydraulics.

Learn, become knowledgeable and demonstrate an applied understanding of electricity.

**Student Learning Outcomes:**

- Troubleshoot a set of problems involving pneumatic components, hydraulic components and electrical motors.
- Demonstrate knowledge in making decisions on any changes that are required by the Local Union of its membership.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units:**

4.0

**Total Hours**

144.0

**Plant Equipment Operator 4 - Journeyworker**

**AOE024J:**

4.0 Units

Provides the Journeyworker instruction required for Operating Engineer in pneumatics, power hydraulics, filtration, piping/sealing devices and electricity, emphasizing troubleshooting three phase industrial motor control systems. This course explores advanced topics and focuses on specific types of equipment used in various situations.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

Learn, become knowledgeable and demonstrate an applied understanding of introductory pneumatics.

Learn, become knowledgeable and demonstrate an applied understanding of introductory hydraulics.

Learn, become knowledgeable and demonstrate an applied understanding of electricity.

Learn, become knowledgeable and demonstrate an applied understanding of political science through participation in the union process.

Learn, become knowledgeable and demonstrate an applied understanding of introductory pneumatics.

Learn, become knowledgeable and demonstrate an applied understanding of introductory hydraulics.

Learn, become knowledgeable and demonstrate an applied understanding of electricity.

**Student Learning Outcomes:**


Troubleshoot a set of problems involving pneumatic components, hydraulic components and electrical motors. Demonstrate knowledge in making decisions on any changes that are required by the Local Union of its membership.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
144.0

Plant Equipment Operator 5
AOE025:

4.0 Units
Provides the related and supplemental instruction required for Operating Engineer Apprentices in disassembly, diagnosis, repair, assembly/adjustment of cone crushers, screens, separators and belt conveyors. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of cone crushers.
Learn, become knowledgeable and demonstrate an applied understanding of jaw crushers.
Learn, become knowledgeable and demonstrate an applied understanding of screen and wash classifiers.
Learn, become knowledgeable and demonstrate an applied understanding of political science through participation in the labor union process.
Learn, become knowledgeable and demonstrate an applied understanding of belt splicing.
Learn, become knowledgeable and demonstrate an applied understanding of cone crushers.
Learn, become knowledgeable and demonstrate an applied understanding as a screen classifier.
Learn, become knowledgeable and demonstrate an applied understanding as a wash classifier.
Learn, become knowledgeable and demonstrate an applied understanding of belt splicing.
Learn, become knowledgeable and demonstrate an applied understanding of jaw crushers.

Student Learning Outcomes:
Demonstrate competence, safety techniques and teamwork while operating cone and jaw crushers, screen and wash classifiers as well as belt conveyors.
Demonstrate knowledge in making decisions on any changes that are required by the Local Union of its membership.
Minimum Units: 4.0

Maximum Units 4.0

Total Hours 144.0

Plant Equipment Operator 5 - Journeyworker
AOE025J:

4.0 Units

Provides the journeyworker instruction required for Operating Engineers in disassembly, diagnosis, repair, assembly/adjustment of cone crushers, screens, separators and belt conveyors. This course explores advanced topics and focuses on specific types of equipment used in various situations.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of cone crushers.

Learn, become knowledgeable and demonstrate an applied understanding of jaw crushers.

Learn, become knowledgeable and demonstrate an applied understanding of screen and wash classifiers.

Learn, become knowledgeable and demonstrate an applied understanding of political science through participation in the labor union process.

Learn, become knowledgeable and demonstrate an applied understanding of belt splicing.

Student Learning Outcomes:
Demonstrate competence, safety techniques and teamwork while operating cone and jaw crushers, screen and wash classifiers as well as belt conveyors.

Demonstrate knowledge in making decisions on any changes that are required by the Local Union of its membership.

Units & Hours
Minimum Units: 4.0
Maximum Units
4.0

Total Hours
144.0

Plant Equipment Operator 6
AOE026:

4.0 Units

Provides the related and supplemental instruction required for Operating Engineer Apprentices in the operation of asphalt/concrete plants, material handling, storage, batching tolerances and electrical controls. Ability to identify and service gasoline and diesel engines. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of design and control concrete mixes.

Learn, become knowledgeable and demonstrate an applied understanding of operation of asphalt mixing plants.

Learn, become knowledgeable and demonstrate an applied understanding of operation of asphalt plants.

Learn, become knowledgeable and demonstrate an applied understanding of internal combustion engines.

Learn, become knowledgeable and demonstrate an applied understanding of political science through participation in the operations of the labor union.

Learn, become knowledgeable and demonstrate an applied understanding of design and control concrete mixes.

Learn, become knowledgeable and demonstrate an applied understanding of location of a concrete mixing plant.

Learn, become knowledgeable and demonstrate an applied understanding of operation of asphalt plants.

Learn, become knowledgeable and demonstrate an applied understanding of internal combustion engines.

Student Learning Outcomes:
Use manuals to maintain, troubleshoot and diagnose gasoline and diesel engine problems. They will be able to service and repair engines in a safe manner.

Explain the fundamental practices, machinery, tools, maintenance, repair, electrical controls, daily start-up and shut-down processes for asphalt and concrete plants.

Demonstrate knowledge in making decisions on any changes that are required by the Local Union of its membership.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0
Total Hours
144.0

Plant Equipment Operator 6 - Journeyworker
AOE026J:

4.0 Units
Provides the journeyworker instruction required for Operating Engineer in the operation of asphalt/concrete plants, material handling, storage, batching tolerances and electrical controls. Ability to identify and service gasoline and diesel engines. This course explores advanced topics and focuses on specific types of equipment used in various situations.

Requisites
None

Transferability & General Education Options
Transferable: Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Learn, become knowledgeable and demonstrate an applied understanding of design and control concrete mixes.
Learn, become knowledgeable and demonstrate an applied understanding of operation of concrete mixing plants.
Learn, become knowledgeable and demonstrate an applied understanding of operation of asphalt plants.
Learn, become knowledgeable and demonstrate an applied understanding of internal combustion engines.
Learn, become knowledgeable and demonstrate an applied understanding of labor union operations.
Learn, become knowledgeable and demonstrate an applied understanding of design and control concrete mixes.
Learn, become knowledgeable and demonstrate an applied understanding of operation of a concrete mixing plant.
Learn, become knowledgeable and demonstrate an applied understanding of operation of asphalt plants.
Learn, become knowledgeable and demonstrate an applied understanding of internal combustion engines.

Student Learning Outcomes:
Use manuals to maintain, troubleshoot and diagnose gasoline and diesel engine problems as well as service and repair engines.
Explain the fundamental practices, machinery, tools, maintenance, repair, electrical controls, daily start-up and shut-down processes for asphalt and concrete plants.
Demonstrate knowledge in making decisions on any changes that are required by the Local Union of its membership.

Units & Hours
Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
144.0

Heavy Duty Repairer 1
AOE031:

3.0 - 3.5 Units

Provides the related and supplemental instruction required for operating engineer apprentices in safe work practices and principles when working around or operating heavy equipment, purposes of organized labor, labor history, first aid, IUOE Local 12 structure, Labor-Management Agreement, Local 12 By-Laws, International Union of Operating Engineers (IUOE) Constitution, and basic machinery maintenance. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.5

Learning Outcomes

Course Objectives:

Identify and apply safe and appropriate practices

Describe important aspects of the IUOE Local 12 Bylaws, Labor-Management Agreements, and the IUOE Constitution

Identify and apply first aid techniques for individuals who are injured or suddenly become injured at home and work

Demonstrate knowledge and basic applications of machinery maintenance on all the major systems found on a piece of machinery

Student Learning Outcomes:

Recall the necessary procedures of safety awareness while working around heavy equipment on a construction site.

Demonstrate proficiency and competence in recognizing the symptoms of sudden illness and injuries that may occur at a construction site, and performing proper treatment until emergency services arrive.

Units & Hours

Minimum Units:

3.5

Maximum Units

3.5

Total Hours

90.0

Heavy Duty Repairer 2

AOE032:

3.0 Units

Provides the related and supplemental instruction required for operating engineer apprentices in the basic safety practices and principles in the use of oxy-acetylene cutting equipment, electric arc welding equipment, and examples/techniques of brazing. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Demonstrate correct procedures for oxy-acetylene cutting
Demonstrate correct brazing procedures
Demonstrate correct DC arc welding procedures

Student Learning Outcomes:
Recall and demonstrate competence in basic welding procedures, and required personal safety techniques while cutting metals with an oxy-acetylene torch.
Demonstrate skills learned by joining two pieces of metal with the use of a brazing rod and torch.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Hydraulics
AOE033:
3.0 Units
Provides related and supplemental instruction required for operating engineer apprentices in the principles of hydraulics, basic hydraulic system nomenclature, and the practical uses of hydraulics. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Apply the basic safety principles and practices when working around hydraulic systems
Identify the basic components of a hydraulic system
Identify potential problems during inspection and testing processes
Perform general maintenance
Identify and describe important aspects of hydraulic fluids

Apply appropriate safety protocols while handling/working with hydraulic fluid

**Student Learning Outcomes:**
- Recall the basic nomenclature of a hydraulic system and necessary safety principles required, and required maintenance recommendations for the hydraulic system.
- Demonstrate the process and procedure required for completing a hydraulic system safety inspection and maintenance report.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
90.0

**Advanced Hydraulics**

**AOE034:**

3.0 Units

Provides the related and supplemental instruction required for operating engineer apprentices in hydraulic systems, pneumatic systems, and electrical/electronic systems used on heavy equipment and trucks. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Apply safety procedures in working around and maintaining hydraulic systems
- Diagnosis and repair problems
- Demonstrate the required safety practices and proper rigging techniques of power train assemblies when the use of a boom truck crane is necessary to hoist heavy components in assembly and/or disassembly situations
- Troubleshoot and properly maintain hydraulic assisted transmissions, hydrostatic drives, and torque converters
- Correctly apply the nomenclature of a pneumatic/hydraulic controlled system
- Compare and contrast "air over hydraulic" type systems
- Identify the purpose of engineered application on heavy construction equipment
- Compare and contrast force and pressure
- Classify types of installation problems
- Measure air flow in a pneumatic system
- Examine key factors in maintaining a fluid power system
Apply safety procedures, theory, and proper operation to basic electrical/electronic systems used on heavy equipment

Demonstrate the appropriate use of tools and equipment needed to troubleshoot electronic systems

Demonstrate proper maintenance procedures for troubleshooting electrical/electronic systems

Student Learning Outcomes:
- Recall their knowledge of proper health and safety guidelines when inspecting, maintenance, servicing and troubleshooting hydraulic, pneumatic, and electrical/electronic systems.
- Demonstrate the process of identifying components on a schematic diagram engineered for hydraulic, pneumatic, and electrical/electronic systems.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Heavy Duty Repairer 5
AOE035:

3.0 - 144.0 Units

Provides related and supplemental instruction required for operating engineer apprentices in basic safety practices and proper maintenance procedures when working with gasoline and/or diesel engines. Specific topics include: internal combustion engine theory for both diesel and gasoline engines, use of appropriate hand tools needed for engine repair, proper procedures for engine disassembly and assembly, and troubleshooting and diagnosing engine failures. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
- Demonstrate required safety procedures in engine tear down and rebuild—both diesel and gasoline
- Identify elements of an internal combustion engine and the basic engine components (nomenclature) included
- Practice proper safety and maintenance procedures when working around the different engine components
- Diagnose and analyze engine malfunctions using proper diagnostic protocols recommended by the manufacturer

Student Learning Outcomes:
- Recall the necessary health and safety practices while operating gasoline and diesel internal combustion engine systems used in the heavy duty repairer field.
- Assess and evaluate symptoms and/or problems while troubleshooting a gas or diesel engine.

Units & Hours
Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 90.0

Disassembly and Assembly

AOE036:

3.0 Units

Provides the related and supplemental instruction required for operating engineer apprentices, including: basic safety aspects and procedures of working with power transmission components of heavy construction equipment. Additional training includes: clutches, mechanical transmissions, differentials, final drives, crawler-type tractor undercarriage, and crawler-type tractor truck assemblies. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Apply appropriate safety practices when performing maintenance

Assess, evaluate, and troubleshoot problems and/or breakdowns associated with equipment maintenance and repair

Apply proper safety and maintenance practices on undercarriage and tracks

Student Learning Outcomes:

Recall the health and safety technique while working with mechanical clutches, mechanical transmissions, mechanical differentials, final drives, undercarriages, and crawler track assemblies practiced in the classification of a Heavy Duty Repair person

Recognize and explain the functions of clutches, transmissions, differentials, final drives, undercarriages and track assemblies

Units & Hours

Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 90.0

Introduction to Apprenticeship

AOE041:

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321a6e6b18
4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers trade. Students will identify basic safety rules and procedures when operating and working around heavy construction equipment, proper safe attitudes and work ethics, personal financial planning responsibilities, history of organized labor and its structure, and the importance of wages and benefits of being a member of a local union. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:
Recall and Demonstrate personal traits of working safely on the jobsite and around heavy equipment.

Review proper work attitudes and work practices regarding personal work ethics and safety.

List the different types of personal injuries resulting from unsafe physical conditions that could likely cause an accident.

Review the roots of organized labor and how the labor movement has evolved in the United States from in the past into modern times.

Discuss proper wage rates, working conditions, and crew sizes.

Describe the proper settlement procedures for grievances and disputes.

Review IUOE Local 12 union membership requirements and member duties.

Define the roles of union officials and agents; financing rules and operating procedures; and the health care benefit package and pension plans.

Recall the decision-making process of a labor union; how the local union conducts its business; and, the current political issues facing the local union.

Student Learning Outcomes:

1. Recall and demonstrate the principles of safety, including necessary best practice personal work traits while on the job and working around heavy construction equipment.

2. Recall and describe the many opportunities of personal financial planning and responsibilities as an Operating Engineer.

3. Recall the history of organized labor and how it pertains to Local 12, including the organization of its members and administrative structure, wages, and benefits.

Units & Hours

Grade Checking

AOE042:

4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers field. Reviews information found on typical grading and Survey stakes, the use of colored ribbon on grade stakes, transferring elevations from one point to another, setting grading stakes for both cut and fill slopes, grading stakes for curb and streets, staking procedures for subdivisions, basic laser set-up, and basic GPS equipment set-up.

Requisites

None

Transferability & General Education Options

Transferable:
Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Demonstrate the personal need for being safety conscious when working on the ground around heavy equipment.
Memorize the meaning and application of related terms and definitions used in the construction industry.
Recall the purpose of each tool and how it is used in relation to grade checking processes.
Recall the processes of verifying the hand level for accuracy, interpreting grade stakes, the use of colored ribbon on grading stakes, setting grade stakes for heavy construction equipment, transferring elevations using a ruler and hand level.
Demonstrate the methods and mathematics used in the staking of slopes.
Demonstrate the methods used for solving mathematical equations used in the grade checking of slopes.
Develop speed and accuracy in the installation of slope stakes.
Utilize the Pythagorean Theorem method for laying out right angle triangles in rough and finish grading operations.
Identify the use of grading stakes for the control and efficiency of heavy construction equipment.
Recall the purpose of catch points and the methods of how to establish them.
Use set stakes for grades specified on subdivision or highway plans.
Evaluate and install staking for grade control specified on subdivision or highway set of engineered plans.
Calculate crossfall elevations for street, highway, and mass grading projects.
Calculate percentages (slope) for horizontal and vertical distances (crossfall) engineered for roadway grade control.
Use of a banjo grade checking tool to establish proper grade in setting curbs and gutters.
Demonstrate the layout of a curve radius to reestablish grade control and elevation for a lost stake and hub.

Student Learning Outcomes:
1. Interpret and solve for equations to accurately set stakes for grading subdivisions, highways, structures, slopes, and curbs and gutters as needed when provided a set of plans from the employer.
2. Demonstrate personal competence, safety awareness, and teamwork while interpreting grading stakes to accurately grade projects required on the work site.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
126.0

Equipment Operator 3
AOE043:
4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers field. Covers the topics of preventive maintenance and operation of heavy construction equipment, best practices and personal safety, terminology, maintenance, and operation of the following pieces of equipment: Scrapers, Dozers, Loaders, Forklifts, Compactors, Rollers,
and Construction Cranes. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

- Explain and demonstrate the proper function of key components (nomenclature) of each type of heavy construction equipment.
- Recall and describe the primary function and application for each type of equipment.
- Recall and demonstrate best safety practices of personal basic safety procedures and walk-around equipment inspections while operating and working with heavy construction equipment.
- Review and discuss safety topics including unknown/unforeseen safety hazards that could occur on the work site.
- Demonstrate proper equipment inspection and maintenance procedures before starting and moving heavy construction equipment, including the function of each of the controls in the operator’s cab.
- Recognize and use the appropriate and industry standard hand signals when working around heavy construction equipment.
- Recall and demonstrate the basic walk-around inspection and skill set necessary to operate each type of heavy construction equipment.
- Review safe working procedures to employ in the event of heavy construction equipment component failure, including securing the equipment safely.
- Recall the industry standard procedures of mounting and dismounting of heavy construction equipment safely, avoiding personal accidents and injury.
- Demonstrate the industry standard safety procedures of securing heavy construction equipment when stopping for any reason on the work site.
- Recall and demonstrate safe operating procedures of heavy construction equipment when loaded or unloaded (empty) based on rated equipment center of gravity and current work site conditions.

**Student Learning Outcomes:**

- Recall and demonstrate walk-around inspections, mounting and dismounting, proper function and application, control orientation, and securing heavy construction equipment when stopping and parking.
- Recall and demonstrate personal safety awareness and hand signal communication while operating heavy construction equipment and construction cranes.
- Recall and demonstrate safe operating procedures of heavy construction equipment when loaded or unloaded (empty) based on equipment rated center of gravity and current work site conditions.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

126.0

**Plan Reading**
AOE044:

4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers field. Introduces the tasks of interpreting and reading plan sets consisting of: grading, infrastructure, and structural plans for roadways, subdivisions, and service utilities. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:

Explain each of the three views on a highway set of engineered plans: plan, profile, and cross section.

Demonstrate on how to find a location on a set of plans using the station number.

Calculate the distance between two points using station numbers.

Explain the symbols on the plan set that are listed in the legend.

Identify the various types of structures and details that are engineered on a set of plans.

Interpret the provided curve data information found in the plan and sheet details.

Identify pipe structures and locations of other drainage structures with the profile sheets and vertical curves.

Identify and Solve for subgrade elevations and crossfall percentages using the cross-section sheets, pipe quantities, and materials needed to build drainage structures using the drainage structure sheets.

Recognize bridge abutments and bent details and determine the dimensions for the footings of the abutment.

Interpret specific standard drawings and details in the Book of Standards and details.

Compare both recognized units of measurements, including English units (feet) and metric (meters).

Identify plan details involving toe of slope and top of slope, including engineered slope ratios.

Identify what type of structure needs to be built at the top of a slope (containment berm or drainage swale).

Compare engineered elevations on a set of plans, including existing and proposed elevations.

Recall the various types of property lines and the limits of grading, both private and public.

Assess housing pad and lot dimensions, including elevations and direction of drainage.

Locate parkway dimensions and engineered crossfall for drainage.

Locate street dimensions including roadway crossfall and/or crowns.

Identify the slope/gradient value (in percent or decimal) of pipe grade including specific elevations of invert grades and manhole heights.

Demonstrate the process of how to locate key engineered points using station numbers.

Identify the slope value (gradient) of the service utility pipe grade including specific elevations of invert grades and manhole heights.

Use elevations to calculate vertical height of risers for utility manholes.
Calculate required structural sections of bedding materials for pipe installation and support.

Calculate vertical cuts to engineered grade to allow for required amounts of structural materials.

Calculate engineered quantities of structural service utilities needed for a specific project.

Estimate amounts of construction materials needed for a specific project.

**Student Learning Outcomes:**

- Interpret and calculate vertical and horizontal measurements (engineered grade and structural sections) for construction materials and equipment to complete a project from the information provided in a set of plans.
- Recall and identify the information contained in the plan set to determine key points and structures for construction progress.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
126.0

**Equipment Operator 5**

**AOE045:**

4.0 Units

Provide related and supplemental instruction to apprentice operating engineers on the topics of preventive maintenance and operation of heavy construction equipment, best practices and personal safety, terminology, maintenance, and operation of the following pieces of equipment: Backhoes, Excavators, Motor Graders, Finish Dozers, and slope boards, Hydraulic and Conventional Cranes. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

- Explain and demonstrate the proper function of key components (nomenclature) of each type of heavy construction equipment.
- Recall and describe the primary function and application for each type of equipment.
- Recall and describe the primary function and application for each type of equipment.
- Recall and demonstrate best safety practices of personal basic safety procedures and walk-around equipment inspections while operating and working with heavy construction equipment.
- Review and discuss safety topics including unknown/unforeseen safety hazards that could occur on the work site.
- Demonstrate proper equipment inspection and maintenance procedures before starting and moving heavy construction equipment, including the function of each of the controls in the operator's cab.
- Recognize and use the appropriate and industry standard hand signals when working around heavy construction equipment.
Recall and demonstrate the basic walk-around inspection and skill set necessary to operate each type of heavy construction equipment.

Review safe working procedures to employ in the event of heavy construction equipment component failure, including securing the equipment safely.

Recall the industry standard procedures of mounting and dismounting of heavy construction equipment safely, avoiding personal accidents and injury.

Demonstrate the industry standard safety procedures of securing heavy construction equipment when stopping for any reason on the work site.

Recall and demonstrate safe operating procedures of heavy construction equipment when loaded or unloaded (empty) based on rated equipment center of gravity and current work site conditions.

Student Learning Outcomes:

- Recall and demonstrate walk-around inspections, mounting and dismounting, proper function and application, control orientation, and securing heavy construction equipment when stopping and parking.
- Display competence, safety awareness and teamwork while operating backhoes, excavators, motor graders, finish dozers, large hydraulic cranes, conventional cranes, and dozers equipped with slope boards.
- Recall and demonstrate safe operating procedures of heavy construction equipment when loaded or unloaded (empty) based on equipment rated center of gravity and current work site conditions.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
126.0

Hazmat 6

AOE046:

4.0 Units

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineer field. Covers basic safety for a worker on a hazardous materials project, First Aid-CPR-AED, OSHA disaster site worker, and safety topics. Apprentices successfully completing this course will receive up to three certifications: Occupational Safety and Health Administration (OSHA) HAZWOPER 40-hr Worker Certificate, OSHA Construction Industry 10-hr Worker Safety Certificate, OSHA 15-hr Disaster Site Worker Certificate, and National Safety Council (NSC) First Aid, CPR, AED Certificate. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Recall and demonstrate the basic life-saving techniques of First Aid, CPR, and AED procedures after evaluating the current situation and/or scene.
Recall OSHA regulations, agencies, industrial hygiene, toxicology, medical surveillance, health and safety plans, medical monitoring and instruments, personal protective equipment, and respiratory protection involved in industry and worker safety.

Recall and explain OSHA excavation, electrical, fall protection, scaffold, and crane regulations including OSHA safety orders, and how to properly use personal protective equipment for worker safety.

**Student Learning Outcomes:**

Recall and interpret OSHA Regulations required for worker safety while participating in HAZWOPER worksite activities. Recognize and evaluate worksite safety hazards to create a safe work environment free from accidents and personal injury. Recall and demonstrate emergency procedures and life-saving techniques in the event of an accident or emergency response to a declared disaster site scene.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

126.0

**Operating Engineers Hazmat 40**

**AOE047:**

1.5 - 2.0 Units

Safety regulations, safe work practices for hazardous waste site operations as specified by the 29th code of Federal Regulations, 1910.120 as approved by the National Institute of Environmental Safety and Health for the International Union of Operating Engineers, for required certification. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.5

**Learning Outcomes**

**Course Objectives:**

Demonstrate knowledge of governing bodies related to hazardous work sites.

Review regulations regarding safety in hazardous situations.

Recognize site personnel responsible for work site safety and health.

Recognize chemical and environmental hazards present on hazardous waste sites.

Recognize control methods used to insure worker safety and good health.

Explain various types of equipment used for personal protection.

Demonstrate knowledge of proper use of personal protective equipment.

Recall and explain work practices which minimize hazards on site.

Review practices for personal safety and health, including the prevention of exposure to hazardous chemicals.
Describe engineering controls and equipment utilized when hazardous waste is present.

Employ the safe use of engineering controls and equipment on hazardous waste sites.

Describe and apply the proper methods and applications of medical surveillance.

Set up approved decontamination procedures.

Interpret established safety and health regulations and procedures.

Evaluate effective spill containment procedures utilizing the appropriate equipment and materials.

Student Learning Outcomes:
- Recognize and correct unsafe practices and dangerous conditions given a set of hazardous waste site situations.
- Research, identify, and implement codes, standards and specifications for work at a hazardous waste site.

Units & Hours
Minimum Units:
1.5

Maximum Units
1.5

Total Hours
36.0

Disaster Site Worker
AOE048:

0.5 Units


Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
- Explain the worker's responsibility for making choices and decisions that enhance their own safety and health and that of others at a disaster site.
- Describe the characteristics of a disaster site.
- Assess disaster site in order to make proper decisions for procedures, equipment and gear to be used for each situation.
- Define Incident Command/Unified Command Systems.
- Explain the purpose of Incident Command Systems.
- Describe how the worker's job supports/fits into Incident Command Systems.
- Recognize and identify disaster site safety hazards including unstable structures, below-grade spaces and voids, severed utilities, flammables/combustibles, compressed gases, sources of electricity, confined spaces, working around mechanized/motorized equipment.
Identify the responsibility of the worker for making choices and decisions that enhance their own safety and that of others at a disaster site.

Identify and report disaster site health hazards.

Define and distinguish between acute and chronic hazards and the significance to workers.

Recognize the importance of route of entry for health hazards.

Define the health hazards of atmospheric hazards from chemical releases and fires, hot work, dusts, blood borne pathogens, miscellaneous chemicals, noise, heat and cold stress.

Describe the process for monitoring health hazards and limitations of each situation.

Review the responsibility of the worker for making choices and decisions that enhance their own safety and that of others at a disaster site.

Recall and list CBRNE agents and symptoms.

Recognize the need for additional training for CBRNE agents.

Demonstrate knowledge of symptoms of exposure when a person is exposed to selected CBRNE agents and the significance of secondary devices.

Define traumatic incident stress and how it may have an effect of employees.

Discuss and research the effects and management techniques of traumatic incident stress.

Recognize how disaster sites can be sources of traumatic incident stress for workers.

Demonstrate knowledge of the physical, cognitive, emotional, and behavioral symptoms of traumatic incident stress and, the key components of traumatic incident stress management.

Recognize the importance of the proper use of respiratory protective equipment.

Define common disaster-site respiratory hazards and the limitations of air-purifying respirators.

Demonstrate knowledge of cleaning and storage of an air-purifying respirator.

Discuss and apply the factors important in selecting protective clothing.

Identify types of protective equipment available and what hazard(s) each protects against.

Discuss and research the reasons for and methods of decontamination.

Recognize and define types of decontamination.

Demonstrate knowledge of where decontamination occurs in the contamination-zone scheme.

**Student Learning Outcomes:**

Determine the proper procedures, equipment, and gear for each situation given a set of disaster site scenarios.

Demonstrate and explain proper and safe use of respiratory protective equipments including cleaning, storage, and the importance and limitations of wearing this equipment.

**Units & Hours**

**Total Hours**

9.0

**Tower Crane**

**AOE054:**

0.5 - 1.0 Units

Provides instruction and training for operating engineers in tower cranes. Covers terminology, nomenclature, basic principles of operation, regulatory agencies, and operator safety involved with construction tower crane operation. Open Entry/Open Exit.

**Requisites**
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes
Course Objectives:
Interpret California Code of Regulations Title 8, OSHA Federal Regulations Code of Federal Regulations (CFR Title 29) 1926.251, American Society of Mechanical Engineers (ASME) B30.4, ASME B30.5.

Recall construction tower crane types, common uses, advantages, disadvantages and limitations of each type, pre-operation inspections, periodic inspections, annual inspections, quadrennial inspections, and special inspections.

Recall and assess the common causes of construction crane accidents, OSHA statistics, and procedures of construction tower crane erection and dismantling.

Recall and demonstrate industry basic electrical best practices of safety, requirements when working around power lines, use of signal person, lock-out/tag-out, fall protection.

Recall and interpret the manufacturers rated requirements when using personnel platforms, wire rope safety, load chart capacities and rigging/equipment reductions.

Recall industry communication requirements, personal fall arrest system requirements, proof test, trial lifts, traveling with personnel suspended, tag lines, wire rope construction, and wire types.

Interpret and evaluate the advantages and disadvantages of various types of wire rope and the replacement requirement of wire rope.

Demonstrate proper hand signals, two-way radio communications, voice signals and special signals.

Recall and demonstrate the responsibilities of the signal person, proper hoisting, swinging, booming, traveling, and trolley procedures.

Assess and evaluate lift planning, principles of leverage, and center of gravity/combined center of gravity.

Calculate using the formulas in determining load angle, hardware types and configurations.

Recall and evaluate the proper use of slings, hooks, shackles, lifting eyes, hoisting rings, spreader bars, wedge sockets, and inspection procedures of rigging and hardware.

Recall the principles of operation for construction tower cranes; including load moment, dynamic loading, shocking loading, capacity deductions, parts of line, reading load charts, and regulations regarding load charts.

Student Learning Outcomes:
1. Demonstrate proper operating and best practice safety techniques, equipment inspection, maintenance, and crew teamwork while operating a construction tower crane.

Calculate using the formulas in determining load angle, hardware types and configurations. Recall and evaluate the proper use of slings, hooks, shackles, lifting eyes, hoisting rings, spreader bars, wedge sockets, and inspection procedures of rigging and hardware.

Interpret California Code of Regulations Title 8, OSHA Federal Regulations Code of Federal Regulations (CFR Title 29) 1926.251, American Society of Mechanical Engineers (ASME) B30.4, ASME B30.5.

Units & Hours
Minimum Units:
0.5

Maximum Units
0.5

Total Hours
Concrete Transportation Construction Inspector

AOE061:

4.0 - 5.0 Units

Provides related and supplemental instruction for apprentices in the Operating Engineers field in concrete transportation construction inspections. Covers transportation systems and applications, preliminary testing, pre-placement inspection, placement inspection, post-placement inspection. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

5.0

Learning Outcomes

Course Objectives:

Recall the role and responsibilities of a concrete inspector, express information pertaining to the workplace properly through verbal and written communication, and record all daily inspection assessments into verbal and/or written reports.

Interpret and identify construction building codes & standards, job site specifications, engineered design drawings & plans, project submittals, contract documents, and site progress reports.

Evaluate the properties and uses of soil, cement, concrete pavements, and RCC (Roller Compacted Concrete) pavements and materials. Review construction site preparation & operation and required inspection & field control.

Recall the principles, design components, and quality of concrete, proportioning mix designs, batching and mixing, and perform sampling and testing as required by construction codes, standards, and specifications.

Evaluate and assess the type and grade, location and spacing, support requirements, splicing and lapping, concrete cover, and cleanliness of reinforcement structures, required use of joint fillers, and structural formwork/falsework necessary for construction.

Demonstrate knowledge of proper site preparation, plastic concrete inspection, sampling & testing, batching, transporting, placing, proper finishing of concrete, control joints, and specified duration of curing and protection.

Inspect and assess the early curing & quality of concrete, surface finishing and repair, form removal, and final inspection/acceptance testing.

Memorize current union contractual negotiations, how to settle contract disputes, evaluate jurisdictional issues, and compare contractual benefit updates as they occur.

Student Learning Outcomes:

Recall the role and responsibilities of a concrete construction inspector, express information pertaining to the workplace properly through verbal and written communication, and record all daily inspection assessments into verbal and/or written reports.

Recall the principles, design, components, and quality of concrete, proportioning mix designs, batching and mixing, and perform sampling and testing as required by construction codes, standards, and specifications.

Units & Hours

Minimum Units:

5.0

Maximum Units:

5.0
Asphalt Inspection
AOE062:

4.0 Units

Provides related and supplemental instruction for apprentices in the Operating Engineers field in asphalt inspection. Covers materials inspection, mix design, plant operations, placing operations, compaction, report writing, plan reading, and grade checking. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Discuss jobsite safety practices, union membership responsibilities, the union structure, and union benefits.

Explain the properties of asphalt cement and asphalt grading.

Explain the principle tests for identifying properties of asphalt.

Explain the various aggregate properties and the test for identifying each of them.

Explain the procedures for safe and proper storage, handling and sampling of asphalt cements and stockpiling of aggregates.

Explain the desirable properties of asphalt and aggregate mixtures and various classifications.


Evaluate Cleanliness of Coarse Aggregate - Caltrans test 227

Explain the principles of the Marshall Method/Hveem Method and Superpave mixes.

Explain mix design characteristic and desirable properties of asphalt and asphalt mixes.

Explain the causes of typical paving mix deficiencies.

Explain the relationship between mix design data and paving job specifications.

Describe the process and knowledge of the function of an asphalt plant.

Describe the process of the two types of asphalt plants and the major components of each.

Describe the process and knowledge of the proper procedures for handling, storing, and sampling aggregate.

Describe the process of the items that should appear in an inspector's plant records.

Describe the operation of cold aggregate feed systems.

Describe the items to be checked in a visual inspection of hot-mix asphalt.

Describe the process of the basic sampling and testing procedures for checking hot-mix asphalt.

Describe the process of the safety considerations necessary for safe and efficient plant operation.
Perform Sampling Material - Caltrans test 125 ASTM D 75.
Perform calculations pertaining to Aggregate Gradations - Caltrans test 105.
Recall the safety training and work practices necessary in obtaining required certification.
Recognize and apply the procedures for placing hot-mix asphalt.
Recognize and apply the principles of the asphalt paver and the floating screed.
Recognize and apply the principles and functions of an automatic screed control.
Recognize how to plan and control a paving operation at a definite width and thickness.
Recognize how to match and/or construct transverse and longitudinal joints.
Recognize and apply placing and mix deficiencies and how they might be corrected.
Explain and apply the principles of the compaction process.
Explain and apply the standard rolling equipment that is utilized.
Explain and apply why rolling operations must be adjusted to compensate for variations in mix properties and environmental conditions.
Explain and apply how to ensure a finished pavement meeting texture, grade, and density requirements.
Perform Caltrans Standard Specification Section 39 Asphalt Concrete.
Perform Caltrans test 375 Determining the In-Place Density and Relative Compaction of Asphalt Concrete Pavement.
Perform Caltrans test 382 Determination of Asphalt Content by Ignition Method.
Specify Caltrans Special provisions and quality control requirements.
Demonstrate knowledge on how to write reports.
Interpret property lines/right of way lines, natural contour lines, finish grade lines, elevations, subgrade/finish grades.
Interpret existing structures/utilities on plans.
Interpret information found on grade stakes.
Set hike-ups for grading machines.
Set transfer elevations.
Inspect work for errors.
Observe union negotiations, how to settle contract disputes, jurisdictional issues, and receive benefit updates.

Student Learning Outcomes:
Recall and interpret construction codes, standards, and specifications to perform asphalt material inspections and evaluations.
Interpret information found on grade stakes, calculate hike-ups for grading machines, transfer elevations, and inspect work for errors.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
144.0

ACI Laboratory Testing Technician I
AOE063A:
4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in laboratory testing on aggregates used for structural concrete. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes

Course Objectives:
Inspect and recall cylinder types, safety, sulfur temps, mold prep, proper alignment, set times, cylinder storage, and required quality control for specimens.

Review personal and equipment safety, break times, proper alignment, set times, break types, calculations for PSI (Pounds Per Square Inch), and quality control.

Compare sample quantity, methods for reduction, aggregate size, determining reduction, area preparation, splitter selection, the reduction process, and the uses of reduced samples.

Assess sample quantity, sieve types, aggregate size, determining sieve process, area preparation, visual quality control, the reduction process, and how to report results.

Interpret the surface saturation of aggregate, sample size, how to determine sieve sizes, sieve arrangement, duration of process, lab analysis documentation, calculations for each sieve, and how to report results.

Evaluate aggregate size, size of measure, unit weight of water, saturation of aggregate, lab test process time, unit weight of aggregate, air voids in aggregate, and how to document results.

Select representative material, to determine aggregate type and size, the calibration of scale, the introduction of water to aggregate, how to document initial results, the procedures for calculation, and how to report unit weight.

Determine heat and burn safety, material selection, scale calibration, how to determine initial wet weight, how to select oven temperature and dry time, how to determine dry weight, how to calculate for moisture.

Demonstrate safety procedures, sample selection techniques, material preparation, proper storage facilities, material set time, proper handling of aggregate samples, color chart identification, and how to document results.

Practice ACI practice evaluations and review terminology, tests, written examinations, and performance examinations covered on the exam.

Student Learning Outcomes:
  
  Demonstrate competence and safety working techniques to accurately perform laboratory tests on aggregates used for structural concrete.
  
  Recall construction codes and standards including ACI (American Concrete Institute) information when evaluating and inspecting structural concrete mix designs and aggregates.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours

4.0
ACI Laboratory Testing Technician II
AOE064A:

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in design parameters for batching structural concrete. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

4.0

Learning Outcomes

Course Objectives:

Evaluate batch-to-batch variations, sampling, specimen preparation, curing testing procedures, statistical procedures, principal sources of strength variation, and statistically based specifications.

Describe scope of work, effects of chemical admixtures, background data, procedure, sample computations, laboratory tests, mass concrete mix proportioning, and report analysis.

Examine scope, apparatus, special solutions required, samples, preparation of test sample, procedure, quantitative examination, and qualitative examination.

Review scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

Research scope, terminology, significance and use, apparatus, heavy liquid, sampling, procedure, and calculation.

Recognize scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

Apply the simple method with third-point loading, scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

Recall and use scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

List and demonstrate scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

Explain scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

Review and utilize scope, terminology, summary of test method, significance and use, apparatus, sampling, test sample preparation, and calculation.

Review and discuss ACI practice evaluations, ASTM standard reviews, terminology, summary of tests, written examinations, performance examinations, and study elements.

Student Learning Outcomes:

Recall specifications and evaluation/inspection standards of the ACI (American Concrete Institute) Laboratory Testing Technician II certification and examination.

Evaluate, assess, and perform advanced ACI (American Concrete Institute) tests and inspection assessments required for construction building codes/standards and site specifications for structural concrete.
Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
144.0

Reinforced Concrete
AOE071A:

4.0 Units
Provides the required related and supplemental instruction for operating engineer apprentices in codes and duties, reinforcing steel, blueprinting reading, gunite, report writing, people skills. Apprentices will gain the knowledge, research skills and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Prepare or update resumes for personal certifications and licenses.
Investigate new skills necessary for upgrading job responsibilities.
Practice effective job-task completion techniques.
Describe the proper protocols for dealing with design problems/errors.
Recall and assess construction code and standards that apply to reinforced concrete.
Analyze and evaluate the procedures for engineer generated design changes.
Recall the techniques and basic safety procedures related to reinforcing steel.
Demonstrate and practice knowledge of construction design plan sets.
Describe the responsibilities and authority of a Construction Building Inspector.
Describe and practice effective communication practices used in the field.
Demonstrate accurate report writing skills.
Identify processes available to Specialty Inspectors who want further training or certification.
Recall on how and when to issue non-compliance notices.
Evaluate and solve for design questions on structural concrete plan sets.
Recall the basic concepts and duties of an apprentice.
Identify the “gray areas” of code applications as they apply to Specialty Inspection
Recall the construction codes, standards, and duties of an inspector as they apply to reinforced concrete.

Apply and enforce building codes and standards as a Construction Building Inspector.

**Student Learning Outcomes:**
- Research, identify, and implement codes, standards and specifications to assess and perform reinforced concrete inspections.
- Evaluate and analyze residential and commercial engineered plan sets used in reinforced concrete inspection.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
144.0

**Prestressed Concrete**

**AOE072A:**

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in reinforcing steel, codes, blueprints, stressing sheets, plan changes, report writing, people skills, job etiquette and protocol. Apprentices will gain the knowledge, research skills and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
4.0

**Learning Outcomes**

**Course Objectives:**
- Recall the basic concepts and duties of an apprentice.
- Recall the construction codes, standards, and duties of an inspector as they apply to prestressed concrete.
- Recall the techniques and basic safety procedures related to reinforcing steel.
- Recall and assess construction codes and standards that apply to reinforced concrete.
- Demonstrate and practice knowledge of construction design plan sets.
- Evaluate and solve for design questions on structural concrete plan sets.
- Understand and solve structural blueprint questions
- Analyze and evaluate the procedures for engineer generated design changes.
- Demonstrate accurate report writing skills.
- Describe and practice effective communication practices used in the field.
- Describe proper jobsite etiquette and the protocol for dealing with problems.
Recall on how and when to issue non-compliance notices.

Apply and enforce building codes and standards as a Construction Building Inspector.

Prepare or update resumes for personal certifications and licenses.

Practice effective job-task completion techniques.

Investigate new skills necessary for upgrading job responsibilities.

Describe the responsibilities and authority of a Construction Building Inspector.

Identify processes available to Specialty Inspectors who want further training or certification.

**Student Learning Outcomes:**

Research, identify, and implement codes, standards, and specifications to assess and perform prestressed concrete inspections.

Evaluate and analyze residential and commercial engineered plan sets used in reinforced prestressed concrete inspections.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

144.0

**Structural Steel/Welding**

**AOE073A:**

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in codes and duties, welding, report writing, people skills, gunite applications. Apprentices will gain the knowledge, research skills and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Demonstrate knowledge of high strength bolting techniques.

Demonstrate and practice knowledge of welding design plan sets.

Practice effective job-task completion techniques.

Analyze and evaluate the procedures for engineer generated design changes.

Prepare or update resumes for personal certifications and licenses.

Demonstrate accurate report writing skills.

Describe proper jobsite etiquette and the protocol for dealing with problems.

Recall on how and when to issue non-compliance notices.
Evaluate and solve for design questions on structural concrete plan sets.

Investigate new skills necessary for upgrading job responsibilities.

Recall the processes of the union and the apprenticeship program.

Describe the responsibilities and authority of a Construction Building Inspector.

Recall the construction codes, standards, and duties of an inspector as they apply to structural steel/welding.

Recall and assess construction code and standards that apply to welding inspection.

Describe and practice effective communication practices used in the field.

Identify processes available to Specialty Inspectors who want further training or certification.

Apply and enforce building codes and standards as a Construction Building Inspector.

**Student Learning Outcomes:**

- Research, identify, and implement codes, standards, and specifications to assess and perform structural steel welding inspections, and solve specific plan set problems as they arise.

- Research, identify, and implement codes, standards, and specifications to assess and perform/inspect structural steel welds.

**Units & Hours**

**Structural Steel/Bolting**

**AOE073B:**

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in codes and duties, structural bolting inspection, report writing, personal skills. Apprentices will gain the knowledge, research skills, and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Recall the processes of the union and the apprenticeship program.

Recall the construction codes, standards, and duties of an inspector as they apply to structural steel bolting.

Recall and assess construction code and standards that apply to structural bolting inspection.

Demonstrate knowledge of high strength bolting techniques.

Analyze and evaluate the procedures for engineer generated design changes.

Demonstrate accurate report writing skills.

Describe and practice effective communication practices used in the field.

Describe proper jobsite etiquette and the protocol for dealing with problems.

Recall on how and when to issue non-compliance notices.

Apply and enforce building codes and standards as a Construction Building Inspector.

Prepare or update resumes for personal certifications and licenses.

Practice effective job-task completion techniques.
Investigate new skills necessary for upgrading job responsibilities.

Describe the responsibilities and authority of a Construction Building Inspector.

Identify processes available to Specialty Inspectors who want further training or certification.

Demonstrate and practice knowledge of welding design plan sets.

Evaluate and solve for design questions on structural concrete plan sets.

**Student Learning Outcomes:**
- Research, identify, and implement codes, standards, and specifications to assess and perform structural steel bolting inspections, and solve specific plan set problems as they arise.
- Research, identify, and implement codes, standards, and specifications to assess and perform/inspect structural steel bolts.

**Units & Hours**

**Structural Masonry**

**AOE074A :**

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in codes and duties, reinforcing steel, plan changes, people skills, jobsite etiquette and protocol, Specialty Inspector. Apprentices will gain the knowledge, research skills and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Recall the construction codes, standards, and duties of an inspector as they apply to structural masonry.

Practice effective job-task completion techniques.

Recall on how and when to issue non-compliance notices.

Recall and assess construction code and standards that apply to structural masonry.

Describe the responsibilities and authority of a Construction Building Inspector.

Demonstrate accurate report writing skills.

Recall the basic safety procedures related to reinforcing steel and masonry.

Prepare or update resumes for personal certifications and licenses.

Analyze and evaluate the procedures for engineer generated design changes.

Evaluate and solve for design questions on structural masonry plan sets.

Demonstrate and practice knowledge of construction design plan sets.

Investigate new skills for upgrading job responsibilities.

Identify processes available to Specialty Inspectors who want further training or certification.

Apply and enforce building codes and standards as a Construction Building Inspector.

Recall the basic concepts and duties of an apprentice.

Describe the proper protocols for dealing with design problems/errors.
Describe and practice effective communication practices used in the field.

**Student Learning Outcomes:**
- Research, identify, and implement codes, standards, and specifications to assess and perform reinforced structural masonry inspections.
- Evaluate and analyze residential and commercial engineered plan sets used in reinforced concrete inspection.

**Units & Hours**

**Soils Inspection and Testing**

**AOE075A:**

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in codes and duties, calibration procedures, soil identification, methods of moisture determination, maximum density tests, sand cone testing, nuclear density testing, people skills, sieve analysis, proper vehicle setup. Apprentices will gain the knowledge, research skills and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
- Recall the basic concepts and duties of an apprentice.
- Recall and demonstrate the duties of a soils inspector/technician.
- Describe the calibration procedures on various scales and equipment.
- Identify and evaluate the various types of soils.
- Describe how to properly cure prepared samples per code.
- Establish and determine results using three types of moisture from prepared samples.
- Practice and utilize a Nuclear Density Gauge for soils compaction inspection.
- Demonstrate by solving for compaction results by visual graph and curve.
- Calculate a maximum density and optimum moisture per the A.S.T.M. standard.
- Demonstrate the standard test method for density and unit weight of soil in place by the sand cone method.
- Explain and calibrate sand cone equipment and weight scales.
- Demonstrate the use of hand tools, test equipment, and all procedures used in preparing an area for testing.
- Demonstrate testing of compacted soil by sand cone method (D-1556) and nuclear method (D-2922).
- Describe and practice effective communication practice used in the field.
- Describe the proper protocols for dealing with design problems/errors.
- Demonstrate a sieve analysis test including the math formulas involved.
- Solve and report the results of the test visual chart and graph.
- Demonstrate the proper and required setup of a work vehicle when transporting soils, gear and equipment to a worksite.
Student Learning Outcomes:
Research, identify, and implement codes, standards, and specifications to assess and perform accurate soils inspections and tests, including density testing, sand cone testing, and nuclear density testing.
Evaluate and analyze residential and commercial engineered plan sets used in soils inspection, density testing, sand cone and nuclear density testing.

Units & Hours
Structural Plan Reading for Inspectors
AOE076A:
4.0 Units
Provides the related and supplemental instruction required for operating engineer apprentices in structural plan reading, interpretation of structural layout and design engineering for inspectors. Design, printing, and preparation guidelines as detailed in the Uniform Building Code (UBC). Open Entry/Open Exit.

Requisites
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Demonstrate a general understanding of IBC (International Building Code).
Recall the basic components of structural tests and inspections.
Describe and analyze design layout formats, plan assembly, and the role of the structural engineer.
Apply and enforce building codes and standards as a Construction Building Inspector.
Demonstrate and practice knowledge of construction design plan sets.
Identify and interpret symbols and general notes.
Identify structural members in a building, including column location, beam and girder location, footings, spread footings, and grade beams.
Recall and explain the five types of Special Inspection.
Demonstrate knowledge of IBC procedures and guidelines.
Describe how the code book and structural plans work together.
Demonstrate the use of structural plans and information contained.

Student Learning Outcomes:
Research, identify, and implement codes, standards, and specifications to assess and perform structural inspections.
Recall and explain the Five Types of Special Inspection.

Units & Hours
ICC Soils Special Inspector
AOE077A:
4.0 Units
Provides the required related and supplemental instruction required for operating engineer apprentices in the general requirements, laboratory testing, grading plans, site preparation, and fill monitoring techniques used for International Code Council (ICC) Soils Inspections. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Evaluate the information on Survey stakes.

Describe the proper techniques to notify the contractor of deviations from approved construction documents.

Identify cuts, fills, over excavations, drainages, slopes, features, and other relevant conditions on grading plans.

Assess laboratory test results to verify fill material is in compliance with approved construction documents.

Identify and describe placement operations and equipment used in fill monitoring.

Collect representative samples of fill materials.

Inspect that the site has been cleared and grubbed according to approved construction documents.

Assess that the subgrade is prepared and the over excavation is completed according to approved construction documents.

Determine fill material types for compliance with project documents.

Demonstrate required soil tests on compacted fill.

Recall the proper construction documents and soils reports used in inspections.

Student Learning Outcomes:
Demonstrate competence and safety techniques to accurately perform construction inspections.

Research, identify, and implement codes, standards, and specifications to assess and perform accurate soils inspections and tests, including density testing, sand cone testing, and nuclear density testing.

Evaluate and analyze residential and commercial engineered plan sets used in soils inspection, density testing, sand cone, and nuclear density testing.

Units & Hours
Certified Welding Inspector
AOE079:

3.0 Units

Provides related and supplemental instruction necessary to become a Certified Welding Inspector. Topics include welding processes, heat control, welding inspections and flaws, definitions and terminology, utilization of specifications and drawings, safety, testing methods. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Recall and assess welding processes and procedures, welder qualifications, agency code and standards application, evaluate materials and interpret engineering and design.

Demonstrate and employ the control processes of heat when welding and inspecting carbon and low alloy steel, mechanic test and properties, code application and fabrication.

Recall the tasks involving welding inspections and evaluating and reporting welding flaws.

Recall welding performance, nondestructive examination, welding code applications and qualifications.

Recall terminology used in welding codes and standards pertaining to welding inspection.

Interpret welding codes, specifications, and engineered drawings.

Assess and evaluate the metallurgy of metal and steel, including carbon and low alloy metals.

Recognize and interpret welding symbols, personal safety, code and standard application, and non-destructive tests.

Recall the duties and responsibilities of a certified welding inspector, inspection testing methods, and welding code and standard applications.

Recall the fundamental and practical welding code applications.

Assess and evaluate welding testing and inspection requirements.

Practice preparing for and taking welding inspection certification exams.

Student Learning Outcomes:
Interpret, explain and articulate schematics and drawings used in welding inspection.

Recall the duties and responsibilities of a certified welding inspector, inspection testing methods, and welding code and standard applications.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Structural Concrete Plan Reading

AOE080:

3.0 Units

Provides instruction for operating engineers in the design and engineering requirements of structural buildings and the fundamentals of structural concrete. Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321ba6eb18
Learning Outcomes

Course Objectives:

Explain how plans are assembled, who designs the plans, the role of the structural engineer, the history of Portland cement, the hydration process, and the role of admixtures and water-cement ratio.

Demonstrate how to navigate a set of structural plans, concrete symbol identification, general notes, the workability of concrete, and the properties of concrete segregation, bleeding, and unit weight.

Identify structural members, column locations, beam/girder locations, concrete strengths, how strength is measured, and the factors affecting strength.

Describe tilt-up building layout, panel reinforcing steel, and panel to grade beam connections, concrete durability, what marine environment structures are, and typical problems of slab-on grades.

Explain multi-level concrete building layout, footings for multi-level concrete building, column to footing connection for the multi-level concrete building, the effects of concrete shrinkage, the role of reinforcement, and thermal properties.

Identify the parking garage structure, connection for ramp to slab-on-grade, deck pour strips, the causes and prevention of cracks, repairs to concrete members, and concrete transportation.

Describe deck reinforcement, shearwalls, column strips, the types and sources of aggregate, how to test concrete, and the effects of water.

Identify grade beams, moment beams, caissons/piles/pozzolan, fly ash, and fresh and hardened concrete.

Identify the slab schedule, column schedule, beam schedule, the use of sealants, the purpose of resins, and the installation of bonding agents.

Describe column to deck connections, beam to shearwall connections, deck slab to shearwall connections, the materials used in formwork, formwork bracing, and form oils.

Identify beam strips, drop panels, pre- and post-tensioning concrete, proportions of concrete mixture, how to adjust concrete mix, and the selection of mix characteristics.

Student Learning Outcomes:

Interpret, explain, and articulate structural plans for the design and engineering requirements of structural buildings.

Describe the structural design and engineering requirements of buildings.

Units & Hours

Structural Reinforced Concrete for Inspectors

AOE081:

3.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in codes and duties, reinforcing steel, plan set reading, gunite, report writing, people skills. Apprentices will gain the knowledge, research skills, and confidence needed to pass their written and oral exams. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:

Interpret general notes, plan/cut/elevation details on structural plans, duties and responsibilities of the special inspector, and reports.

Identify general details and schedules of structural plans, International Building Code – earthquake reinforcing requirements, and shotcrete inspection.
Recall specific details and piles on structural plans, ACI 318 – cold-weather requirements, and exposure requirements.

Identify footing to column and wall connections, anchor bolts on structural plans, A615 and A706 reinforcement, and ready-mix concrete requirements.

Identify deck slab to shearwall connections, beam to shearwall connections, and Structural Code – formwork and concrete placement.

Examine and assess tilt-up concrete building structural plans, admixtures and water-cement ratio, and reinforcement codes.

Assess and evaluate structural plans for multi-level concrete buildings, the causes and preventions of cracks, how to repair to concrete members, and concrete transportation.

Assess and evaluate structural plans for parking garage structures, the types and sources of aggregate, how to test concrete.

Assess and evaluate structural plans for parking garage structure, and structural codes for Pozzolan and fly ash.

Student Learning Outcomes:

Research, identify, and implement codes, standards and specifications to perform reinforced concrete inspections.

Interpret, explain and articulate structural plans used in reinforced concrete projects.

Units & Hours

Non-Destructive Testing

AOE082:

4.0 Units

Provides the required related and supplemental instruction for operating engineer apprentices in Ultrasonic, Magnetic Particle, and Liquid Penetrant Testing codes and duties, welding procedures, report writing, people skills, and testing equipment orientation.

Members will gain the knowledge, research skills, and confidence needed to pass their written and oral exams as applicable to the Non-Destructive Testing requirements. Open Entry/Open Exit.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Learning Outcomes

Course Objectives:

Recall the construction codes, standards, and duties of an inspector as they apply to Non-Destructive Testing.

Recall and assess construction code and standards that apply to Ultrasonic, Magnetic Particle, and Liquid Penetrant Non-Destructive Testing Methods.

Demonstrate knowledge of pre-operational test equipment inspection and required calibration techniques.

Analyze and evaluate the electronic testing results for Non-Destructive Testing specifications.

Demonstrate accurate report writing skills

Describe and practice effective communication practices used in the field.

Describe proper jobsite etiquette and the protocol for dealing with problems.

Recall on how and when to issue non-compliance notices to the responsible agent when necessary.

Describe and practice effective communication practices used in the field.

Describe proper jobsite etiquette and the protocol for dealing with problems.

Apply and enforce welding codes and standards as a Non-Destructive Ultrasonic, Magnetic Particle, and Liquid Penetrant Testing Inspector.
Describe the responsibilities and authority of a Non-Destructive Testing Inspector, including the common test methods used in the construction field.

Prepare or update resumes for personal certifications and licenses.

Investigate new skills necessary for upgrading job responsibilities.

**Student Learning Outcomes:**
- Identify, Review, and implement codes, standards, and specifications to assess and perform Non-Destructive Testing inspections for welding applications and interpret electronic and physical results from using specific Non-Destructive Testing equipment.
- Recall and Implement pre-inspection requirements, standards, and calibration specifications to assess and perform/inspect structural steel welds requiring Non-Destructive Testing standard.
- Recall and Demonstrate the process of reviewing and interpreting Non-Destructive Testing results (both electronic and physical) for inspection requirements, including report writing for compliance/non-compliance situations.

**Units & Hours**

**Orientation**

**APL020:**

3.0 Units

Provides related and supplemental instruction required for entry-level apprentice power linemen.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

Express an applied understanding of the Power Lineman Trade and Union.

Employ the ability to safely rig and tie knots

Employ pole climbing and safety skills

**Student Learning Outcomes:**

Demonstrate competence, proper safety techniques, and teamwork while to use entry-level tools, equipment and techniques used in pole line construction.

Identify and perform the proper treatment for various sudden illnesses and injuries, given a set of emergency situations.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

108.0

**Power Lineman Apprentice 1**
APL021:

2.5 - 3.0 Units

Provides the related and supplemental instruction required for entry-level power lineman apprentices in the tools, math, theory, and safety required in the power lineman industry.

**Requisites**

None

**Transferability & General Education Options**

Transferable: Not transferable

**Weekly Lecture Hours:**

2.5

**Learning Outcomes**

**Course Objectives:**

Demonstrate an applied understanding of the Power Lineman Apprentice 1 requirements.

Demonstrate a positive attitude towards related training throughout student’s apprenticeship by completing all assignments.

Develop and demonstrate good study habits by completing student’s assignment on time and correcting any questions answered incorrectly.

Demonstrate an understanding of the terms and conditions of student’s Apprenticeship Agreement.

List the qualities which identify a competent, qualified journeyman and characteristics the NJATC seeks in an applicant.

Discuss the relationship between labor and management in terms of employer profits, employee wages and customer relations.

Define sexual harassment in the workplace.

Identify sexual harassment activity.

Explain why job performance, behavior, and appearance are important to the future of the electrical worker and electrical contractor.

Be knowledgeable of the IBEW and its contributions in signifying the lifestyle of all electrical workers.

Through discussion, demonstrate a basic knowledge of the NECA’s history and structure.

Identify ways to deal with drug abuse.

Demonstrate an applied understanding of Power Lineman Apprentice 1 safety requirements.

Determine what factors will affect the severity of an electrical shock including various shock current intensities and their affects.

Distinguish energized line parts from other parts of electrical equipment.

Define the fall protection terms used through out the fall protection standard.

Recognize the causes of climber cutouts.

Describe the steps that should be followed when climbing to the rescue position.

Describe how electricity acts in shocks, arcs and blasts.

Know the importance of using the proper personal protective equipment (PPE) for the particular job assignment and job hazard.

Understand the Occupational Safety and Health Administration (OSHA) requirements and differences in applying the regulations, and summoning rescue or emergency services for confined space operations.

Conduct a productive safety meeting.

Identify how to meet the OSHA requirements for medical assistance on construction sites.
Identify the major provisions of the OSHA Hazard Communication Standard.

Read and use a material safety data sheet (MSDS) to identify potential chemical hazards.

Select the proper type of PPE for the conditions which are present on the job.

Describe when PPE is required by the OSHA Standards.

Demonstrate an applied understanding of Power Lineman Apprentice 1 job information requirements.

Identify the more commonly used hand tools of the trade.

Describe how to use basic hand tools properly.

Describe how to properly inspect and care for climbing equipment.

Explain proper climbing technique.

Visually inspect a pair of rubber gloves and sleeves.

Apply various insulating equipment over energized equipment.

Demonstrate how to give basic hand signals for material handling.

Size a generator for the task at hand.

Understand inspection techniques and treatments for wood poles.

Understand the different steps of setting poles manually and with equipment.

Understand pole hole digging and sizing with power and manual installations.

Discuss digging, trenching and boring.

Demonstrate an applied understanding of basic mathematics necessary for Power Lineman Apprentice 1.

Add, subtract, multiply, and divide whole numbers.

Add, subtract, multiply, and divide numbers with fractions.

Add, subtract, multiply, and divide decimal numbers.

Convert percentages to or from decimals and fractions.

Demonstrate an applied understanding of the theory associated with Power Lineman Apprentice 1.

Demonstrate a thorough understanding of “The Structure of Matter”

Describe electrical charges

Discuss how basic electrical units relate to each other

Demonstrate the ability to convert units of electrical measurement

Recognize and explain the products (effects) of electric current

**Student Learning Outcomes:**

- Demonstrate competence, proper safety techniques, and teamwork while to use entry-level tools, equipment and techniques used in pole line construction.
- Identify and perform the proper treatment for various sudden illnesses and injuries, given a set of emergency situations.

**Units & Hours**

**Minimum Units:**

2.5

**Maximum Units:**

2.5

**Total Hours**

90.0
Power Lineman Apprentice 2
APL022:

2.5 - 3.0 Units

Provides the related and supplemental instruction in the theory, math, construction methods, and safety required for the second-level power lineman apprentice.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

2.5

Learning Outcomes

Course Objectives:

Demonstrate an applied understanding of Power Lineman Apprentice 2 safety requirements.

Recognize associated hazards with operation of aerial equipment

Identify hazards involved with systems grounding

Describe the requirements for training under the Lock-out/Tag-out program

Demonstrate an applied understanding of mathematics required for the Power Lineman Apprentice 2.

Provide students with skill to develop algebraic equations and formulas and to solve word problems

Solve mathematical problems involving the addition of fractions with different denominators

Set up and solve problems using direct and inverse proportions

Demonstrate an applied understanding of theory related to Power Lineman Apprentice 2.

Demonstrate knowledge and understanding of the factors (ohm, ampere, and volt) used in Ohm's Law

Calculate the total resistance in a series circuit using the formula for series resistance

Determine how some circuits may be modified to control circuit current using Ohm's Law

Use Ohm's Law to determine the voltage applied to a series circuit or to the individual components in a series circuit

Calculate the power used in series circuits

Identify and describe differences between voltage sources in series and parallel circuits

Calculate the total circuit resistance of parallel circuits with two resistance values using the product-sum method

Calculate the total circuit resistance of parallel circuits with two or more resistance values using the reciprocal method

Draw parallel circuits showing alternate current paths in those circuits

Show the power required by each individual component in a parallel circuit

Explain the theories of magnetism

Describe how electron flow creates magnetic fields

Apply the rules learned for series and parallel resistors to reduce a circuit to its equivalent resistance

Set up and solve problems using direct and inverse proportions
Apply Ohm's Law to determine the current through any branch or component of a combination circuit

Apply Ohm's Law to determine the voltage drop across any component in a combination circuit, as well as the circuit's applied voltage

Determine the power requirements of a circuit when it is necessary to do so

Demonstrate an applied understanding of job information requirements for the Power Lineman Apprentice 2.

Identify the various types of blocks used in line construction

Determine the proper application of blocks

Identify the various types of slings and chokers that are commonly used in the line construction industry

Determine the proper application of slings and chokers

Identify rigging hardware components

Determine the proper application of rigging hardware

Define the different types of guys used in line work

Select the correct guy for a given situation

Identify the tools required for guy installations

Calculate the length of a guy

Identify the different types of guy anchors used in linework

Explain the individual characteristics of different types of conductors

Recognize different types of crossarms and braces

Describe the proper installation procedures for pin insulators, crossarms and braces

Explain how insulators are made and list individual characteristics

List the different components that are involved in the electric system

Explain how electrical conductors are sized and classified

Discuss tension conductor stringing for transmission and distribution lines

Understand the importance for proper sag

Identify single-phase distribution overhead services

Explain what it means to isolate from live electrical circuits

Explain what it means to insulate from a live electrical circuit

Discuss the insulated platform and its purpose

Explain how good housekeeping procedures effect the work environment

Explain how to use a two-way radio properly

Understand the different methods for constructing an underground system

Install conduit to the proper depth and use proper backfill methods

Explain proper construction techniques in the building of a manhole or vault, including placement of a precast structure

Identify the different components used in shielded and nonshielded cables

Set up the proper rigging and identify the different equipment used in pulling cable

Identify components and their uses in URD systems

Discuss the process/procedure used to take a line out of service

**Student Learning Outcomes:**

Apply the appropriate calculations to solve work-related math problems.
Demonstrate competence, proper safety techniques, and teamwork while operating booms, winches and diggers.

Units & Hours
Minimum Units:
2.5

Maximum Units
2.5

Total Hours
90.0

Power Lineman Apprentice 3
APL023:

2.5 - 3.0 Units

Provides the related and supplemental instruction for third-level power lineman apprentice with emphasis on circuits energized below 750 volts, tower erection, and street lighting systems.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
2.5

Learning Outcomes
Course Objectives:
Demonstrate an applied understanding of the orientation requirements for Power Lineman 3.
Identify the National Joint Apprenticeship and Training Committee (NJATC)
Demonstrate an understanding of the structure of the IBEW
Demonstrate a knowledge and understanding of parliamentary procedure
Answer oral questions and participate in classroom discussion concerning local union by-laws
State three behavior patterns which adopt to help perform as a professional
State the top two reasons for employee absenteeism
Demonstrate an applied understanding of the safety requirements for Power Lineman 3
Protect themselves and others when encountering different weather conditions during job assignments
Explain the basics of an Emergency Action Plan
Identify important safe work practices contained in the Occupational Safety and Health Administration (OSHA) 1910.269 standard
Demonstrate an applied understanding of theory related to Power Lineman Apprentice 3
State the basic Ohm's Law formulas as they apply to DC theory
Identify the distinct characteristics of alternating and direct current
Define the terms: cycle frequency, period, alteration, sine ware, and instantaneous values
Describe the relationship between the voltages or currents in different phases of a three-phase power system

Describe the principles and operations of the DC generator

Describe the operation of AC generators

Demonstrate an applied understanding of the job information required for the Power Lineman Apprentice 3

Safely use various voltage or current test instruments to identify electrical power problems

Discuss methods for establishing measurements in the field

Demonstrate an applied understanding of transformers as related to the performance of Power Lineman 3 duties

Explain how a transformer coils and core function

Draw and explain the internal leads brought out from transformer coils

Describe five items found on transformer nameplates

Differentiate between the functions of a Potential and Current Transformer

Diagram the proper way to set up equipment to check polarity on a single phase transformer

Demonstrate how to figure load on a single-phase transformer

Describe the operation of the red warning light

Discuss transformer fusing as it relates to protection of a transformer

Diagram three connections that can be made with a single-phase transformer

State the functions of fuses as relates to protecting a transformer

Demonstrate how to figure load on a single-phase transformer

Explain safety procedures prior to working on transformers

State the purpose of vectors as used in electrical drawings

Demonstrate an applied understanding of mathematics required to perform at the Power Lineman 3 level

Demonstrate a knowledge and understanding of comparing the US customary system with the metric system

Calculate each of the measurements of a circle

Solve math problems involving area and volume

Name and understand the different types of angles

Calculate the unknown lengths and angles of right triangle

Demonstrate an applied understanding of blueprints required to perform the duties of Power Lineman 3

Identify four of the lines normally used on blueprints

List three types of drawings used on a job

Describe the types of view found on a blueprint and the procedure to change a blueprint

State the purpose of symbols, conventions and abbreviations used on blueprints

List four types of drawings used to illustrate an electrical system or circuit

State three methods an engineer uses to provide additional information other than the drawings

Discuss different maps used in buildings power lines

Identify and state the function of different stakes

**Student Learning Outcomes:**

Demonstrate competence, proper safety techniques, and teamwork while working on energized circuits below 750 volts.

Demonstrate competence, proper safety techniques, and teamwork while constructing, maintaining and operating street light systems and underground power systems used in the electrical field.
Units & Hours
Minimum Units:
2.5

Maximum Units
2.5

Total Hours
90.0

Power Lineman Apprentice 4
APL024:

2.5 - 3.0 Units

Provides the related and supplemental instruction for the fourth-level lineman apprentice in underground construction, blueprint reading, splicing and sagging conductors, locating faults, and using aerial man-lift equipment.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
2.5

Learning Outcomes
Course Objectives:
Demonstrate an applied understanding of the theory related to the position of Power Lineman 4

Define inductance and self-inductance.

Identify the variety of conditions that can affect voltage drop.

List three types of demand which is metered.

Describe how protective equipment operates.

Demonstrate an applied understanding of the job information requirements for Power Lineman 4.

List three ways FCI's operate

Identify different types of triangles.

List hand tools used in tower erection.

Describe procedures for applying implosive sleeves.

List charts and three methods used to sag conductors.

Describe conductor vibration causes.

List three reasons two circuits feeding off the same substation bus may not go together.

List three methods or circumstances which dispel heat from transformers.

State when it is necessary to check for phase rotation.

State the definition of backfeed.
List two types of fault locating equipment for both overhead and underground.

Describe the range of medium voltage.

Discuss all of the functions of a splice, as they relate to those of cables'.

Describe the training OSHA requires for confined/enclosed spaces.

Discuss DOT requirements for truck operators.

Use the oad charts to calculate a safe lift for a given weight.

Discuss angle effects on conductors and rigging.

Discuss proper operating methods for equipment use.

Identify the basic components of a traffic signal system.

Understand and use hand signals and other traffic control devices.

Understand the purpose of the MUTCD manual.

Learn mastarm applications and hardware principles.

Understand the construction of a caisson.

Understand the different pages of a plan set and what information each page contains.

Identify traffic signal cabinet components with an understanding of their operation.

Properly phase an intersection.

Demonstrate an applied understanding of the safety requirements for Power Lineman Apprentice 4.

List the hazards that a flagger may be exposed to on the job.

Student Learning Outcomes:

Demonstrate competence, proper safety techniques, and teamwork while installing, connecting and maintaining single and three phase transformers and underground power systems.

Research, identify, and implement codes, standards and specifications to splice and sag conductors and to install and maintain of street light control systems.

Units & Hours

Minimum Units:

2.5

Maximum Units

2.5

Total Hours

90.0

Power Lineman Apprentice 5

APL025:

2.5 - 3.0 Units

Provides the related and supplemental instruction for power lineman apprentices in the theory, operation and installation of electrical apparatus and test equipment in power systems. Includes construction and maintenance of energized line and equipment.

Requisites

None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
2.5

Learning Outcomes
Course Objectives:
Demonstrate an applied understanding of the orientation requirements for Power Lineman 5.
Assess how much training you need before you become a Journeyman.
Discuss the positive personal and occupational benefits of developing pride.
Describe the International Brotherhood of Electrical Workers' (IBEW) COMET Program.
State the cost of a job insofar as labor, materials, equipment.
Recognize the importance of labor-management relations.
Demonstrate an applied understanding of the theory required for the position of Power Lineman Apprentice 5.
Identify different types and characteristics of distribution circuits.
Discuss the characteristics and advantages of alternating current.
Define the terms used in AC theory.
List the ways a capacitor functions.
List two safety precautions when working on Distribution Capacitors.
Demonstrate an applied understanding of transformers as related to the duties of a Power Lineman Apprentice 5.
Explain how three-phase power is generated.
Calculate the kVA being supplied by a transformer.
Identify three connections for single-phase transformers.
State how the load is split among transformers in a three-phase bank.
Calculate total kVA load of wye and delta banks.
Demonstrate an applied understanding of safety requirements for the Power Lineman 5 level.
Recognize how different levels of body current affect the body.
Understand the relationship between voltage and current.
Understand the problems with the earlier grounding methods.
Define an equipotential zone.
Understand the electrical sizing of grounding equipment.
Know the things that affect both the installation and the removal of grounds.
Understand both step potential and touch potential, and the difference between them.
Identify some of the sources of induced voltage and current.
Understand the worker's part in the total circuit.
Understand why insulation is the better method.
Recognize the different grounding requirements between substation work and remote site work.
Apply the known protective measures to a constructions worksite.
State three factors that influence the resistivity of the earth.

Describe two characteristics of a lighting strike.

Demonstrate an applied understanding of the job information requirements for the Power Lineman 5.

State the purpose of applying protective devices.

State procedures for repairing live-line tools.

State which tools are needed for tying or untying a hot conductor.

Describe the proper method of using an auxiliary arm.

State clearances for various equipment from a 138kV line when changing insulators.

State the size of live-line sticks used to move conductors on various size lines.

State how equipment is used to safely move phases when changing out insulators.

State two safety rules that should be followed when changing timbers with a helicopter.

State where and when safety grounds are to be applied.

Demonstrate understanding of the purpose for primary revenue metering.

Demonstrate understanding of measuring by revenue metering.

**Student Learning Outcomes:**

- Demonstrate competence, proper safety techniques, and teamwork to locate and make repairs on faulted circuits in electrical power systems.
- Demonstrate competence, proper safety techniques, and teamwork to install and use metering devices used in electrical power systems.

**Units & Hours**

**Minimum Units:**

2.5

**Maximum Units**

2.5

**Total Hours**

90.0

**Power Lineman Apprentice 6**

**APL026:**

2.5 - 3.0 Units

Provides the required related and supplemental instruction for power lineman apprentices in the theory, installation, maintenance, and operation of electrical apparatus used for system protection, metering, power factor correction and voltage regulation.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

2.5
Learning Outcomes

Course Objectives:

Demonstrate an applied understanding of the job information requirements for Power Lineman Apprentice 6.

List two methods used in substations to interrupt an arc and thereby protect a feeder.

State two safety requirements in the OSHA standards pertaining to substation safety.

State two requirements when administering first aid.

Discuss two items of general knowledge pertaining to OSHA.

Identify three pieces of equipment used in a substation by their representative drawings.

List two factors associated with making bolt on connections in substation work.

Recognize the role of various elements in a substation.

Pour concrete to specifications.

Understand the purpose for the use of grout in a substation.

Recognize the fragile nature of underground cable.

Understand the purpose of a substation ground grid.

Describe the types of superstructures.

Recognize the types of insulators found in a substation.

Install control cables into a pre-wired relay panel.

Figure fuse sizes to be used with various single-phase transformers and three-phase banks.

Describe how a sectionalizer or recloser operates to isolate a line.

State how two pieces of substation electrical equipment perform their functions.

State two elements that might be found in the oil of substation OCB.

State two types of load, that substation batteries much support in case of a power outage.

State two factors which govern oil sampling of substation transformers.

State three types of switches used in substations for isolating or grounding a line.

List two meters used when installing cable and relays.

Understand the characteristics of a fault current.

Name the three different types of line faults.

Understand how voltage is affected by electrical system changes.

Operate step voltage regulators.

Operate capacitors.

Understand the electrical influences that make up a power factor.

Understand the basics of harmonic interference.

List the components of an optical fiber link.

Understand the advantages of extra high voltage (EHV) lines.

Demonstrate an applied understanding of the orientation requirements for Power Lineman Apprentice 6.

Describe the need for a personal savings plan.

Describe and explain three basic theories on motivation.

Demonstrate an understanding of the history, growth, and development of the NEBF.
Demonstrate an ability to constructively critique and evaluate work performance.

Describe a responsible Foreman.

Identify the qualities of a competent, conscientious Journeyman.

Demonstrate a positive attitude toward improving the outside curriculum.

Demonstrate an applied understanding of theory related to the Power Lineman Apprentice 6 level.

Mix and pour grout properly.

**Student Learning Outcomes:**

- Demonstrate competence, proper safety techniques, and teamwork to install, maintain and operate electrical apparatus used for system protection, metering, power factor correction, and voltage regulation.
- Identify and perform the proper and safe rescue procedures, given a set of pole-top emergency situations.

**Units & Hours**

**Minimum Units:**
2.5

**Maximum Units**
2.5

**Total Hours**
90.0

**Work Methods Training**

**APL041:**

0.5 - 1.0 Units

Provides the required related and supplemental instruction for apprentice power lineman in safety, tools, guys and anchors, pole setting and handling, underground tools and equipment.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
0.5

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an applied understanding of General Orders (G.O.) 95
- Demonstrate an applied understanding of the tools required as part of work methods training.
- Properly identify and safely use cold and hot grips, chain and fiber hoists, rigging hardware, wire rope and wire slings, blocks and ropes, handline blocks, fiber slings, steel slings; safe work loads
- Demonstrate an applied understanding of guys and anchors.
- Demonstrate an applied understanding of pole setting.
- Demonstrate an applied understanding of installing sagging conductors.
- Demonstrate an applied understanding of working with underground tools and equipment.
Demonstrate an applied understanding of safety requirements in work methods training.

**Student Learning Outcomes:**
- Demonstrate competence, proper safety techniques and work methods, and teamwork while operating electrical power line systems.
- Demonstrate competence, proper safety techniques and work methods, and teamwork while maintaining electrical power line systems.

**Units & Hours**

**Minimum Units:**
0.5

**Maximum Units:**
0.5

**Total Hours**
36.0

**Rubber Gloves Training**

**APL042:**

0.5 - 1.0 Units

Provides the required related and supplemental instruction for apprentice power linemen in tools, accident prevention rules, rubber glove guidelines and rules.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
0.5

**Learning Outcomes**

**Course Objectives:**
- Demonstrate an applied understanding of the orientation and introduction to rubber gloves.
- Demonstrate an applied understanding of rubber protective equipment.
- Demonstrate an applied understanding of using rubber gloves with underground equipment.
- Demonstrate an applied understanding of safety and evaluation for the advanced Power Lineman Apprentice.

**Student Learning Outcomes:**
- Demonstrate competence when using rubber protective equipment on electrical power line systems.
- Demonstrate proper safety techniques when using rubber protective equipment on electrical power line systems.
Total Hours
36.0

Hot Sticks Training
APL043:

0.5 - 1.0 Units

Provides the required related and supplemental instruction for apprentice power linemen in history, development, manufacture and care of hot line tools.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes
Course Objectives:
Demonstrate an applied understanding of the history and development of hot line tools.

Demonstrate an applied understanding of the manufacture and care of hot line tools.

Demonstrate an applied understanding of the safety requirements for working with hot sticks and tools.

Student Learning Outcomes:
- Demonstrate competence, proper safety techniques, and teamwork to use, repair, and maintain hot line equipment used in an electrical power line system.
- Demonstrate competence, proper safety techniques, and teamwork to inspect hot line equipment used in an electrical power line system.

Units & Hours
Minimum Units:
0.5

Maximum Units
0.5

Total Hours
36.0

Introduction to Art Concepts
ART100:

3.0 Units

A study of the visual arts in relation to both personal and cultural expressions. Fundamentals of visual organization, color theory, terminology, historical art movements and concepts will be studied. Students are required to visit an art museum during the semester. Required for art majors.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area C: Humanities

CSU GE - Plan B
   Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
   Area 3A: Arts

Course Identifier (C-ID)
   Art History

Learning Outcomes
Course Objectives:
Define art by exploring meanings, purposes, and styles.
Identify multiple points of view and perspective.
Identify art in a global context and interpreting works of art from all world cultures and situations.
Analyze the differences in the appearance and function of art.
Define the visual elements of art and the principles of design and identify their use in works of art.
Identify and analyze specific types of media and apply technical vocabulary specific to the media.
Synthesize, compare, contrast, evaluate and assess art from a variety of eras, cultures, and countries in Western and non-Western art.
Analyze the methodologies that surround art from production to collection and display.

Student Learning Outcomes:
Identify and analyze formal elements and principals of design used by artists while employing proper historical art terminology.
Analyze and distinguish materials and techniques used for creating art and architecture.
Identify and analyze works of art by major artists in cultural and/or historical context.

Units & Hours
Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Honors Introduction to Art Concepts
ART100H:
3.0 Units

Enriched exposure to a study of the visual arts in relation to personal and cultural expression with an emphasis on critical thinking and writing. Fundamentals of visual organization, color theory, terminology, historical art movements and concepts will be studied in a seminar format. Students are required to visit an art museum or gallery.

Requisites
Requisites:

None

Transferability & General Education Options
Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area C: Humanities

CSU GE - Plan B

Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C

Area 3A: Arts

Course Identifier (C-ID)

Art History

Learning Outcomes

Course Objectives:

Define art by exploring meanings, purposes, and styles.

Identify multiple points of view and perspective.

Identify art in a global context and interpreting works of art from all world cultures and situations.

Analyze the differences in the appearance and function of art.

Define the visual elements of art and the principles of design and identify their use in works of art.

Identify and analyze specific types of media and apply technical vocabulary specific to the media.

Synthesize, compare, contrast, evaluate and assess art from a variety of eras, cultures, and countries in Western and non-Western art.

Analyze the methodologies that surround art from production to collection and display.

Student Learning Outcomes:

Critically analyze works of art using terminology related to elements and principles of design, materials and process.

Discuss and analyze works of art in their social, historical and psychological contexts.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0
Survey of Western Art History I: Prehistory Through the Middle Ages
ART101:

3.0 Units

The study of art and architecture from Prehistory through the Middle Ages. Cultures and civilizations are studied through visual imagery, lectures, class discussion, reading, and research. Students are required to independently visit an art museum. Field trips may also be required.

Requisites

Requisites:

Advisory

ENGL100 - Freshman Composition with Integrated Support

OR

Advisory

ENGL101 - Freshman Composition

OR

Advisory

ENGL101H - Honors Freshman Composition

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A
   Area C: Humanities

CSU GE - Plan B
   Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
   Area 3A: Arts

Course Identifier (C-ID)

Art History

Santa Ana College - Shared Course
   Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify research models in art history and apply them to an analysis of existing artworks
Identify and differentiate art and architecture from the ancient world
Analyze and discuss artwork in regards to cultural aesthetics and conceptual context of the ancient world while employing appropriate art terminology

Identify and differentiate art and architecture from the Middle Ages

Analyze and discuss artwork in regards to cultural aesthetics and conceptual context of the Middle Ages while employing appropriate art terminology

**Student Learning Outcomes:**
- Identify major Western art forms from the prehistoric millennia through the Middle Ages.
- Explain and analyze major Western art works from prehistoric through the Middle Ages in terms of their philosophical, spiritual, socio/political significance.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Honors Survey of Western Art History I: Prehistory Through the Middle Ages**

**ART101H:**

3.0 Units

Enriched exposure to a study of art and architecture from Prehistory through the Middle Ages with an emphasis on critical thinking and writing. Cultures and civilizations are studied through visual imagery, lectures, class discussion, reading, and research. Students are required to independently visit an art museum. Field trips may also be required.

**Requisites**

**Requisites:**

**Advisory**

**ENGL101 - Freshman Composition**

Previous or concurrent enrollment

OR

**Advisory**

**ENGL101H - Honors Freshman Composition**

Previous or concurrent enrollment

OR

**Advisory**

**ENGL100 - Freshman Composition with Integrated Support**

Previous or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
General Education Plan:
Local - Plan A
  Area C: Humanities

CSU GE - Plan B
  Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
  Area 3A: Arts

Course Identifier (C-ID)
  Art History

Learning Outcomes
Course Objectives:
Identify research models in art history and apply them to an analysis of existing artworks
Identify and differentiate art and architecture from the ancient world
Analyze and discuss artwork in regards to cultural aesthetics and conceptual context of the ancient world while employing appropriate art terminology
Identify and differentiate art and architecture from the Middle Ages
Analyze and discuss artwork in regards to cultural aesthetics and conceptual context of the Middle Ages while employing appropriate art terminology

Student Learning Outcomes:
  Identify major Western art forms from the prehistoric millennia through the Middle Ages.
  Explain and analyze major Western art works from prehistoric through the Middle Ages in terms of their philosophical, spiritual, socio/political significance.

Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 54.0

Survey of Western Art History II: Renaissance Through the Twentieth Century
ART102:
  3.0 Units

The study of Western art history from the Renaissance through the 20th century. Art movements and individual painters, sculptors, architects and printmakers will be presented within the context of the social, political and intellectual histories of their respective periods. Required for art majors. Students are required to independently visit an art museum. Field trips may also be required.

Requisites
Requisites:
Advisory
  ENGL100 - Freshman Composition with Integrated Support
Advisory
ENGL101 - Freshman Composition

OR

Advisory
ENGL101H - Honors Freshman Composition

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area C: Humanities

CSU GE - Plan B
   Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
   Area 3A: Arts

Course Identifier (C-ID)
   Art History

Santa Ana College - Shared Course
   Shared Course with SAC

Learning Outcomes
Course Objectives:
Describe general concepts of art, including what it is and how it functions throughout history.

Analyze concepts of Humanism, science, Neo-Platonism, history of the Church, Aristocracy and the middle class, the Reformation, etc., as these affected and were revealed in the arts and architecture. Focus on individual artists and movements.

Analyze the Counter-Reformation, Catholicism, and Protestantism as expressed in the absolute monarchies, the aristocracy and the middle classes as seen in the arts and architecture.

Analyze the age of industrial and political revolution in Europe, United States, and Latin America, intellectual and emotional art directions, and the full development of Renaissance realism and its inversion in the late 19th Century into non-objectivism

Student Learning Outcomes:
   Identify major Western art forms and artists from the Renaissance in Europe and the Americas through the 20th century.
   Explain and analyze major Western art works and architecture from the Renaissance through the 20th century in terms of their philosophical, spiritual, socio/political significance.

Units & Hours
Minimum Units:
3.0

Maximum Units
Total Hours

54.0

Honors Survey of Western Art History II: Renaissance Through the Twentieth Century

ART102H:

3.0 Units

The study of Western art history from the Renaissance through the 20th century. Art movements and individual painters, sculptors, architects and printmakers will be presented within the context of the social, political and intellectual histories of their respective periods. Required for art majors. Students are required to independently visit an art museum. Field trips may also be required.

Requisites

Requisites:

Advisory

ENGL101 - Freshman Composition

Previous or concurrent enrollment

OR

Advisory

ENGL101H - Honors Freshman Composition

Previous or concurrent enrollment

OR

Advisory

ENGL100 - Freshman Composition with Integrated Support

Previous or concurrent enrollment

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area C: Humanities

CSU GE - Plan B

Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

Course Identifier (C-ID)

Art History

IGETC - Plan C

Area 3A: Arts

Learning Outcomes

Course Objectives:
Review general concepts of art; what it is; how it functions throughout history.

Analyze concepts of Humanism, science, Neo-Platonism, history of the Church, Aristocracy and the middle class; the Reformation, etc., as these affected and were revealed in the arts and architecture. Focus on individual artists and movements.

Analyze the Counter-Reformation; Catholicism and Protestantism as expressed in the absolute monarchies, the aristocracy and the middle classes as seen in the arts and architecture.

Analyze the age of industrial and political revolution in Europe, United States, and Latin America, intellectual and emotional art directions, and the full development of Renaissance realism and its inversion in the late 19th Century into non-objectivism

Student Learning Outcomes:
- Identify major Western art forms and artists from the Renaissance in Europe and the Americas through the 20th century.
- Explain and analyze major Western art works and architecture from the Renaissance through the 20th century in terms of their philosophical, spiritual, socio/political significance.

Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 54.0

Two-Dimensional Design
ART110:
3.0 Units

Introduction to terminology, historical concepts, and aesthetic techniques associated with two-dimensional art and composition, including the study and application of visual elements and principles of design. Application of concepts will be executed through creative projects. Required for art majors.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

Course Identifier (C-ID)
Studio Arts

Learning Outcomes
Course Objectives:
Problem solve design scenarios with the use of proper studio practices.

Apply line as a design element.
Apply shape and texture as a design element.
Apply value and color as a design element.
Apply design elements to give the illusion of active space and motion.
Apply emphasis and balance to a composition with a cohesive design.
Apply unity, variety, and rhythm to a composition with a cohesive design.
Discuss works of art in terms of formal elements and concepts.

**Student Learning Outcomes:**

Create graphic art projects with thematic content, an understanding of visual elements and principals of design, and the use of sequential problem solving techniques.
Analyze art in terms of the visual elements and the principles of design and deliver a verbal critique of a work of art to a group using professional art terminology.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
108.0

**Three-Dimensional Design**

**ART111:**

3.0 Units

Fundamentals of visual organization as applied to objects in-the-round. Visual space problems, structure and dimensional terminology through creative projects in various media. Required for art majors.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Course Identifier (C-ID)**
Studio Arts

**Learning Outcomes**

**Course Objectives:**

- Explain what is the nature of the creative process
- Select materials according to inherent qualities
- Demonstrate an understanding of the concept of mass in the construction of 3-dimensional form
- Comprehend the use of negative areas, their relationship to mass and spatial tensions involved in the juxtaposition of figures
Demonstrate an understanding of the basic rules of safety in the operation of power equipment

Describe primary categories of 3-dimensional form and the differing interrelationship of form and space with laborations and implications

Utilize the subtractive process of sculpture

Select appropriate materials and tools used to understand the process

Construct a figure that may take on several configurations to creatively interpret a dimensional puzzle

Articulate space through line and plane form

Use various media in the construction of a single figure

Operate the power equipment safely and effectively

**Student Learning Outcomes:**

Create 3-Dimensional works in-the-round using a variety of media, tools and techniques.

Explain and analyze the aesthetic, conceptual, formal, functional and spatial characteristics of a three-dimensional work of art.

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**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

108.0

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**Graphic Design I**

**ART122:**

3.0 Units

Introduction to basic graphic design concepts, techniques and practices resulting in the production of effective visual communications. Projects combine text with images, using current industry standards in print media, interactive technologies, and other design applications.

**Requisites**

**Requisites:**

**Advisory**

[ART110 - Two-Dimensional Design](https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32faa6eb18)

or an understanding of Photoshop and Illustrator software

OR

[ART195 - Introduction to Digital Media Arts](https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32faa6eb18)

or an understanding of Photoshop and Illustrator software

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0
General Education Plan:
Learning Outcomes
Course Objectives:
Identify graphic design practices and demonstrate the correct use of digital media equipment and software.
Demonstrate basic design concepts and fundamentals of typography and use of visual images with type. Identify type groups and styles.
Apply the use of representative image and type selection appropriate to a functional identification piece, personal or otherwise.
Solve design problems generated by client expectations to work within industry standards for a variety of print media.
Analyze how images and type are used to display concepts.
Analyze demographics and sales history to design packaging for specific products.
Apply industry standard file formats to a variety of outputs both digital and print.
Demonstrate application of symbols to promote a product, business, or idea.

Student Learning Outcomes:
Create graphic designs that combine text with images using current industry standards in both print and digital media technology.
Analyze and evaluate designs that combine text with images by applying knowledge of principles of visual communication and current technological and industry practices.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Introduction to Illustration
ART128:
3.0 Units
An introductory course to book illustration, concept art, animation, descriptive rendering, editorial illustration, and fashion drawing. The focus is on developing technical and conceptual expertise. The course examines master works by contemporary and historic artists.

Requisites
Requisites:
Prerequisite
ART130 - Introduction to Drawing

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Identify the works of top contemporary and historical illustrators.

Demonstrate understanding of a variety of techniques and tools through the execution of thumbnail sketches, rougths, and final works.

Create rendered natural and imaginative forms with a variety of mediums.

Define visual elements and design principles and utilize their effect on the illustrated image.

Demonstrate an understanding of the illustration process and the ability to design inventive solutions for the descriptive needs of a client.

Identify a variety of book illustration concepts and the ability to create appropriate designs.

Identify aspects of concept art and create appropriate designs.

**Student Learning Outcomes:**
- Create illustrations and descriptive renderings using a variety of conceptual processes, techniques, and materials.
- Identify and analyze major contemporary and historic illustrations.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours**
90.0

**Introduction to Web Design**

**ART129:**
3.0 Units

Introduction to the development and design of web sites with an emphasis on the elements and principles of design as they relate to web interfaces. Includes learning the technical requirements for colors, fonts, file optimization, effects, image resolution, and special effects. Includes creative web design projects.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**
- Identify course content, lab guidelines, and technologies used in web design.
- Identify web design elements and apply them to a cohesive interactive design.
- Identify the configuration of images obtained from scanning, digital photography, and stock.
- Identify file types and how they interact with a variety of browsers and platforms.
- Recognize action elements and how to apply them to the user experience.
Apply text, graphics, images in a web design that demonstrates an understanding of visual elements and design principles.

Recognize interface languages and appropriately apply them to a web design.

Upload websites through a host site which is compatible with multiple browsers.

**Student Learning Outcomes:**
- Create designs for the web by applying elements and principles of design.
- Create designs using a variety of web design software and web specific criteria and techniques.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours**
72.0

**Introduction to Drawing**

**ART130:**

3.0 Units

Introductory course in expressive drawing, exploring line, form, composition, and a variety of media. Drawing from man-made objects and natural forms. Field trips may be required. Required for art majors.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Course Identifier (C-ID)**
Studio Arts

**Learning Outcomes**

**Course Objectives:**
- Develop an ability to describe form with the use of hand-eye coordination and line drawings.
- Define the perception of 3-dimensional shapes on a 2-dimensional picture plane with drawings.
- Develop an ability to mechanically draw spacial objects on a two-dimensional plane with the use of isometric and linear perspective.
- Develop an ability to draw and define forms with the use of tone and value on light, middle, and dark grounds.
- Define spacial relationships on a picture plane with traditional drawing techniques.
- Create realistic drawings of a variety of surfaces and materials with traditional media.
- Create representational drawings of a variety of subjects with the use of texture, rhythm, and pattern.
- Apply color theory to create representational drawings of a natural subjects.
Explore creative concepts and apply them to create contemporary drawings with individual concepts.

**Student Learning Outcomes:**
Create the illusion of three-dimensional space on a two-dimensional surface with a variety of drawing materials, using traditional mark making techniques, studio practices, and observational tactics.
Analyze a drawing in terms of its thematic content and the materials and techniques incorporated, and deliver a verbal critique to a group using professional art terminology.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours**
108.0

**Beginning Life Drawing**

**ART131:**

3.0 Units

Introduction to drawing the human form by observing live models for studies in anatomy, structure, and composition. Exposure to traditional and contemporary figurative drawing while exploring media and methods. Required for art majors.

**Requisites**

**Requisites:**
Advisory

ART130 - Introduction to Drawing

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Course Identifier (C-ID)**

Studio Arts

**Learning Outcomes**

**Course Objectives:**
Apply materials used in drawing the human form with representational naturalism.
Apply structure to drawings of the human form with an understanding of balance and weight shifts.
Demonstrate an understanding of the skeletal structure including key landmarks and proportions.
Demonstrate an understanding of the human body's muscle structures and how to represent them in a representational drawing.
Apply visual elements in drawing hands and feet.
Apply visual elements in drawing human head.
Demonstrate an understanding of the visual elements and principles of design in relation to representing the human figure.
Interpret the way light falls over three-dimensional form and an ability to apply that to a two-dimensional drawing.

Apply color theory to drawing the human figure.

Demonstrate an understanding of the representation of the human figure in a history of traditional and contemporary art.

**Student Learning Outcomes:**
- Accurately draw the human form from observation of a live model using knowledge of human anatomy, structure and proportion.
- Accurately draw the human form from observation of a live model using a variety of materials and techniques.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
108.0

**Beginning Painting**

**ART141:**

3.0 Units

Introduction to acrylic and/or oil painting as a creative art form with exposure to historical, traditional and contemporary painting styles. Course includes principles of composition and color theory, materials selection, tools, terminology, and techniques. Students develop basic skills painting a variety of subjects. Required of art majors.

**Requisites**

**Requisites:**

Advisory

**ART110 - Two-Dimensional Design**

**AND**

Advisory

**ART130 - Introduction to Drawing**

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Course Identifier (C-ID)**

Studio Arts

**Learning Outcomes**

**Course Objectives:**

- Safely handle and use painting studio materials and equipment.
- Construct painting surfaces and understand the technical applications of the painting medium.
- Apply the visual elements and principles of design to painting projects.
Create paintings that display an understanding of still life techniques including alla prima and glazing.

Develop expressive content with use of mark, color, and shape to use painting as language.

Examine and describe traditional and contemporary approaches in trends and materials of painting.

Assess and critique paintings using relevant terminology and methodologies of art critique in groups and individually.

**Student Learning Outcomes:**

- Create a series of acrylic and/or oil paintings utilizing sequential problem-solving techniques, effective use of visual elements, and original content.
- Analyze and critique aesthetics, content, and concepts of paintings using appropriate art terminology.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

108.0

**Introduction to Digital Photography**

**ART149:**

3.0 Units

An introductory course in digital photography and imaging including basic camera functions, natural and artificial lighting, computer imaging, and image editing techniques. Aesthetics and concepts of digital photography will be analyzed in both fine art and commercial applications. Students must provide their own digital cameras.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**

- Define course expectations, equipment, and lab procedures.
- Demonstrate ability to present images for display both digitally and physically.
- Identify camera functions and be able to use them to get the correct exposure, focal point, and photographic effect.
- Define visual elements and design principals and utilize their effect on the photographic image.
- Distinguish a variety of light sources and how the camera responds to them. Analyze traditional and contemporary lighting techniques.
- Demonstrate techniques in editing a digital image and analyze the results on the photographic image.
Define photographic imagery and recognize its influence on society.

Demonstrate how to present images for display both digitally and physically.

Define job descriptions for the field of digital photography and imaging.

Demonstrate ability to input and store digital images in correct file format and size according to application.

Demonstrate correct use of editing techniques to create a natural photographic image that relates to the subject matter.

Examine a variety of photography subjects and the techniques specific to each.

**Student Learning Outcomes:**

- Create properly exposed images by applying camera functions, lighting, computer imaging, and software editing techniques.
- Solve photographic and technical design problems and be able to support decisions with conceptual and thematic content.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

72.0

**Introduction to Mobile Application Development and Design**

**ART159:**

3.0 Units

Introduction to the development of mobile applications for smartphones and similar devices. Emphasis will be placed on graphic design standards as they apply to interactive media. Industry-standard multi-platform software will be employed to develop applications that will run on a variety of platforms with an emphasis on iOS.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

Transferable:

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Demonstrate a comprehension of course expectations, equipment, and lab procedures.
- Developing mobile applications with navigational elements.
- Apply industry-standard software and their uses in developing mobile applications.
- Employ visual elements and design principles within interactive designs.
- Build operative UIs with a variety of techniques and styles.
- Explain digitizing, formatting, and layout using type and images.
Discuss relevance of mobile applications in a contemporary society.

Demonstrate a comprehension job descriptions for the field of mobile application development and interactive design.

Explore industry-standard software used in mobile application development.

Explore building operative UIs with a variety of techniques and styles.

Solving interactive design problems utilizing text and imagery.

Demonstrate techniques in interactive design and discuss the results on mobile applications.

Student Learning Outcomes:
- Demonstrate an ability to apply visual elements and principles of design to develop a user interface for a mobile application.
- Develop a complete, fully-functional mobile application that includes wire diagrams for navigation.

Units & Hours
Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
72.0

Introduction to Digital Media Arts
ART195:

3.0 Units

Introduction to digital media arts for artists, photographers, web designers, illustrators, and animators. Includes an overview of Photoshop, Illustrator, InDesign, digital graphics terminology, careers, market applications and design components.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Course Identifier (C-ID)
Studio Arts

Learning Outcomes
Course Objectives:
Identify and apply computer operations including hardware, software, and peripherals as they relate to digital media arts.

Identify visual elements and principles of design and apply them to digital media projects.

Demonstrate applicable practices in commercial aspects of digital media arts.

Demonstrate an understanding of raster graphics and their applications in digital media.

Demonstrate an understanding of vector graphics and their applications in digital media.
Demonstrate an understanding of desktop publishing and its applications in page layout and interactive design.

Identify opportunities in digital media arts throughout a history of the medium.

Critique individual and peer designs using applicable terminology in regards to conceptual ideas and aesthetic content.

Create digital media art projects with a variety of input and output methods using raster graphics.

Create digital media art projects with a variety of input and output methods using vector graphics.

Create digital media art designs working with page layout and interactive design.

**Student Learning Outcomes:**
- Design and create digital media using a variety of software.
- Analyze digital media art design choices in a variety of settings and contexts.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
72.0

**Graphic Design II**

**ART221:**

3.0 Units

Intermediate level study of concepts in graphic design to assist the artist/designer in formulating aesthetic and purposeful visual communications from roughs through finished art. Creative development of solutions to problems in common print media and other design applications. Explores the combination of images and text, using hand skills, digital technology and current graphics industry standards and practices.

**Requisites**

**Requisites:**

**Prerequisite**

ART122 - Graphic Design I

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Recognize basic elements of graphic design and apply them to projects.
- Analyze current trends in the field of graphic design including major contemporary figures.
- Analyze contemporary techniques and practices in advertising a product, company, or idea.
- Solve context issues in designing for signage in a variety of environments.
Analyze context of product packaging including site, demographics, and marketing strategies.

Identify specific requirements as well as traditional practices for creating effective posters and billboards.

Identify how designs are altered by the form of the final publication.

Explore possible career paths in graphic design and create a strong portfolio of individual’s work.

**Student Learning Outcomes:**

- Create complex graphic designs that combine text with images using current industry standards in print media and interactive technology.
- Analyze and evaluate designs that combine text with images by applying knowledge of principles of visual communication, analysis of audience and current technological and industry practices.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

90.0

**Intermediate Illustration**

**ART228:**

3.0 Units

Further development of conceptual and technical expertise in book illustration, concept art, animation, descriptive rendering, editorial illustration, and fashion drawing. The course examines master works by contemporary and historic artists. Emphasis on developing individual creative style.

**Requisites**

**Requisites:**

**Prerequisite**

**ART128 - Introduction to Illustration**

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Identify the works of top contemporary illustrators and demonstrate an in-depth understanding of a history of illustration.
- Create applicable designs that address client needs.
- Create a portfolio in a variety of illustrative styles and themes that demonstrate individual expression and design.
- Develop individual creative style through assigned personal project approved by instructor.

**Student Learning Outcomes:**
Create illustrations and descriptive renderings using a variety of conceptual processes, techniques and materials that reflect a self-defined creative style.
Identify and analyze major contemporary and historic illustrations.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Multimedia Applications for the Web
ART229:

3.0 Units
Introduction to the use of multimedia components, images, typography, motion and audio, for designing websites. Software may include Photoshop, Dreamweaver, SoundEdit 16 and Flash. Projects include conceptualizing, storyboarding, and designing Web page layout. Application of design elements to Web page creation.

Requisites
Requisites:
Prerequisite
ART129 - Introduction to Web Design

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Identify and apply lab guidelines

Explain what makes a user interactive web site

Identify the elements of multimedia

Identify different applications and their technical requirements

Identify file types and how they interact with a variety of browsers and platforms.

Design user friendly navigation.

Design projects with regards for client needs.

Create user friendly sounds imbeded in a website.

Create user friendly animations imbeded in a website.

Organize and publish completed web sites that work on multiple browsers.
Student Learning Outcomes:

Create multimedia designs for the Web sites by applying principles of concept development, storyboarding and page layout.
Create Web sites using a variety of multimedia Web design software.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
72.0

Intermediate Drawing

ART230:

3.0 Units

An intermediate course in the study of drawing designed to give students who have completed an introductory drawing course additional opportunity in graphic expression. Further exploration of materials including a wide variety of both drawing and mixed media. Students continue the development of composition and more intermediate concepts. The class emphasizes individual expression. Field trip for en plein air style of drawing may be required.

Requisites

Requisites:

Prerequisite

ART130 - Introduction to Drawing

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Course Identifier (C-ID)

Studio Arts

Learning Outcomes

Course Objectives:
Create drawings that display a technical understanding with a variety of drawing materials.

Demonstrate an understanding of the elements and principles of design as they apply to drawing, and the ability to utilize these in studio projects.

Develop expressive content in a series of drawings that utilize formal elements as they relate to concepts.

Explore and apply a history of trends, materials, and approaches in drawing to individual artwork.

Assess and critique a series of paintings with appropriate art terminology and methodology associated with analysis.

Student Learning Outcomes:

Create drawings using complex application of personal expression, materials and techniques.
Critically analyze form and content of their drawings and those of others in terms of visual elements, design principles, and concepts.
Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 108.0

Intermediate Life Drawing
ART231:
3.0 Units
Continued experience in drawing from the live model with opportunity for development of self-expression. Further exploration of media and techniques. Projects vary each semester.

Requisites
Requisites:
Prerequisite
ART131 - Beginning Life Drawing

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Apply structural anatomy to observational drawings of the human figure.
Apply contemporary approaches to observational representation of the human figure with creative concepts.
Create observational drawings of the human skeleton with an understanding of structure, form, and traditional techniques.
Create observational drawings of muscle groups with an understanding of structure, form, and traditional techniques.
Create drawings of the human figure that display a range of personal expression and creative concepts.
Create observational drawings of the human skull with an understanding of structure, form, and traditional techniques.
Explore wet media materials in developing individual expression.
Explore dry media materials in developing individual expression.
Explore new directions in contemporary art media and methods including compositional arrangements.
Create observational paintings of the human figure with an understanding of contemporary and traditional techniques.
Apply a variety of balanced compositions to observational drawings of the human figure.

Student Learning Outcomes:
Accurately draw the human form from observation of a live model with advanced working knowledge of human anatomy, proportion and structure.
Accurately draw the human form from observation of a live model demonstrating personal expression using a variety of materials and techniques.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
108.0

Advanced Life Drawing
ART232:

3.0 Units
Intensive study of the figure with further development of drawing skills, composition, technique and media utilizing the live model. Projects vary each semester.

Requisites
Requisites:
Prerequisite

ART231 - Intermediate Life Drawing

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Create a series of drawings of the human figure from observation that incorporate concepts learned in Intermediate Life Drawing.

Create a series of drawings of the human figure from observation that display individual graphic expression and creative concepts.

Create a series of drawings of the human figure from observation that display an understanding of traditional and contemporary compositional elements with regards to design principles.

Create a series of drawings of the human figure from observation that display a mastery of drawing materials and an exploration of aesthetics and concepts.

Create a series of paintings of the human figure from observation that display an understanding of traditional and contemporary techniques and concepts.

Utilize mix media in individualized life drawings with an understanding of contemporary display practices.

Demonstrate an understanding of the contemporary approaches in figure drawing and an ability to apply them into individualized artwork.

Student Learning Outcomes:
Create a portfolio of drawings that accurately display the human form from observation of a live model using advanced application of human anatomy, proportion and structure.
Discuss observational drawings of a live model in regards to individual creative expression and its place in a traditional and contemporary art world.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
108.0

Advanced Drawing
ART233:

3.0 Units

To further develop individual graphic expression. Students will plan a series of drawing problems to be executed during the semester under the instructor's direction. A further exploration of new materials and techniques that are in line with creative concepts. Field trip for en plein air style of drawing may be required.

Requisites
Requisites:
Prerequisite
ART230 - Intermediate Drawing

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Further develop an awareness and creative use of design elements and principles as they apply to drawing and utilize them in studio projects.

Demonstrate an understanding of the principles and elements of composition as they apply to expressive drawing, and an ability to utilize these in studio projects.

Create drawings with an a formal control of drawing materials and techniques.

Develop in-depth concepts and aesthetics to create a portfolio of drawings that display individual expression, problem solving, and strong studio practice.

Assess and critique a portfolio of paintings with appropriate art terminology and methodology associated with analysis.

Student Learning Outcomes:
Define and explore a variety of studio themes/problems using a variety of drawing materials and techniques.
Critically analyze a series of drawings in terms of visual elements, content, and concept.

Units & Hours
Minimum Units:
Intermediate Painting
ART241:

3.0 Units

An intermediate level class designed to promote and advance the creative development of those with basic skills in painting. Opportunity for further study of historical and contemporary references and to increase experience with new media, methods and techniques. Emphasis on artistic expression and individual creative problems.

Requisites

Requisites:

Prerequisite

ART141 - Beginning Painting

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Develop a studio practice that relates to personal problem solving and experience.

Examine and apply a history of painting as inspiration to personal expression.

Create paintings with a working knowledge of figurative techniques and concepts.

Examine and apply 20th century art movements, trends, materials, and concepts into the creation of individual paintings.

Assess and critique personal and peer paintings with regard to a contemporary art model.

Student Learning Outcomes:

Create paintings that display creative concepts, in-depth content, and complex aesthetic problem solving.

Analyze and evaluate a painting for its use of visual elements, technique, content, and concepts.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

108.0
Advanced Painting
ART242:

3.0 Units

An advanced level studio course providing opportunity for further refinement of painting skills with increasing exposure to contemporary styles. Emphasis on research and individual creative problems in painting. Exploration into a personal mode of expression through development of media, technique and style.

Requisites

Requisites:

Prerequisite

ART241 - Intermediate Painting

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Develop a studio practice that emphasizes an understanding of formal techniques and creative concepts.

Create a portfolio of paintings that demonstrate an understanding of aesthetic problem solving and creative concepts with regard to formal elements and in-depth content.

Examine and apply contemporary approaches to painting to individual artwork.

Critique and assess a series of paintings with an advanced understanding of art terminology and contemporary analysis.

Student Learning Outcomes:

Create a series of paintings that display creative concepts, in-depth content, and complex aesthetic problem solving.

Analyze and evaluate a series of paintings for its uses of visual elements, technique, content, and concepts.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

108.0

Intermediate Digital Photography
ART249:

3.0 Units

An intermediate course in digital photography and imaging that allows students to take the technical information received from Art 149 and apply it to a variety of concepts. This course focuses on projects that explore photographic subjects including portrait, landscape, still life, and commercial photography. Students must provide their own digital camera with manual controls.
Requisites
Requisites:
Prerequisite

ART149 - Introduction to Digital Photography

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Demonstrate an understanding of course expectations, equipment, and lab procedures.
Light, photograph and compose images to sell a product.
Use camera’s functions to create images with correct exposures and balance compositions.
Explore and create a variety of portrait photographs that take into consideration the subject, environment, and objects.
Compose and photograph both natural and artificial environments.
Impartially record narrative events that highlight social roles.
Recognize and analyze photographic imagery and its influence on society.
An understanding of jobs in the field of digital photography and imaging.
Use various lighting techniques and understand how to achieve the correct exposure.
Explore and create a variety of portrait photographs that take into consideration the subject, environment, and objects.
Compose and photograph both natural and artificial environments.
Impartially record narrative events that highlight social roles.
Light, photograph and compose images to sell a product.

Student Learning Outcomes:
Create properly exposed images that display visual elements and concepts relating to the subject and environment.
Discuss and analyze photographic imagery with terminology related to the fields of fine art and commercial photography.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
72.0

Advanced Studio Concepts
ART250:
3.0 Units
Intensive study in visual arts for majors with studio emphasis. This class offers art majors exposure to contemporary art directions, trends and job markets. Students will be given different studio problems each semester which will help them build a personal portfolio. Field trips are required.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**
Demonstrate a comprehension of project objectives, studio expectations and procedures, and portfolio structure.

Analyze art centers and venues to display individuals art in accordance to the students selected medium.

Research what is available in the field of art, where to look, what to look for, and how to interpret art writings.

Analyze vocations within the artworld.

Identify an approach for seeking and gaining recognition and sales/show outlets for creative work.

Locate exposure options in visual arts through direct contact with professional artists.

Explore necessary visual motivation and an opportunity to investigate personal visual problems.

Refine technique

Explore development of a personal direction in chosen media

Develop critical awareness in relationship to personal work

**Student Learning Outcomes:**

- Create advanced studio work in the area of their selected focus that display an understanding of formal elements and defined concepts.
- Assess their own studio work within the context of contemporary issues in the discipline.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

108.0

**Advanced Mobile Application Development and Design**

**ART259:**

3.0 Units
Advanced topics in the graphic design of mobile applications viewed on smart phones and similar devices. Industry standard multi-platform software will be employed to develop applications that will run on a variety of platforms with a focus on iPads and iPhones. Students will work in development teams to map and storyboard advanced application designs.

Requisites

Prerequisite

ART159 - Introduction to Mobile Application Development and Design

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Demonstrate a comprehension of course expectations, equipment, and lab procedures.

Design in teams, where individuals have specialized skill sets. Explain the graphic designer’s role.

Discuss technology that is available to individuals without a coding background for Mobile app creation.

Interpret the graphic designers role in guiding and enhancing the user’s experience.

Interpret the graphic designers role in guiding and enhancing the user’s experience.

Explore and demonstrate the use of various techniques for non coders to develop mobile applications and websites with basic and advanced website technologies and software.

Utilize various software and methods available to demonstrate the visual design phase of mobile applications.

Develop advanced presentation assets and skills to show potential clients and/or other members of designs teams mobile apps in the planning stages.

Student Learning Outcomes:

Develop a professional stand-alone visual presentation for a new and multi faceted mobile application.

Demonstrate the ability to perform a professional presentation explaining the concept, functionality, and design of a new mobile application.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

72.0

American Sign Language I

ASL110:

4.0 Units
This entry-level course is designed to introduce students to American Sign Language (ASL) and fingerspelling as it is used within American Deaf culture. Instruction includes preparation for visual/gestural communication followed by intensive work on comprehension through receptive language skills, development of basic conversational skills, modeling of grammatical structures, and general information about American Deaf culture. American Sign Language 110 is equivalent to two years of high school ASL. Students are required to attend at least one off-campus event.

**Requisites**

None

**Transferability & General Education Options**

Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0

**General Education Plan:**

**Local - Plan A**

Area C: Humanities

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**

Area 6: Language Other than English

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Identify and analyze similarities and differences in American hearing and deaf cultures in a variety of situations.

Demonstrate a beginning conversational ability in American Sign Language by integrating vocabulary, grammar, and culture.

Identify and apply the phonology of American Sign Language to each sign containing the five parts (handshape, location, palm orientation, movement and non-manual markers).

Compare, contrast and classify phonological parts to given pairs of vocabulary words.

Apply one-person role shift, two-person role shift, basic classifiers, transitions and facial expressions.

Demonstrate an understanding and participating in short narratives and conversations between two or three people.

Employ grammar correctly to communicate about a variety of activities and real world experiences.

Express personal short story narratives and translate short stories written in English utilizing (one-person role shift, two-person role shift, basic classifiers, transitions and non-manual markers).

Discuss personal short story narratives and translate stories from English to American Sign Language.

Record and assess expressive production of American Sign Language.

Practice receptive ASL comprehension by completing activities and assignments.

**Student Learning Outcomes:**

Comprehend and demonstrate beginning-level ASL syntax, grammar, vocabulary, translation and fingerspelling skills.

Engage in beginning conversation using ASL signing, fingerspelling and non-manual markers to convey thoughts and ideas.

Identify and analyze basic similarities and differences between American Deaf and hearing cultures.
Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
90.0

American Sign Language II
ASL111:

4.0 Units

The second course in the study of American Sign Language (ASL) focuses on increased vocabulary development, intermediate comprehension and conversational skills, application of grammatical structures and practice in the receptive and expressive language aspects of ASL, as well as appreciation of American Deaf culture and history. Students are required to attend at least two off-campus events.

Requisites

Requisites:
Prerequisite
ASL110 - American Sign Language I

Outcomes

Comprehend and demonstrate beginning-level ASL syntax, grammar, vocabulary, translation and fingerspelling skills.
Engage in beginning conversation using ASL signing, fingerspelling and non-manual markers to convey thoughts and ideas.
Identify and analyze basic similarities and differences between American Deaf and hearing cultures.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Identify and analyze similarities and differences in American hearing and Deaf cultures.
Utilize grammar correctly to communicate about a variety of activities and real-world experiences.
Comprehend short story narratives and conversations utilizing classifiers.
Utilize appropriate facial grammar, role shifting, contrastive structure, conditional clause, and transitions.
Express personal short story narratives and translate short stories written in English utilizing a variety of classifiers, role shifting, transitions, appropriate facial expression, and fingerspelling.
Integrate intermediate vocabulary, grammar and culture for appropriate communication.
Record and assess expressive production of American Sign Language.
Practice expressive and receptive ASL comprehension by completing activities and assignments.

Student Learning Outcomes:
Comprehend and demonstrate intermediate level ASL syntax, grammar, vocabulary, translation and fingerspelling skills.
Engage in intermediate level conversation using ASL signing, fingerspelling and non-manual markers to convey thoughts and ideas.
Identify and analyze issues facing the American Deaf community.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
90.0

Introduction to Interpreting for the Deaf
ASL113:
3.0 Units
The study of the history of sign language interpreting and the theoretical foundations and technical skills needed to interpret in professional settings for deaf and hard of hearing children and adults. The roles, responsibilities, and ethics of interpreters providing interpreting services in various professional settings will be examined. Field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Define or identify conceptual models of professional sign language interpreting and the varying types of interpreting modalities utilized.
Define terms that apply in the field of interpreting.
Outline and explain the professional aspects of the career of Sign Language Interpreting.
Describe the Registry of Interpreters for the Deaf and other professional interpreting organizations.
Apply the Code of Professional Conduct to ethical scenarios.
Synthesize the relationship between the interpreting community and the Deaf and hard of hearing community.
Engage in ongoing professional development.

Student Learning Outcomes:
Demonstrate an understanding of the history of sign language interpreting and the development of professional organizations overseeing the profession of sign language interpreters in the United States.
Describe the requirements for National Interpreter Certification and Registry of Interpreters for the Deaf certifications.
Use the Code of Professional Conduct to analyze ethical scenarios with consideration of communication equity and social justice.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Deaf Studies
ASL116:
3.0 Units

This is an introductory course exploring the cultural, educational, linguistic, and audiological experiences of people who are deaf, hard of hearing, deaf/blind, and late-deafened in America. Students will be exposed to historical and current perspectives in trends, philosophies, ideologies, and the Deaf community as a subculture of American society. Students may be required to attend at least one off-campus event.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)
Arts (Art, Cinema, Dance, Music, Theatre)
IGETC - Plan C  
Area 3B: Humanities

Santa Ana College - Shared Course  
Shared Course with SAC

Learning Outcomes

Course Objectives:
Describe audiological aspects of hearing loss as it relates to identity of the person and implication of language acquisition.
Evaluate the effects of age of onset and hearing loss on individuals in their language and cultural development.
Compare and contrast hearing and Deaf cultural and linguistic norms.
Examine historical and contemporary issues regarding the Deaf as a subculture as seen by the deaf themselves.
Evaluate the psychological and social perspectives of deafness and hearing loss on the individual, family and societal groups.
Identify the historical and contemporary perspective of the education of the Deaf and hard of hearing including introductory information to the various educational approaches.
Identify the major laws impacting the lives of American Deaf.

Student Learning Outcomes:
Analyze various perspectives of deafness.
Evaluate pathological, cultural and historical viewpoints of deafness.
Distinguish among various components of American Deaf culture.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

American Sign Language III  
ASL210:

4.0 Units

The third course in the study of American Sign Language (ASL) emphasizes advanced ASL syntax, non-manual markers, vocabulary, and fingerspelling enabling students to participate in more complex conversations with Deaf community members. The course also emphasizes expressive skills in narrative form. Students are required to attend three off-campus events.

Requisites

Requisites:
Prerequisite
ASL111 - American Sign Language II

Outcomes
Comprehend and demonstrate intermediate-level ASL syntax, grammar, vocabulary, translation and fingerspelling skills.
Engage in intermediate level conversation using ASL signing, fingerspelling and non-manual markers to convey thoughts and ideas.
Identify and analyze issues facing the American Deaf community.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify and analyze similarities and differences in American hearing and American Deaf cultures in a variety of situations.
Utilize grammar correctly to communicate about a variety of activities and real world experiences.
Integrate vocabulary, grammar and culture to communicate
Comprehend short story narratives and conversations
Express personal short story narratives.
Translate short stories, narratives and children stories written in English utilizing a variety of classifiers, role shifting, transitions, appropriate non-manual markers, and fingerspelling.
Record and assess expressive production of American Sign Language
Practice expressive and receptive ASL comprehension by completing laboratory activities and assignments.

Student Learning Outcomes:
Recognize and demonstrate an intermediate to advanced-level of ASL syntax, grammar, vocabulary, translation and fingerspelling skills.
Engage in advanced-level conversation using ASL signing, fingerspelling and grammar to convey thoughts and ideas.
Identify and analyze critical issues facing the American Deaf community.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
90.0

Astronomy Laboratory
ASTR100L:

1.0 Units

Explores techniques used to study properties of celestial objects and astronomical phenomena. Field trips to local planetaria and/or dark sky locations may be included. Previous Title: Astronomy 140, Astronomy Laboratory (2017)

Requisites

Requisites:

Prerequisite

ASTR102 - Introduction to Stars and Galaxies

or concurrent enrollment

OR

Prerequisite

ASTR103 - Introduction to the Solar System

or concurrent enrollment

OR

Prerequisite

ASTR112 - Introduction to Cosmology

or concurrent enrollment

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

Local - Plan A

Area A: Natural Sciences

CSU GE - Plan B

Area B3: Laboratory Activity

IGETC - Plan C

Area 5C: Laboratory Activities

Learning Outcomes

Course Objectives:

Demonstrate the correct use of laboratory equipment and data analysis to explain the various phenomena.

Student Learning Outcomes:

Demonstrate an understanding of the scientific method as a research tool for understanding the universe.

Conduct laboratory investigations according to a given experimental procedure, collect and analyze data, and to formulate valid conclusions based on their results.

Units & Hours

Minimum Units:

1.0
Maximum Units
1.0

Total Hours
54.0

Introduction to Stars and Galaxies
ASTR102:

3.0 Units
Surveys the development of astronomy, current research and observations of stars, galaxies and large-scaled structures in the universe. Explores light and gravity to understand the properties and evolution of stars, neutron stars, black holes, galaxies and the universe structures and changes.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences

IGETC - Plan C
Area 5A: Physical Science

Learning Outcomes
Course Objectives:
Explain how the electromagnetic spectrum and an object’s spectrum are used to determine the properties and motion of celestial objects.
Demonstrate an understanding of how the Earth’s atmosphere affects the ability to view celestial objects.
Explain how different types of spectra are produced.
Demonstrate an understanding of Newtons’ Laws, Kepler’s Laws, and how they work in conjunction with gravity to allow for orbital motion.
Explain how acceleration of an object changes based on forces applied.
Describe the history of how astronomy was conducted and how its methods have changed from the Ancient Greece to the Modern Era.
Explain how mass, temperature, and radius are determined for stars.
Explain the significance of an object’s placement on the HR Diagram.
Describe how to use various methods to determine a star’s mass, radius, temperature, and distance.
Describe the various properties of stars associated with different luminosity and spectral classes.
Identify the impacts of mass on the fusion rates, energy outputs, and life-times of stars.
Describe the stages and contributing factors of stellar evolution for high-mass, very low-mass, and Sun-like stars.

Describe and identify characteristics of various galaxies, including the Milky Way.

Investigate the formation of galactic structure and various regions within a galaxy including where star formation occurs.

Describe the various laws and theories and their applications.

Demonstrate a fundamental understanding of our place in a changing universe.

Student Learning Outcomes:

Demonstrate an understanding that science is based on observations of the universe and how it is used to understand some basic phenomena of our world.

Demonstrate various methods of analyzing starlight to understand stellar properties and structures in the universe.

Discuss how mass and gravity are related to the formation, interaction, and evolution of the solar system, stars, galaxies, and the universe.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to the Solar System

ASTR103:

3.0 Units

Surveys the history of astronomy, recent research and space flight observations of the planets, moons, and other solar system objects. Explores light and gravity to understand formation, properties and motion of Solar System objects.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences

IGETC - Plan C
Area 5A: Physical Science

Learning Outcomes

Course Objectives:
Explain how the electromagnetic spectrum and an object’s spectrum are used to determine the motion and properties of celestial objects.

Develop an understanding how the Earth’s atmosphere affects the ability to view celestial objects and the effects it has on Earth’s climate.

Demonstrate an understanding of Newton’s Laws and how they work in conjunction with gravity to allow for orbital dynamics.

Explain how acceleration changes on an object based on forces applied.

Recognize celestial motion as the result of Earth’s rotation and/or revolution.

Identify the contributing factors for seasons on Earth and other planets.

Explain why the night sky changes throughout the year and what constellation the Sun is in as related to a horoscope.

Describe how astronomy was conducted and how it’s methods have changed from the Stone Age to the Modern Era.

Demonstrate an understanding of Kepler’s Laws.

Identify the contributing factors to changes occurring on the Earth.

Compare features and changes of Earth to other Solar System planets.

Identify Moon phases.

Explain the causes of Moon phases.

Explain the timing of Moon phases.

Describe lunar formation theories and verify the accepted theory.

Identify other effects the Moon has on the Earth.

Identify characteristics of the classes of planets.

Discuss evidence to explain properties and features of these planets.

Identify characteristics of this class of planets.

Discuss evidence to explain properties and features of these planets.

Identify characteristics of these types of objects.

Explain how these smaller objects support theories of the Solar System origin.

Identify how they affect the Solar System’s present day structure.

Describe of the structure, characteristics and formation theories of the Solar System.

Identify major regions of the Solar System.

Explain the relevance of regions to the overall Solar System structure.

**Student Learning Outcomes:**

- Demonstrate an understanding that science is based upon observations of the universe and how that is used to understand some basic astronomy phenomena of our world.
- Demonstrate various methods of analyzing light to understand the formation, interaction, structure and evolution of the Solar System.
- Discuss how mass and gravity are related to the formation, interaction, properties and evolution of various objects in the Solar System.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

3.0
Introduction to Cosmology
ASTR112:

3.0 Units

Principles of astronomy stressing the origin, structure, and evolution of the universe. Discussions to include light, matter, gravity, stellar evolution, cosmology, relativity, the Big Bang Theory, and the expansion of the universe.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area A: Natural Sciences

CSU GE - Plan B
   Area B1: Physical Sciences

IGETC - Plan C
   Area 5A: Physical Science

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Discuss the development of cosmology from ancient cultures to present day.
Apply the scientific method to determine a logical conclusion.
Explain the basic process by which telescopes gather light.
Discuss the advantages and disadvantages of telescopes.
Explain the desirable features of an observing site.
Describe the electromagnetic spectrum and the various components of the spectrum.
Describe the process that produces spectral lines and how they relate to atoms.
Compare and contrast the differences between absorption lines and emission lines.
Explain the process by which the chemical composition of a star can be determined through star light.
Describe what is meant by radial velocity and how it can be determined.
Explain how the temperature of a star can be determined by star light.
Describe the variables associated with gravity
Explain how gravity affects matter in non-extreme conditions.
Explain the development and consequences of the Special and General Relativity theories.
Describe their implications for cosmology.

Explain energy generation & hydrostatic equilibrium.

Describe various stellar properties.

Explain the formation and evolution.

Describe the purpose of a distance indicators with an emphasis on Type Ia Supernovae as standard candles.

Describe the structure of stellar and super-massive black holes and their effect on light and matter.

Describe the various types of galaxies and their structure using the Milky Way as an example of a standard spiral galaxy.

Describe the various types and structures of active galaxies including the active galactic nuclei (AGN) central engine, quasars, and radio galaxies.

Describe the motion and interaction of galaxies.

Explain the Hubble expansion and the Big Bang Theory

Describe alternate theories to the origin of the universe and their subsequent geometry.

Describe recent research and the effects to modern cosmology and the implications of such discoveries (e.g., dark energy).

Describe the standard model of the Big Bang, the first three minutes, and alternate models of the Big Bang (e.g., the inflationary model)

**Student Learning Outcomes:**

- Demonstrate an understanding that science is based on observations of the universe and how it is used to understand some basic phenomena of our world.
- Discuss how light is used by astronomers to determine the origin, structure, and future of the universe.
- Discuss how gravity is described and related to the evolution and interactions of objects in the universe.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Labor Relations**

**ASV030:**

0.5 Units

Provides a required related and supplemental instruction for surveying apprentices in apprenticeship rules and regulations; general history of labor/ management relations in the United States (US); employer/employee relations; state and federal laws affecting workers.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

0.5

**Learning Outcomes**
Course Objectives:
Discuss and explain his/her obligation to the employers, Joint Apprenticeship Council (JAC) and to Local 12; and knowledge of how to appeal a decision regarding claims that are denied by the Health and Welfare Trust.

Explain an understanding of his/her rights as a worker in California for worker's compensation and unemployment insurance.

Student Learning Outcomes:
- List and give a brief description of the rules and regulations of the surveying apprenticeship program, their responsibilities as an apprentice and as a union member.
- List and give a brief description of the state and federal laws affecting workers.

Units & Hours
Minimum Units:
0.5

Maximum Units
0.5

Total Hours
9.0

Supplemental Math for Chainman Apprentices
ASV031:
1.0 Units

Review of basic mathematics, algebra and geometry related to surveying; review angles, azimuths, and bearings; stationing and offsets.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.0

Learning Outcomes

Course Objectives:
Apply the concepts of basic mathematics.
Apply concepts of algebraic and geometric mathematics used in the surveying industry.
Use coordinate systems for directional and location measuring
Demonstrate an understanding and application of mathematics by taking and passing the supplemental math exam.

Student Learning Outcomes:
Use basic math, algebra and geometry concepts to solve a set of surveying problems.
Describe how angles, azimuths, and bearings apply to surveying.
1.0

Total Hours
18.0

Standard First Aid
ASV040:

0.1 Units
Enables surveyors to cope with accidents and emergency situations with the goal of protecting and saving lives with special emphasis on those first aid skills unique to the surveying industry. American Red Cross certificate awarded upon successful completion.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Distinguish between various wounds and specific injuries.
Recognize and assess respiratory emergencies and CPR.
Evaluate breathing emergencies.
Identify and assess bone and joint injuries as well as soft tissue injuries.
Analyze and assess environmental emergencies.
Identify and assess burns with dressings and bandages.

Student Learning Outcomes:
Identify and perform the proper treatment for various sudden illnesses and injuries, given a set of emergency situations.
Perform Cardio-Pulmonary Resuscitation and use an Automated External Defibrillator.

Units & Hours
Total Hours
1.8

Chainman Apprentice 1
ASV101:

4.5 - 5.0 Units
Provides the required related and supplemental instruction for apprentice surveyors in the survey industry: basic field operations and setting survey points, basic measurement techniques, introduction to field instruments, introduction to leveling, introduction to topographic surveys. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.5

General Education Plan:

Learning Outcomes

Course Objectives:
Analyze and understand the history of surveying, duties and basic crew operations, safety procedures for tool use, and job site safety.
Analyze and understand the reading, recording, and checking of angles, stake driving, sight setting, marking of lath, use of T-16, and safety procedures
Develop an understanding of basic chaining procedures, metric measurements, safety procedures, chaining blunders, errors, mistakes, note keeping, pacing and chaining, and the use of T-16.
Analyze and understand bearings, azimuths, angles, and angular units, using total stations, reflector, prism plumbing poles and stake driving, safety procedures, total station and data collectors, and chaining.
Review course content presented in the first half of the course and take the required apprenticeship tests
Learn to use leveling instruments and the hand level. Understand the use of rods and differential leveling principles. Learn how to set turning points and bench marks. Learn proper notekeeping and grade sheets, electronic and trigonometric leveling. Under
Analyze and learn topo note keeping, X-sections, grid, stadia, total stations and aerial topos, location of shots taken in topos, contour and contour lines, performing grid and X-section topo, safety procedures, plotting of topo notes and use of scales.
Take required apprentice skills evaluation tests on safety procedures and computer skills.
Review course content presented in second half of course and take required apprentice tests.
Review math skills necessary for the apprenticeship surveying program and take the required apprenticeship math skills tests.
Take required computer skills tests for apprenticeship surveying program.

Student Learning Outcomes:
- Demonstrate competence, safety techniques, and teamwork while operating surveying instruments.
- Apply the proper calculations to accurately perform basic topographic surveys.

Units & Hours

Minimum Units:
4.5

Maximum Units
4.5

Total Hours
126.0

Chainman Apprentice 2

ASV102:

5.0 Units

Provides the required related and supplemental instruction for apprentice surveyors in apprentice responsibilities and public relations; identification of monuments; linear measurements; introduction to station and location systems; angles, bearings, and instruments; leveling methods; global positioning system; plan reading and grade sheets; introduction to construction surveys. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
5.0

General Education Plan:

Learning Outcomes

Course Objectives:
Learn the obligations and responsibilities to the employer, the industry, and the union, public and client relations, and job site safety.

Learn the proper procedures for field notes and lettering.

Learn the identification of monuments, public monuments, laws pertaining to monuments, and will review metric and English measuring systems.

Understand the scope and variety of chaining procedures, sources of error in chaining and how to apply chaining corrections, and safety procedures.

Understand and demonstrate stationing and location measuring systems, the techniques of stationing and field problems, and safety procedures.

Understand angles, bearings, azimuths, and direction measuring, and learn how to use direction measuring instruments and proper safety procedures.

Review course content presented in the first half of the course and take the required apprenticeship tests.

Learn leveling methods and procedures, notekeeping and adjustments, calculations and errors, leveling problems, and safety procedures.

Learn and apply the basic principles of GPS and GPS field equipment, the operation of GPS field equipment, and safety procedures.

Learn to read a topographic map, improvement plans and circular curves, site and grading plans, and the plan book.

Learn and apply construction terminology and coordinates, building construction sequence, construction surveying, staking methods and procedures, and safety procedures.

Take the required pre-trigonometry survey math examination

Review course content presented in the second half of the course and take and the required apprenticeship tests

Student Learning Outcomes:
Read, explain and articulate topographic maps, improvement plans, and site and grading plans used in the surveying trade.
Demonstrate competence, proper safety techniques, and teamwork to perform construction surveys.

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
126.0

Chainman Apprentice 3

ASV103:
4.5 - 5.0 Units

Provides the required related and supplemental instruction for apprentice surveyors in measuring systems; angles, bearings, and location systems; calculations techniques; trigonometry for surveying; slope staking; electronic distance measuring and recording. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.5

General Education Plan:
Learning Outcomes
Course Objectives:
Learn the historical and contemporary systems for horizontal and angular measurements; basic mathematics, algebra and geometry related to surveying; and safety procedures.

Understand angles, bearings, azimuths, and location systems; and, stationing and offset location systems.

Learn and understand trigonometric functions, trigonometric identities and right triangles, and to solve right triangle problems.

Review material presented in the first half of the course and take the required apprenticeship tests.

Learn and understand solving intermediate right triangle problems, advanced right triangle problems, and oblique triangle problems using right triangles.

Learn and apply the terminology, geometry, and marking of slope stakes; slope staking procedures and techniques; safety procedures; and, to use reference slope stakes and perform grade staking.

Learn and apply the techniques of operating total stations, the calculations for slope reductions and trigonometry leveling, use of data collectors for gathering information and use for stakeout, and safety procedures.

Learn and demonstrate GPS basics and to solve field problems with GPS.

Review material presented in the second half of the course and take the required apprenticeship tests.

Field practice of total station.

Student Learning Outcomes:

Use trigonometric concepts to solve a set of surveying problems.

Demonstrate competence, safety techniques, and teamwork while staking slopes.

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
108.0

Chainman Apprentice 4
ASV104:
4.5 - 5.0 Units

Provides the required related and supplemental instruction for apprentice surveyors in coordinate geometry, horizontal and vertical curves; traverse surveys. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

4.5

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Understand coordinate principles, rectangular coordinate systems and traversing and inversing coordinates.

Learn how to survey horizontal curves, compound and reverse curves, spiral curves and vertical curves.


Understand and demonstrate GPS coordinate systems and how to determine traverse and stakeout with GPS.

Learn and demonstrate the proper field staking procedures, including safety procedures, for horizontal curves, compound and reverse horizontal curves, and vertical curves.

Learn and apply the proper field procedures, including safety procedures, for traverse surveys.

Review and apprenticeship testing of above material.

Learn and apply traversing mathematically closed figures, field loop traverses, connecting traverses, and deflection angle traverses.

Review and apprenticeship testing of above material.

**Student Learning Outcomes:**

- Apply the proper calculations to accurately perform traverse surveys.
- Demonstrate competence, safety techniques, and teamwork while performing traverse surveys.

**Units & Hours**

**Minimum Units:**

4.5

**Maximum Units**

4.5

**Total Hours**

108.0

**Chainman Apprentice 5**

**ASV105:**

4.5 - 5.0 Units
Provides the related and supplemental instruction for apprentice surveyors in safety procedures; U.S. public land surveys; property surveys; subdivisions surveyors; topographic and photogrammetry surveys; staking procedures; heavy construction surveys; ALTA surveys; total stations; public relations; scope of profession and the Chief of Party program. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.5

General Education Plan:

Learning Outcomes
Course Objectives:
Learn and demonstrate effective public relations techniques, professional liability, professional status, ethics, and Chief of Party Program.

Learn and understand the subdivision approval process and construction drawing; overview of Subdivision Map Act.

Learn and analyze construction site control and recovery of control, and structural steel buildings. Understand routes, to include: highways, bridges, railroads, tunnels, mines, dams, refineries, and power plants, and hydrographic surveys.

Learn and understand map making and items to locate, grid and cross-section topos, how to plot topos, how to perform topographic surveys, and photogrammetry.

Learn and analyze legal descriptions and research, boundary surveys, total job research, performing property surveys, and safety procedures.

Learn and understand the development of public land surveys; parallels, meridians, townships, and sections.

Review and apprenticeship testing of above material.

Analyze and learn to perform ALTA and similar surveys, the types of total station and data collector surveys, digital mapping, to perform total station surveys, and safety procedures.

Review and apprenticeship testing of above material

Learn how to prepare field notes

Student Learning Outcomes:

- Apply the proper calculations to accurately perform property, subdivision, topographic, photogrammetry, heavy construction, ALTA, and total station surveys.
- Demonstrate competence, safety techniques, and teamwork while performing property, subdivision, topographic, photogrammetry, heavy construction, ALTA, and total station surveys.

Units & Hours

Minimum Units:
4.5

Maximum Units
4.5

Total Hours
108.0

Plane Surveying and Coordinate Geometry

ASV121:
3.0 Units

Advanced field surveying principles and mathematical surveying principles including introduction and review of survey mathematics, measuring systems, coordinate geometry, and modern calculation systems. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable: Transferable to CSU only

General Education Plan:

Learning Outcomes

Course Objectives:
Identify and describe various principles of coordinate geometry

Apply appropriate principles to solve problems

Describe and demonstrate proper methods of various measuring and recording systems

Review and Adjustment of Field Traverses-Coordinate Adjustment

Explain how techniques have changed

Demonstrate advanced note keeping and sketches

Describe and explain control research and reconnaissance

Student Learning Outcomes:

- Apply coordinate geometry to solve a set of surveying problems.
- Demonstrate the proper measuring and note keeping methods to perform accurate surveys.

Units & Hours

Advanced Coordinate Geometry

ASV122:

3.0 Units

Advanced field surveying methods and calculation principles involving coordinate geometry, including omitted measurements, intersection problems, three-point resection problems, area calculation problems, complex circular curves, vertical curves, and spiral curves. Open Entry/Open Exit.

Requisites

None

Transferability & General Education Options

Transferable: Transferable to CSU only

General Education Plan:

Learning Outcomes

Course Objectives:
Recognize and solve various types of Coordinate Intersection problems

Describe the principles behind the various types of intersection problems
Demonstrate an understanding of the principles of complex field problems

Demonstrate an understanding of accuracy and precision requirements

Demonstrate field and office calculating techniques

Horizontal and Vertical Curve Field Staking Procedures

**Student Learning Outcomes:**

- Apply advanced coordinate geometry principles to solve complex field surveying problems.
- Apply accuracy requirements and measuring techniques to solve curve calculations.

**Units & Hours**

**Laptop Surveying/Aerial Photogrammetry**

**ASV123:**

3.0 Units

Advanced field surveying methods and principles involving laptop surveying, photogrammetry, and topographic surveying. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an understanding of the basics of laptop surveying
- Read and interpret aerial photos
- Use photogrammetry in control extension and topographic mapping
- Analyze ground control for aerial surveys
- Identify and analyze the various topographical surveys

**Student Learning Outcomes:**

- Demonstrate proper laptop surveying methods to accurately perform topographic surveys.
- Read, explain and articulate aerial photos used in topographic surveys.

**Units & Hours**

**Plan Reading and Subdivision Surveying**

**ASV124:**

3.0 Units

A study of plan reading and subdivision surveying principles and practices including plan reading basics; typical and unique subdivision plans; survey control; layout and staking of subdivisions; locating plan, calculation and specification errors. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**
Transferable:
Transferable to CSU only

General Education Plan:
Learning Outcomes
Course Objectives:
Interpret and comprehend drawings, plans, and legal notes
Identify and analyze typical subdivision and other grading plans and the different stages of a project
Describe buttresses and other specialized grading operations
Identify safe working procedures on a typical survey project
Survey Control before and after construction of site improvements

Student Learning Outcomes:
Read, explain and articulate a variety of grading and improvement plans to perform subdivision surveys.
Coordinate and carryout construction projects according to drawings and plans.

Units & Hours
Major Project Plans and Survey Layout
ASV125:

3.0 Units

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Read and analyze construction plans
Demonstrate an understanding of survey control and layout
Analyze the structural components and plans of multi-story buildings
Demonstrate an understanding of the plans and survey layout for major construction projects

Student Learning Outcomes:
Read, explain and articulate a variety of plans and specifications used in major project surveys.
Coordinate and carry out major construction projects according to survey layouts.

Units & Hours
Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Control and Geodetic Surveying
ASV126:

3.0 Units
Principles/methods of control and geodetic surveying. Modern positioning systems; triangulation/trilateration for geodetic control; state plane coordinate systems; astronomy for surveyors; note keeping and computational procedures utilizing modern instruments, techniques, communications equipment; dredging and hydrographic surveys. Open Entry/Open Exit.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the standards of accuracy for geodetic control
Measure, calculate and adjust triangulation figures
Introduction of Least Squares Adjustment Procedures
Demonstrate an understanding of the state plane coordinate system
Demonstrate an understanding of the basic principles of Global Positioning Systems
Accurately collect and utilize GPS data
Demonstrate an understanding of the principles and methods of hydrographic and dredging surveys

Student Learning Outcomes:
Properly analyze triangulation and trilateration figures, plane coordinates, GPS data, and use dredging and hydrographic methods to perform accurate surveys.
Apply principles of control and geodetic surveying to construction projects.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
U.S. Public Land Surveys  
ASV127:  

3.0 Units  


Requisites  
Requisites:  
None  

Transferability & General Education Options  
Transferable:  
Transferable to CSU only

Weekly Lecture Hours:  
3.0

General Education Plan:  

Learning Outcomes  
Course Objectives:  
Demonstrate an understanding of the principles, procedures, and methods of performing U.S. public land surveys
Read and interpret property descriptions

Principles of Riparian and Littoral Surveys  

Student Learning Outcomes:  
Use the proper methods and techniques to perform accurate U.S. public land surveys and property surveys.
Read and interpret property descriptions of townships and sections.

Units & Hours  
Minimum Units:  
3.0

Maximum Units  
3.0

Total Hours  
54.0

Property Surveys and Legal Descriptions  
ASV128:  

3.0 Units  

Principles, procedures, and methods of researching and performing property surveys. Laws affecting surveyors and ethics. Supervision and public relations. Analysis of survey data and drawing the plat. Writing descriptions of real property. Open Entry/Open Exit.

Requisites  
Requisites:  
None  

Transferability & General Education Options  

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Describe principles, procedures, and methods for researching and interpreting surveys and legal descriptions

Demonstrate an understanding of The Land Surveyor's Act and The Subdivision Map Act

Identify principles and techniques of appropriate supervision, efficient management, and good public relations

Student Learning Outcomes:
Read, explain, articulate and write legal descriptions and easements.
Define and explain the principles of eminent domain, evidence, guarantee of title, the Land Surveyors' Act and the Subdivision Map Act.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Adult High School Diploma, DIPL
Adult High School Diploma

Credits:
0.0 credits

Program Length:
Recommended preparation for program is 0 semesters

Transferable:

Credential ID:
OEC.HS.DIPL

Rationale for Non-Fall Start:
eLumen migration - updated diploma to include HSART837.

Submission Rationale:
No value

National Taxonomy:
No value

Occupational Taxonomy:
No value

The Adult High School Diploma Program is designed to offer students instruction ranging from the basic skill level to the high school level with the purpose of preparing them to earn a high school diploma and for other higher educational or job opportunities. Each high school course is worth five (5) credits unless otherwise noted.
Program Requirements

Adult High School Diploma, DIPL (Total 2304)

Complete all of the following

ENGLISH - Required courses (credits are in hours). Forty (40) high school credits required (576 hours). Must include one (1) of the following composition courses: (Total 72)

Complete the following number of credits: 72

HSENG083 - Composition 1 72
HSENG084 - Composition 2 72
HSENG085 - Composition 3 72

ENGLISH - electives (credits are in hours). Select seven (7) of the following English electives (504 hours). [A maximum of 10 high school credits (144 hours) from High School Subjects Reading 089, 090 (Total 504)

Complete the following number of credits: 504

HSENG020 - Literature Brought to Life 72
HSENG052 - English Language Arts 1 72
HSENG053 - English Language Arts 2 72
HSENG066 - English Fundamentals 2 72
HSENG067 - English Fundamentals 3 72
HSENG068 - English Fundamentals 4 72
HSENG070 - The Short Story 72
HSENG072 - Poetry 72
HSENG076 - The Novel 72
HSENG098 - Building Vocabulary 3 72
HSRDG089 - Reading Proficiency Development 72
HSRDG090 - Reading Improvement 72
HSRDG093 - Building Reading Skills 1 72
HSRDG094 - Building Reading Skills 2 72

NATURAL SCIENCES - Required courses (credits are in hours). Twenty (20) high school credits are required (288 hours). Must include one (1) of the following biological science course: (Total 288)

Complete the following number of credits: 288

HSSCI168 - Life Science 1 72
HSSCI169 - Life Science 2 72
HSSCI193 - Basic Science 2 72

NATURAL SCIENCES - Must include one (1) one of the following physical science courses: (Total 0)

Complete the following number of credits: 0

HSSCI190 - Physical Science 1 72
HSSCI191 - Physical Science 2 72
HSSCI192 - Basic Science 1 72

SOCIAL AND BEHAVIORAL SCIENCES - Required courses (credits are in hours). Thirty (30) high school credits required (432 hours). Must include all of the following six (6) courses: (Total 432)

Complete the following number of credits: 432

HSSOC215 - Introduction to Economics 72
HSSOC218 - U.S. History 1: Colonization to Industrialization 72
HSSOC219 - U.S. History 2: The Shaping of Modern America 72
HSSOC222 - Government 1: United States Federal Government and Politics 72
HSSOC229 - World History, Geography, and Culture 1 72
HSSOC230 - World History, Geography, and Culture 2 72

HUMANITIES - Required courses (credits are in hours). Ten (10) high school credits required (144 hours). Select two (2) of the following courses: (Total 144)

Complete the following number of credits: 144

HSART020 - Literature Brought to Life 72
HSART070 - Short Stories 72
HSART828 - Understanding America Through Art 72
HSART837 - The Film As Art 72

MATHEMATICS - Required courses (credits are in hours). Twenty (20) high school credits are required (288 hours). Select four (4) of the following courses: (Total 288)

Complete the following number of credits: 288

HSMTH156 - Essential Mathematics 1 72
HSMTH157 - Essential Mathematics 2 72
HSMTH159 - Math Fundamentals 2 72
HSMTH163 - Algebra 1A 72
HSMTH164 - Algebra 1B 72
HSMTH167 - Geometry A 72
HSMT168 - Geometry B 72

**ELECTIVES** - (credits are in hours). Forty (40) high school credits are required (576 hours). Select elective courses from the following: (Total 576)

Complete the following number of credits: 576

ABE009 - Academic Skills 72 - 288
ABE023 - Adult Basic Education Reading 72
ABE024 - Adult Basic Education Writing 72
ABE025 - Adult Basic Education Mathematics 72
ABE026 - Adult Basic Education Spelling 72
HSOTH050 - Basics of Leadership Part 1 36
HSOTH202 - Basics of Leadership Part 2 36
HSS338 - Workforce Preparation 15
HSS770 - Orientation to College 8
VBUS118 - Introduction to Windows 60
VBUS260 - Introduction to Word Processing using MS Word 60

**Program Outcomes**

**Adult High School Diploma, DIPL**

Demonstrate foundational knowledge and comprehension of the natural sciences, social and behavioral sciences, and humanities.

Demonstrate proficiency in the core concepts from the student's selected mathematics courses.

Demonstrate effective written communication skills.

**Apply Now** [Request Info]

**Apprenticeship**

Carpentry - Apprenticeship*
Cosmetology - Apprenticeship*
Electrician - Apprenticeship*
Maintenance Mechanic - Apprenticeship*
Operating Engineers - Apprenticeship*
Power Lineman - Apprenticeship*
Surveying - Apprenticeship*

**Apprenticeship**

Carpentry - Apprenticeship*
Cosmetology - Apprenticeship*
Electrician - Apprenticeship*
Maintenance Mechanic - Apprenticeship*
Operating Engineers - Apprenticeship*
Power Lineman - Apprenticeship*
Surveying - Apprenticeship*

**B1: Physical Sciences**

ASTR112 - Introduction to Cosmology

**B2: Life Science**


**B3: Laboratory Activity**

ASTR100L - Astronomy Laboratory BIOL109HL - Honors Fundamentals of Biology Laboratory BIOL115L - Concepts in Biology for Educators BIOL139L - Health Microbiology BIOL229L - General Microbiology BIOL231L - Plant Diversity and Ecology BIOL239L - General Human Anatomy BIOL249L - Human Physiology
B4: Mathematics/Quantitative Reasoning

**MATH287 - Introduction to Linear Algebra and Differential Equations**

**Introduction to Work Experience**

**BIOL097:**

0.5 - 3.0 Units

This course is an introduction to work experience with an on campus, supervised volunteer experience in the biosciences including an introduction to new or expanded responsibilities. 60 hours of unpaid work equals one unit. Course may be taken 3 times for a maximum of 3 units of introductory occupational cooperative work experience credit. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**
- Complete the necessary forms for establishing the internship.
- Complete the safety training and assessment.
- Dress appropriately for internship site.
- Identify new or expanded job-related skills to be developed.
- Work to meet the objectives agreed upon by the student and supervisor.
- Ensure the student has met the objectives of the internship.

**Student Learning Outcomes:**
- Develop laboratory skills necessary to function within a lab-based work environment.
- Acquire knowledge pertaining to working safely within a laboratory environment.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
180.0

**Fundamentals of Biology**

**BIOL109:**

3.0 Units
Principles of biology stressing the relationship of all organisms from anatomical, physiological and ecological points of view. Includes cell machinery, genetics, reproduction, embryology, animal behavior, botany, ecology, evolution and human physiology. Designed for non-biology majors.

**Requisites**

**Requisites:**

Advisory

[Biol109L - Fundamentals of Biology Laboratory](#)

or concurrent enrollment

OR

Advisory

[Biol109HL - Honors Fundamentals of Biology Laboratory](#)

or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

Local - Plan A

Area A: Natural Sciences

CSU GE - Plan B

Area B2: Life Sciences

IGETC - Plan C

Area 5B: Biological Science

**Learning Outcomes**

**Course Objectives:**

Define and describe the characteristics of life.

Explain the steps of the scientific method and apply them to relative situations.

Differentiate between prokaryotic and eukaryotic cell types.

Compare and contrast the structure and function of cellular components

Define and describe the basic components and bonding patterns of atoms.

Illustrate how the properties of water affect living organisms.

Determine the structural components and functions of organic molecules.

Explain the structures and function of enzymes used in cellular metabolism.

Describe, and compare and contrast the mechanisms used by organisms during cellular respiration and photosynthesis.

Evaluate and illustrate the significance of mitosis and meiosis, and their relationship to heredity.

Describe and explain DNA structure, and the steps of DNA replication and protein synthesis.

Explain the early stages of animal development following fertilization.

Describe the structure and function of the basic plant components found in both monocots and eudicots.

Evaluate the major phyla of invertebrate animals and their distinguishing characteristics.
Examine the basic characteristics that define chordate animals.

Explain the structures and functions of the main internal organ systems found in vertebrate animals.

Analyze the evolution of organisms through natural selection.

Describe the interrelationships between organisms and the environment.

Examine the various groups of microorganisms.

Student Learning Outcomes:
- Identify and explain the characteristics of living organisms in a clear and concise manner.
- Demonstrate a coherent understanding of evolution and its relationship to the unity and diversity of living organisms.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors Fundamentals of Biology
BIOL109H:

3.0 Units

Traditional Biology enriched in breadth and depth by extensive outside reading assignments and guest lecture presentations. Emphasis is on individual preparation for discussion and analysis of pertinent topics using critical oral and written expression. Designed for non-biology majors. Field trips may be required.

Requisites
Requisites:
Advisory
BIOL109L - Fundamentals of Biology Laboratory

OR

Advisory
BIOL109HL - Honors Fundamentals of Biology Laboratory

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B2: Life Sciences
IGETC - Plan C
Area 5B: Biological Science

Learning Outcomes

Course Objectives:
Evaluate cause and effect relationships, analytical and synthetic statements.

Compare scientific and non-science approaches to knowledge.

Understand the functional anatomy of the eukaryotic cell.

Compare the major groups of biological macromolecules, including their formation and function.

Evaluate the methods of bringing energy into ecosystems and producing cellular energy through photosynthesis, anaerobic and aerobic respiration.

Explain and compare the cell cycle, mitosis, meiosis, cytokinesis, sexual and asexual reproduction.

Examine and explain stem cells and cancer.

Examine and explain Mendelian genetics, nucleic acids, DNA replication, transcription, and translation.

Examine the manipulation and forensic use of DNA.

Examine and compare the major animal functions and organ systems in the major phyla, focusing primarily on humans.

Examine and summarize flowering plant anatomy and physiology, with emphasis on adaptation to environment.

Evaluate the mechanisms of evolution and evidence for evolution.

Examine biomes and predict adaptations to each, with emphasis on human influences.

Student Learning Outcomes:
- Identify and explain the definitive characteristics of living organisms in a clear and concise manner.
- Demonstrate a coherent understanding of evolution and its relationship to the unity and diversity of living organisms.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Honors Fundamentals of Biology Laboratory
BIOL109HL:
1.0 Units

Hands-on laboratory experiments to identify and illustrate significant organisms and their structures. Emphasis is placed on the relationship of all organisms from an anatomical, physiological, and ecological framework. Content correlates to Biology 109/109H lecture material. Field trips required.

Requisites

Requisites:
Prerequisite
BIOL109 - Fundamentals of Biology

or concurrent enrollment
OR
Prerequisite

BIOL 109H - Honors Fundamentals of Biology

or concurrent enrollment

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B3: Laboratory Activity

IGETC - Plan C
Area 5C: Laboratory Activities

Learning Outcomes

Course Objectives:
Apply the scientific method to various aspects of biology.
Investigate pH and the chemistry of macromolecules.
Identify an unknown organic substance.
Identify different cell types, structures, and functions.
Investigate and differentiate between cellular respiration and fermentation, and the relationship between surface area and volume.
Differentiate between mitosis and meiosis.
Apply the basic principles of Mendelian genetics and investigate their effect on human traits.
Investigate DNA technology and analyze biotechnology data.
Analyze the many components of natural selection.
Analyze the various types of evidence for evolution.
Distinguish between the various classifications of animals.
Distinguish between the various classifications of plants.
Distinguish between population and community levels of species interactions.
Identify various ecosystems within the environment.

Student Learning Outcomes:
Apply the steps of the scientific method to conduct laboratory investigations.
Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

Units & Hours

Minimum Units:
1.0

Maximum Units:

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
1.0

**Total Hours**

54.0

**Fundamentals of Biology Laboratory**

**BIOL109L**:

1.0 Units

Laboratory experiments to identify and illustrate significant organisms and their structures. Emphasis is placed on the relationship of all organisms from an anatomical, physiological, and ecological framework. Content correlates to Biology 109/109H lecture material. Field trips required.

**Requisites**

**Requisites:**

**Prerequisite**

**BIOL109 - Fundamentals of Biology**

or concurrent enrollment

OR

**Prerequisite**

**BIOL109H - Honors Fundamentals of Biology**

or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Local - Plan A**

Area A: Natural Sciences

**CSU GE - Plan B**

Area B3: Laboratory Activity

**IGETC - Plan C**

Area 5C: Laboratory Activities

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Identify safety procedures, proper use of laboratory equipment, and the course requirements.

Analyze the various types of evidence for evolution.

Demonstrate the use of both dissecting and compound microscopes.

Investigate pH and the chemistry of macromolecules.

Identify an unknown organic substance.
Identify different cell types, structures, and functions.

Demonstrate the difference between diffusion and osmosis.

Apply the scientific method to various aspects of biology.

Differentiate between mitosis and meiosis.

Apply the basic principles of Mendelian genetics and investigate its effect on human traits.

Demonstrate the embryological development of both invertebrates and vertebrates.

Compare and contrast the anatomy and physiology of basic organ systems in vertebrates with emphasis on the human body. (Frog dissection is performed)

Illustrate various flowering plant structures and their functions, and distinguish between monocots and eudicots.

Identify various chaparral plants and their ecological role in the environment.

Investigate and differentiate between cellular respiration and fermentation, and the relationship between surface area and volume.

**Student Learning Outcomes:**
- Apply the steps of the scientific method to conduct laboratory investigations.
- Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
54.0

**Concepts in Biology for Educators**

**BIOL115:**

4.0 Units

An investigation in the basic principles of Biology and Science with content appropriate for future multiple-subject teachers and secondary through high school. The course material is presented within the context of the human experience and includes cell biology, physiology, genetics, evolution, ecology, and the interaction of humans with the environment. The course is taught from an inquiry-based strategy using active learning. Field trips may be required.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
4.0

**General Education Plan:**

Local - Plan A

Area A: Natural Sciences
CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

Learning Outcomes

Course Objectives:
Define and describe the characteristics of life
Develop their own mini-lessons for elementary school students on these various topics
Define and describe the basic components and bonding patterns of atoms
Illustrate how the properties of water affect living organisms
Determine the structural components and functions of organic molecules
Differentiate between prokaryotic and eukaryotic cell types
Compare and contrast the structure and function of cellular components
Describe, and compare and contrast the mechanisms used by organisms during cellular respiration and photosynthesis
Evaluate and illustrate the significance of mitosis and meiosis, and their relationship to heredity
Apply Mendelian genetics to various situational genetics problems
Explain the steps of the scientific method and apply them to relative situations
Examine the various organs and their functions in each system
Distinguish between the various groups of animals
Distinguish between the various groups of plants
Analyze the evolution of organisms through natural selection
Describe the interrelationships between organisms and the environment
Discuss solutions to population growth and world problems, such as pollution, water and food shortages
Conduct experiments, analyze data, and draw conclusions
Identify and differentiate local flora and fauna as well as describe local habitats
Describe and explain DNA structure, and the steps of DNA replication and protein synthesis

Student Learning Outcomes:
Identify and explain the characteristics of living organisms in a clear and concise manner.
Demonstrate a coherent understanding of evolution and its relationship to the unity and diversity of living organisms.

Units & Hours

Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
108.0

Health Microbiology
BIOL139:

4.0 Units

Presents practical and theoretical aspects of medical microbiology to meet the needs of those in allied health professions. Provides basic knowledge of the microbial world by covering diversity, structure, metabolic and genetic characteristics, cultivation and control. Emphasis is placed on human-microbe interactions especially infectious diseases. Laboratory deals with identification, growth, and control of microorganisms. Field trips may be required.

Requisites

Advisory

BIOL109 - Fundamentals of Biology

Outcomes

Identify and explain the characteristics of living organisms in a clear and concise manner.
Demonstrate a coherent understanding of evolution and its relationship to the unity and diversity of living organisms.

OR

Advisory

BIOL109H - Honors Fundamentals of Biology

Outcomes

Identify and explain the definitive characteristics of living organisms in a clear and concise manner.
Demonstrate a coherent understanding of evolution and its relationship to the unity and diversity of living organisms.

OR

Advisory

BIOL149 - Human Anatomy and Physiology

Outcomes

Appropriately apply anatomical and directional terminology commonly used in the medical profession to body structures.
Demonstrate a coherent understanding of the relationship between tissues, organs, and organ systems from a structural and functional perspective.
Properly utilize and care for laboratory equipment following conventional procedures.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

4.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Summarize the early history of microbiology, noting especially the major contributors to the development of the germ theory of disease and the problems presented by the belief in the theory of spontaneous generation.

Demonstrate the correct use of the microscope and other equipment used in the microbiology laboratory. Demonstrate the proper employment of aseptic technique. Correctly interpret and analyze experimental data.

Distinguish among the different types of microbial cells and note their key characteristics.

Describe and interpret the various methods for culturing and identifying microorganisms.

Explain key concepts concerning microbial genetics.

Demonstrate a basic knowledge of some common diseases caused by protozoa. Demonstrate a basic knowledge of some common diseases caused by fungi. Demonstrate a basic knowledge of some common diseases caused by multicellular parasites.

Summarize the basic chemical concepts as they relate to biologically-important molecules and reactions, including metabolic pathways.

Distinguish among the different types of acellular pathogens. Demonstrate a basic knowledge of some common diseases caused by viruses, viroids, and prions.

Describe how microorganisms cause disease, and explain the basic principles of epidemiology. Summarize the basic principles of innate and adaptive immunity. Provide an overview of the applications of immunology for the purpose of diagnosing diseases.

Choose appropriate methods for microbial control, and describe the factors that influence their growth rates.

Describe the types and mechanisms of action for antimicrobial agents. Explain the concept of antibiotic resistance.

Demonstrate a basic knowledge of some common diseases caused by bacteria.

Student Learning Outcomes:

Demonstrate a coherent understanding of human-microbe interactions, the medical impact of these interactions, and the commercial applications.

Apply the principles of the scientific method to both laboratory and conventional investigations.

Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

Human Anatomy and Physiology
BIOL149:

4.0 Units

Introduces human anatomy and physiology stressing the interrelationships between normal and abnormal structure and function. Laboratory may include the dissection of mammalian tissues. Designed for students in the allied health sciences and as a life science general education course. May not meet requirements for kinesiology or Bachelor of Science in Nursing (BSN) majors.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Explain the organization of the human body.

Examine the structure of atoms, chemical bonds and molecules.

Examine and describe cell physiology. Explain diffusion and osmosis.

Explain and describe the 4 types of body tissues.

Differentiate between the different body membranes and describe the integumentary system.

Examine both the axial and appendicular skeletal systems, and their organs.

Identify the anatomy of a muscle and evaluate it's physiology.

Demonstrate the organization of the nervous system Explain the structure and function of nervous tissue

Examine the functions of the brain and spinal cord.

Identify the endocrine organs and hormonal function.

Differentiate between the special senses, and examine the structure and function of the human eye.

Identify and examine the anatomy and physiology of the heart and blood vessels.

Discuss the composition and functions of the various blood cells in the human body.

Discuss the anatomy and physiology of the mammalian digestive system.

Explain the functional anatomy of the respiratory system.

Examine the functional physiology of the urinary system.

Differentiate between the male and female reproductive systems. Discuss the functional physiology of both reproductive systems.

Examine each organ system of the human body.

Demonstrate an understanding of the physiology of each organ system within the human body.
Student Learning Outcomes:
- Appropriately apply anatomical and directional terminology commonly used in the medical profession to body structures.
- Demonstrate a coherent understanding of the relationship between tissues, organs, and organ systems from a structural and functional perspective.
- Properly utilize and care for laboratory equipment following conventional procedures.

Units & Hours
Minimum Units: 4.0

Maximum Units: 4.0

Total Hours: 108.0

Introduction to Biotechnology
BIOL190:

3.0 Units

Introduction to the field of biotechnology including a history of its origin and development, a survey of modern industrial applications and accomplishments, ethical considerations, and career paths.

Requisites
Requisites:
Advisory
MATH080 - Intermediate Algebra

Outcomes
- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Advisory
MATH085 - Intermediate Algebra with Integrated Support

Outcomes
- Identify different types of equations and solve by applying appropriate algebraic methods.
- Solve a variety of real-world applications using different types of functions and/or equations.
- Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Advisory
Qualifying profile from the mathematics placement process

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0
General Education Plan:
Local - Plan A
  Area A: Natural Sciences

CSU GE - Plan B
  Area B2: Life Sciences

IGETC - Plan C
  Area 5B: Biological Science

Course Identifier (C-ID)
  Biotechnology

Learning Outcomes

Course Objectives:
Examine the ancient origins of biotechnology.
List and describe the practices of the field.
Discuss historical compared to recent technological advancements in the field.
Explain the structures of atoms, ions, isotopes
Distinguish between ionic bonds, covalent bonds, and hydrogen bonds
Understand the structural formula for basic biological molecules
Compare and contrast the morphological differences between prokaryotic and eukaryotic cells.
Explain the distribution and function of organelles found in eukaryotic cells.
Draw and label a DNA molecule including the backbone and nucleotides.
Explain DNA replication.
Explain how the genetic material of inheritance is encoded in DNA and expressed through the processes of transcription and translation.
Explain cell reproduction in prokaryotes and eukaryotes.
Compare and contrast mitosis and meiosis
Define and apply the basic vocabulary of genetics
Explain the molecular aspects of genes and mutation
Describe the patterns of inheritance
Demonstrate a knowledge of homeostasis.
Demonstrate a knowledge of immune and nervous system function.
Demonstrate a fundamental knowledge of the cellular processes leading to energy production.
Compare and contrast conventional production with newer biotechnological-assisted production of medicine, foods, and fuels.
Explain the environmental impacts of biotechnology.
Explain a diagnostic test made possible by biotechnology.
Analyze the ethical and legal implications surrounding biotechnology.

Student Learning Outcomes:
  Demonstrate knowledge of the fundamental biotechnology concepts that include basic molecular biology, industrial applications, a brief history of the field, and ethical considerations.
  Demonstrate a proficiency in the techniques used for scientific communication.

Units & Hours
Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Introduction to Biotechnology Lab
BIOL190L :

1.0 Units

This laboratory is a general examination of biology as it relates to the field of biotechnology. The laboratory addresses basic skills and techniques common to the biotechnology industry. Topics include the measurement of activity and quantity of proteins, growth and manipulation of bacteria, genetic engineering and antibody methods. The course is intended as a laboratory class for students majoring in applied biology and as a general education laboratory option for all students.

Requisites

Requisites:

Co-Requisite
BIOL190 - Introduction to Biotechnology

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B3: Laboratory Activity

IGETC - Plan C
Area 5C: Laboratory Activities

Course Identifier (C-ID)
Biotechnology

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Evaluate laboratory scenarios for safety compliance
Define MSDS, SDS, and Global Harmonizing Systems
Explain the regulations governing the biological laboratory
Utilize the scientific method in laboratory experiments
Apply given SOPs
Demonstrate the ability to properly document laboratory activities
Demonstrate the ability to properly maintain a laboratory notebook
Analyze and graph data from laboratory experiments
Convert measurements from one unit to another
Utilize correct units of measurement
Distinguish between accuracy and precision
Understand qualitative and quantitative data
Obtain volumes as directed using appropriate laboratory equipment
Obtain mass as directed using appropriate laboratory equipment
Measure and dispense volumes and mass as required by the procedures used in the laboratory
Measure transmittance and absorbance with the spectrophotometer
Analyze data and construct appropriate graphs
Demonstrate proper aseptic technique
Demonstrate proficiency using the brightfield microscope
Apply the appropriate culture methodologies
Make solutions as directed
Obtain the desired concentration from a stock solution by serial dilution
Measure and adjust solution pH while using the pH meter
Make and use buffer solutions
Perform a PCR reaction
Perform a restriction enzyme digest of DNA
Analyze DNA fragments in an agarose gel
Successfully clone a gene into a plasmid vector
Successfully introduce the plasmid into bacteria
Identify transformed bacteria containing the gene of interest
Apply the methods for fractioning cells
Purify protein by column chromatography and dialysis
Evaluate the purity of a protein obtained in the laboratory
Analyze proteins after polyacrylamide gel electrophoresis
List the steps of the typical ELISA diagnostic test
Explain the mechanism of color development in a immunochromatography diagnostic test

Student Learning Outcomes:
Clone a gene into a plasmid and have bacteria express the gene.
Communicate laboratory results clearly to others.

Units & Hours
Minimum Units:
1.0

Maximum Units
Total Hours
54.0

Biotech A: Basic Lab Skills
BIOL191:

4.0 Units
Introduction to the fundamental skills necessary for any biotechnology laboratory. Skills include maintenance of an industry standard notebook; preparation and sterilization of solutions, reagents, and media; utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, and laboratory safety regulations. Previous Title: Biotechnology A: Basic Lab Skills (2017)

Requisites
Requisites:
Advisory
MATH080 - Intermediate Algebra

Outcomes
Identify different types of equations and solve them by applying the appropriate algebraic methods. Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Advisory
MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods. Solve a variety of real-world applications using different types of functions and/or equations. Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Advisory
Qualifying profile from the mathematics placement process

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.0

General Education Plan:

Learning Outcomes

Course Objectives:
Demonstrate proper procedures when performing basic laboratory activities to ensure safety and compliance with standard operating procedures employed in industry.

Demonstrate a knowledge of hazardous materials encountered in the biotechnology laboratory setting.

Maintain proper records for hazardous material storage and disposal.
Create and maintain an industry-standard notebook.

Create accurate records and logs for laboratory equipment and materials.

Mix accurate solutions, buffers, and reagents.

Employ basic laboratory math calculations to arrive at the proper formulation for the solution, buffer, or reagent.

Demonstrate an understanding of the function of the materials used to create the solutions, buffers and reagents.

Properly employ the methods of aseptic technique.

Properly employ the methods needed to decontaminate materials used in the laboratory.

Demonstrate a knowledge of the functions of the various equipment, methods and materials used to decontaminate and sterilize laboratory materials.

Employ basic math calculations to solve common laboratory problems.

Create accurate charts and graphs of laboratory-generated data.

Interpret data displayed in chart or graph format.

Demonstrate a knowledge of the proper methods to label, organize and otherwise, maintain your inventory.

Demonstrate a knowledge of methods used to validate laboratory equipment and materials.

Perform inventory maintenance methodologies.

Use equipment properly.

Calibrate a common laboratory instrument such as a balance.

Validate laboratory instruments.

**Student Learning Outcomes:**

- Demonstrate a proficiency in the techniques used for scientific analysis, documentation and communication in a laboratory and industrial setting.
- Demonstrate the knowledge of fundamental biotechnology techniques and its basic molecular biology industrial applications and ethical considerations.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units:**

4.0

**Total Hours:**

108.0

**Biotech B: Proteins**

**BIOL192:**

4.0 Units

Fundamental skills in applied biotechnology necessary for any biotechnology laboratory but particularly focused on downstream manufacturing processes in biomanufacturing. Skills include maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents and media; utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, in vitro translation, large scale expression, purification, modification, western blot analysis, enzyme-linked immunosorbent assay (ELISA), antibody tagging, and fluorescent microscopy. Compliance with industry standards and regulations will be incorporated into course procedures.

**Requisites**

**Requisites:**
Prerequisite

BIOL191 - Biotech A: Basic Lab Skills

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:

4.0

General Education Plan:

Course Identifier (C-ID)
Biotechnology

Learning Outcomes

Course Objectives:
Describe the proper protocols to ensure laboratory safety and quality of product.
Describe the process of protein production starting with a DNA sequence.
Explain protein production resulting in quantities suitable for industrial applications.
Summarize the methods needed for obtaining purified protein product.
Describe filtration methodology for protein purification.
Describe modifications made to proteins after translation in order to achieve functionality.
Show methods for identifying and purifying proteins using linkages to other proteins, including antibodies.
Explain immunological methods for detecting proteins.
Describe the visualization of protein location using fluorescent microscopy.
Demonstrate a body of knowledge concerning, and employ the procedures necessary to ensure safety and quality product production in the laboratory.
Illustrate the process of protein production starting with a DNA sequence.
Illustrate the methods used in industry for protein production.
Demonstrate the methods needed for obtaining purified protein product and analyzing yield.

Student Learning Outcomes:
Write and follow standard operating procedures (SOPs).
Demonstrate how to obtain a purified sample of a genetically engineered protein

Units & Hours

Minimum Units:

4.0

Maximum Units:

4.0

Total Hours:

108.0

Biotech C: Nucleic Acids

BIOL193:
4.0 Units

This course introduces the fundamental skills in applied biotechnology focusing on the upstream research and development process. Skills include the maintenance of an industry standard notebook; preparation and sterilization of solutions, reagents, and media; utilization of good aseptic technique; proper use and maintenance of laboratory equipment; adherence to quality control protocols, lab safety regulations; DNA/RNA extraction and purification, bioinformatics, polymerase chain reaction, electrophoresis, DNA sequencing, recombinant DNA technology, DNA cloning, fluorescence in situ hybridization, Southern blot analysis, and in vitro transcription. Compliance with industry standards and regulations will be incorporated into course procedures. Previous Title: Biotechnology C: Nucleic Acids (2017)

Requisites
Requisites:
Prerequisite
BIOL191 - Biotech A: Basic Lab Skills

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.0

General Education Plan:

Learning Outcomes
Course Objectives:

Explain the process of obtaining pure nucleic acids using two different techniques.

Outline the steps in the process of DNA uptake and incorporation during transformation.

Relate the three temperature steps in the polymerase chain reaction with the molecular events that occur during amplification.

Design a PCR primer

Explain the process and the applications of DNA restriction digest analysis.

List the steps in the process of producing a clone.

Determine the practical applications of cloning.

Define bioinformatics.

Relate different aspects of genomic research with bioinformatics.

List the materials and steps taken to sequence a DNA fragment.

Summarize the method for obtaining the sequence of an entire genome.

Outline the applications of fluorescence in situ hybridization.

Describe the process of obtaining RNA in the laboratory.

Relate nucleic acid hybridization with industrial and research procedures.

Follow all safety and good laboratory practices

Properly document all laboratory activities and findings

Follow and create a Standard operating procedure

Extract nucleic acids from cells.

Purify extracted nucleic acids.
Transform E. coli and verify the process
Perform and interpret a PCR reaction
Assemble a PCR master mix.
Operate a thermal cycler to perform a polymerase chain reaction.
Verify PCR products by gel electrophoresis.
Perform and interpret a restriction digest
Selectively digest DNA using restriction endonucleases.
Interpret the results of the digests.
Clone and verify a gene fragment
Access, use, and interpret findings from appropriate bioinformatic database

**Student Learning Outcomes:**
- Maintain an industry standard notebook.
- Illustrate how to subclone a gene into a cloning vector.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units:**
4.0

**Total Hours:**
108.0

**Quality and Regulatory Compliance in Biosciences**

**BIOL194:**

2.0 Units

This course will cover quality assurance and regulatory compliance for the biosciences industries. Topics will span quality control and Federal Drug Administration (FDA) regulations for the biotechnology, biopharmaceutical, biomedical device and food industries. Theories and application of quality assurance and quality control will be presented and several different quality systems will be discussed such as GMP (good manufacturing practices), ISO9000 (International Standards Organization), Six Sigma and Lean.

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

2.0

**General Education Plan:**

**Course Identifier (C-ID):**

Biotechnology

**Learning Outcomes**
Course Objectives:
Express knowledge of the history of regulations concerning product quality.

Summarize the current state of the biotechnology industry.

Demonstrate a knowledge of managing variation during production.

Properly employ statistical process control charts

Explain the relationship between product quality and the regulatory environment.

Illustrate the role of the FDA in the biosciences industry.

Summarize the laws, regulations, and good practices affecting the bioscience industry.

Demonstrate how the ISO applies to the field of biotechnology.

Summarize the quality management system and its components as it applies to biotechnology.

Establish proper QMS documentation.

Student Learning Outcomes:
- Demonstrate knowledge of regulatory compliance in the bioscience industry.
- Demonstrate knowledge of quality assurance in the bioscience industry.

Units & Hours
Minimum Units: 2.0

Maximum Units: 2.0

Total Hours: 36.0

Food Safety
BIOL196:

2.0 Units

This course covers the regulatory agencies that oversee and the methodologies prescribed to ensure a safe food supply. The basics of quality assurance and quality improvement as applied to the food industry as well as The Food Safety Modernization Act, hazard analysis critical control points (HACCP), product traceability, food allergens, and food contaminants including microorganisms are presented. Illnesses known to result from ingestion of contaminated foods are discussed.

Requisites
Requisites:
Advisory

BIOL139 - Health Microbiology

Objectives
- Distinguish among the different types of microbial cells and note their key characteristics.
- Demonstrate a basic knowledge of some common diseases caused by protozoa. Demonstrate a basic knowledge of some common diseases caused by fungi. Demonstrate a basic knowledge of some common diseases caused by multicellular parasites. Choose appropriate methods for microbial control, and describe the factors that influence their growth rates.
- Demonstrate a basic knowledge of some common diseases caused by bacteria.

OR

Advisory
BIOL229 - General Microbiology

Objectives
- Distinguish between fungi, protozoa, and prokaryotes
- Identify common diseases
- Choose appropriate methods for microbial control, and describe the factors that influence their growth rates. Explain the concept of antibiotic resistance.
- Distinguish among the different types of microbial cells and note their key characteristics.
- Describe how microorganisms cause disease, and explain the basic principles of epidemiology. Summarize the basic principles of innate and adaptive immunity.
- Demonstrate a basic knowledge of some common diseases caused by bacteria.
- Demonstrate a basic knowledge of some common diseases caused by viruses.
- Provide an overview of some disease-causing protozoa.
- Demonstrate a basic knowledge of some common diseases caused by fungi. Explain important activities of microorganisms in the environment and their uses in industrial microbiology.

Outcomes
- Demonstrate knowledge of the diversity of microorganisms and their role in the biosphere.

AND

Advisory

BIOL194 - Quality and Regulatory Compliance in Biosciences

Objectives
- Express knowledge of the history of regulations concerning product quality.
- Demonstrate a knowledge of managing variation during production.
- Properly employ statistical process control charts
- Explain the relationship between product quality and the regulatory environment.
- Illustrate the role of the FDA in the biosciences industry.
- Summarize the laws, regulations, and good practices affecting the bioscience industry.
- Demonstrate how the ISO applies to the field of biotechnology.
- Summarize the quality management system and its components as it applies to biotechnology.
- Establish proper QMS documentation.

Outcomes
- Demonstrate knowledge of regulatory compliance in the bioscience industry.
- Demonstrate knowledge of quality assurance in the bioscience industry.

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes

Course Objectives:
- Summarize the major events and influences on the food safety regulations in the United States.
- Explain the Food Safety Modernization Act and its application to different types of food products.
- Establish the roles and jurisdictions of the regulatory groups governing food production.
- Demonstrate the reasons for and methods employed to ensure a product is traceable to the source(s).
- Apply the principles of HACCP to a given food product.
- Illustrate the various regulations concerning and macroanalytical procedures used to ensure food safety.
- Describe the regulations concerning and methods used to detect toxic elements within foods.
- Describe the regulations concerning and methods used to detect traces of pesticide within foods.
Explain the regulations concerning drug and chemical residues in foods.
Evaluate the methods employed to detect traces of drugs and chemicals in foods
Establish the common food allergens.
Show the physiologic effect of an allergen on an allergic individual.
Establish the approved methods for detection of microorganisms.
Summarize the types of microbial contamination.
Define and use the term quality correctly as it applies to the food industry.
Define quality plan and describe its development and purpose for the organization.
Distinguish between the different quality philosophies.
Distinguish the types of teams, when each is best suited and are effective in solving specific types of problems.
Define the types of continuous improvement tools and techniques.
Identify requirements for the Certified Quality Improvement Associate (CQIA) certification exam.

Student Learning Outcomes:
- Demonstrate fundamental knowledge of regulations that apply to food production.
- Demonstrate a knowledge of food contaminants and resulting illnesses associated with their ingestion.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
36.0

Science, Technology, Engineering and Mathematics (STEM)
Internship
BIOL197:
1.0 - 4.0 Units

This is an Internship of supervised paid or unpaid work experience in the student's major which could include new or expanded responsibilities. 75 hours paid work or 60 hours of unpaid work equals one unit. A maximum of 4 units is allowed per semester. Limitation of 16 units in occupational cooperative education courses. Open Entry/Open Exit

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.0

General Education Plan:
Learning Outcomes
Course Objectives:
Write measurable learning objectives related to personal and internship site needs including what is to be accomplished, how it will be accomplished, how it will be evaluated and completion date.

Identify an appropriate internship site.

Interview at an internship site and represent one's self professionally.

Dress appropriately for internship site and interview.

Maintain a record of internship experiences and time.

Review achievement of learning objectives and effectiveness of internship site and program with instructor and work site supervisor.

Participate in all assignments related to the career/job.

Evaluate their performance, and review the employer evaluation (must include both employer and student signature).

Discuss with the faculty the evaluation and experience who will then determine if credit should be granted and determine the final grade to be submitted to the Admissions office.

Student Learning Outcomes:
- Acquire the necessary knowledge to select and develop Science, Technology, Engineering & Mathematics (STEM) careers.
- Develop skills necessary to select and develop Science, Technology, Engineering & Mathematics (STEM) careers.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
225.0

Cell Culture Techniques
BIOL202:

2.0 Units

Students will learn eukaryotic cell culture techniques that include working under aseptic conditions, sterile techniques, media preparation, quantification and passage of cell lines. Laboratory experience prepares students for work in industry.

Requisites
Requisites:
Prerequisite

BIOL191 - Biotech A: Basic Lab Skills

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:
Learning Outcomes
Course Objectives:
Demonstrate proper documentation techniques

Describe the conditions under which cells can be cultured outside an organism

Analyze practical and theoretical principles of eukaryotic cell culture

Describe the condition under which cells can be cultures outside an organism

Differentiate between primary and continuous cell lines

Differentiate between the types of microscopes used to analyze cells

Explain how the different types of microscopes function and what purpose each type serves

Describe the processes necessary to prevent contamination

Explain the function of the various types of equipment used in cell culture

Analyze a culture for cell density.

Assess cell health using the prescribed methodology.

Calculate cell concentration

Calculate plating efficiency

Calculate cell density

Graph a growth curve

Describe the processes of cryopreservation and resuscitation.

Describe the proper culture methodologies.

Describe the processes transfection.

Describe a vector-specific induction of expression in cells.

Explain the roles of inducers in cell culture to initiate the process of differentiation of stem cells.

Explain the principles of the assay methodologies

Demonstrate the proper use and care of equipment used in the tissue culture facility.

Demonstrate proper aseptic technique.

Demonstrate the ability to maintain cell cultures by utilizing passaging, cryopreservation, and thawing methods.

Assess the state of health of cell lines.

Construct a survival curve.

Demonstrate proper documentation procedures.

Produce a properly documented laboratory notebook.

Produce an inventory assessment.

Aseptically prepare solutions for cell culture.

Demonstrate the ability to perform tissue culture assays.

Analyze and graph data obtained in tissue culture assays

LD50 curves

identify cellular structures

**Student Learning Outcomes:**

Demonstrate proficiency in aseptic technique.

Explain the basic theory of cell culture.

**Units & Hours**
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Cellular and Molecular Biology
BIOL211:
5.0 Units
An investigation into the molecular and cellular basis of life, including the evolution of cells, cell structure and function, energy and information flow, cellular reproduction, genetics, and the molecular basis of inheritance. Required of majors in Biology, Medicine, Forestry, and Agriculture.

Requisites
Requisites:
Prerequisite
CHEM200A - General Chemistry A

OR

Prerequisite
CHEM200AH - Honors General Chemistry A
AND
Prerequisite
MATH080 - Intermediate Algebra

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

qualifying profile from the mathematics placement process
AND
Advisory
Eligible for ENGL 100 or ENGL 101/101H

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

Course Identifier (C-ID)
Biology

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Describe the characteristics of living organisms.

Read and write scientific articles, and be able to cite scientific literature correctly.

Summarize the evolution of cells and multicellularity.

Define the scientific method.

Discuss the application of the scientific method within the discipline of biology.

Relate basic chemical principles, including atomic structure, atomic bonds, properties of water, carbon compounds, and functional groups as they apply to the molecular structure, biochemical properties, and functions of organic macromolecules and lipids.

Compare and contrast the molecular structures of carbohydrates, proteins, nucleic acids, and lipids.

Relate the molecular structure and chemical properties of these major classes of organic compounds to their functions within cellular membranes, organelles, and metabolic components.

Discuss the cell theory.

Examine the evolutionary relationship of cells classified into the three domains of life.

Compare and contrast the structural composition and organization of the different major cell types.

Relate membrane structure, macromolecules, and lipids to cellular components and functions.

Define energy and metabolism and their relationship to organic molecules and cells.

Discuss the role of enzymes in metabolic pathways.

Analyze the structure, function, and regulation of enzymes.

Examine the metabolic pathways of energy production in terms of cellular localization, important enzymes, substrates, products, and molecules.

Discuss biochemical and environmental factors that affect the functioning of these pathways.
Examine the metabolic pathways of energy production in terms of cellular localization, important enzymes, substrates, products, and molecules.

Discuss biochemical and environmental factors that affect the functioning of these pathways.

Describe the cell division process in prokaryotic cells and eukaryotic cells.

Explain the hierarchical classification of living organisms.

Employ the Mendelian principles to determine modes of inheritance and to calculate and evaluate genetic outcomes.

Relate the principles of segregation and independent assortment with gamete formation during meiosis and inheritance of genes on chromosomes.

Compare and contrast the molecular structure of DNA and RNA.

Relate the molecular structure and chemical properties of nucleic acids to their roles in the series of events that occur during DNA replication, protein synthesis, gene regulation, and metabolism.

Discuss the varieties of genetic mutations and their consequences.

Compare and contrast the biochemical mechanisms for regulating the expression of genes in prokaryotic and eukaryotic cells.

Examine the practical application of gene regulation in the field of biotechnology.

Describe the dynamics of cellular communications within the cell, between cells, and with the environment with relation to the molecules and metabolic pathways involved.

Discuss the importance of cell communication during the development of multicellular organisms.

Relate cell communication to stem cell research, regenerative medical research, and the potential development of genetic based treatments and cures.

Describe the basic methods and tools used for DNA sequencing, manipulation, and cloning.

Examine the practical applications of biotechnology in research and industry.

Discuss the growing databases of genomic data and the internet-based tools used for analysis of this data as well as current findings with respect to genome content and evolution.

Demonstrate the correct use of the scientific method in a laboratory setting.

Compare and contrast cellular processes and interactions between prokaryotes and eukaryotes (including metabolism, reproduction, communication).

Apply the principles of classical and molecular genetics to solve problems in genetics or biotechnology.

Explain how DNA replicates and transmits genetic information within organisms.

Apply the processes of scientific inquiry and experimental design to the study of biological concepts.

Compare and contrast the functions and sequences of events for mitosis and meiosis.

**Student Learning Outcomes:**

- Express a coherent understanding of fundamental biological concepts that include cell structure, energy, cell reproduction, and genetics.
- Employ the principles of the scientific method to investigate both laboratory and ordinary situations.
- Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units:**

5.0

**Total Hours**

5.0
Animal Diversity and Evolution
BIOL221:

5.0 Units

This course is intended for biology majors and surveys the diversity, structure, function, evolution and taxonomy of the major animal phyla. Topics also include behavior, development, comparative anatomy, and evolutionary relationships with an emphasis on the principles and mechanisms of microevolution and macroevolution accentuating molecular and morphological phylogeny. Field trips are required.

Requisites
Requisites:

Prerequisite
MATH080 - Intermediate Algebra

Outcomes
Identify different types of equations and solve them by applying the appropriate algebraic methods.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite
Equivalent course from the mathematics placement process

AND

Advisory
BIOL211 - Cellular and Molecular Biology

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
Course Identifier (C-ID)
Biology

UC Comparable Transfer Courses
UC Comparable Transfer Courses

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

Learning Outcomes

Course Objectives:
Recognize the major grades of organization within animal groups, the developmental sequence of body forms, and the distinct body plans of animals.

Investigate classification schemes, the species concept, and construct phylogenetic relationships in animals.

Analyze the characteristics, classification, and functions of various protozoan groups, their role in the ecosystem, and their evolution.

Investigate the major phyla and classes of invertebrates stressing physical and behaviors characteristics (form and function), anatomical advances, habitats, adaptations and role in the ecosystem and evolutionary history.

Compare and contrast the major classes and orders of the Phylum Chordata, with an emphasis on their characteristics, form and function, habitats, behavior, adaptations and role in the ecosystem and evolutionary history.

Illustrate the tenets of evolution including natural selection, mutation, speciation, genetic drift, population and quantitative genetics, evolutionary history of life, and evidence for evolution.

Identify, describe, and analyze the characteristic form, function, behavior, development and life cycles of the major animal taxa and relate them across the animal phyla and to phylogenetic history.

Describe mechanisms for evolutionary change, cite evidence for evolution, construct and interpret phylogenies.

Apply scientific methodology through experimentation and experiences.

Acquire, use, and cite scientific literature for scientific writing.

Student Learning Outcomes:

Demonstrate a coherent understanding of the relationship between animal diversity, form and function, behavior, and life style.

Express a fundamental comprehension of the process of evolution and its relationship to animal diversity.

Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
162.0

General Microbiology
BIOL229:

5.0 Units

Introduction to microorganisms, their classification, structure, biochemistry, growth, control and their interactions with other organisms and the environment. Designed for biology, preprofessional, and prenursing (BSN) majors. This course may also include an optional field trip.

Requisites

Requisites:
Prerequisite

BIOL109 - Fundamentals of Biology

AND

Prerequisite

BIOL109L - Fundamentals of Biology Laboratory

OR

Prerequisite

BIOL109H - Honors Fundamentals of Biology

AND

Prerequisite

BIOL109HL - Honors Fundamentals of Biology Laboratory

OR

Prerequisite

BIOL139 - Health Microbiology

OR

Prerequisite

BIOL149 - Human Anatomy and Physiology

OR

Prerequisite

BIOL211 - Cellular and Molecular Biology

OR

Prerequisite

BIOL239 - General Human Anatomy

OR

Prerequisite

BIOL249 - Human Physiology
Prerequisite

CHEM100 - Introductory Chemistry

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

Learning Outcomes

Course Objectives:
Summarize the early history of microbiology, noting especially the major contributors to the development of the germ theory of disease and the problems presented by the belief in the theory of spontaneous generation. Summarize the basic chemical concepts

Demonstrate the correct use of the microscope and other microbiology equipment. Demonstrate the proper employment of the aseptic technique. Correctly interpret and analyze experimental data.

Distinguish between fungi, protozoa, and prokaryotes Identify common diseases

Choose appropriate methods for microbial control, and describe the factors that influence their growth rates. Explain the concept of antibiotic resistance.

Describe the major metabolic pathways and the characteristics and role of enzymes. Describe and interpret the various methods for culturing and identifying microorganisms.

Identify and explain key concepts of microbial genetics.

Distinguish among the different types of viruses. Describe the types and mechanisms of action for antimicrobial agents

Distinguish among the different types of microbial cells and note their key characteristics.

Describe how microorganisms cause disease, and explain the basic principles of epidemiology. Summarize the basic principles of innate and adaptive immunity.

Summarize the basic principles of innate and adaptive immunity. Provide an overview of the applications of immunology for the purpose of diagnosing diseases.

Demonstrate a basic knowledge of some common diseases caused by bacteria.

Demonstrate a basic knowledge of some common diseases caused by viruses.

Provide an overview of some disease-causing protozoa.

Demonstrate a basic knowledge of some common diseases caused by fungi. Explain important activities of microorganisms in the environment and their uses in industrial microbiology.
Explain common methods and uses of biotechnology.

**Student Learning Outcomes:**
- Demonstrate knowledge of the diversity of microorganisms and their role in the biosphere.
- Employ the principles of the scientific method to both laboratory and conventional investigations.
- Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

**Units & Hours**

**Minimum Units:**
- 5.0

**Maximum Units:**
- 5.0

**Total Hours**
- 162.0

**Plant Diversity and Ecology**

**BIOL231:**

5.0 Units

This course is intended for biology majors and surveys the diversity, structure, function and taxonomy of the kingdoms Protista, Fungi, and Plantae. Topics include development, morphology, physiology, taxonomy and systematics, and the principles of population, community, and ecosystem ecology. Field trips required.

**Requisites**

**Requisites:**

**Prerequisite**

**MATH080 - Intermediate Algebra**

**Outcomes**
- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Graph equations, functions, and conics by applying different graphing techniques and transformations.

**OR**

**Prerequisite**

**MATH085 - Intermediate Algebra with Integrated Support**

**Outcomes**
- Identify different types of equations and solve by applying appropriate algebraic methods.
- Solve a variety of real-world applications using different types of functions and/or equations.
- Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

**OR**

**Prerequisite**

Equivalent course from qualifying profile from the math placement process

**AND**

**Advisory**

**BIOL211 - Cellular and Molecular Biology**
Transferability & General Education Options

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
5.0

**General Education Plan:**

**CSU GE - Plan B**
- Area B2: Life Sciences
- Area B3: Laboratory Activity

**IGETC - Plan C**
- Area 5B: Biological Science
- Area 5C: Laboratory Activities

**Course Identifier (C-ID)**
- Biology

**UC Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**
- Review the processes of mitosis and meiosis and apply them to sexual life cycles.
- Demonstrate an understanding of ecological principles.
- Examine various ways organisms are grouped, later applying that knowledge to the phyla presented in this class.
- Compare and contrast the characteristics, classification, and functions of various prokaryotic groups and their roles in ecosystems.
- Discover viral structure and compare reproductive methods.
- Examine and compare the characteristics, classification, and functions of various algal groups and their roles in ecosystems.
- Demonstrate a basic understanding of sexual life cycles by applying that knowledge to the organisms that we will discuss.
- Examine the form and function of the plant organs including anatomical advances and adaptations to habitats.
- Recognize and compare the characteristics, classification, and functions of various fungi phyla and their roles in ecosystems.
- Discover ecological concepts including biotic zones, biomes, ecological components, population dynamics, limiting factors, biotic diversity, biogeochemical cycles, and energy acquisition.
- Analyze form and function of organisms in the various phyla
- Compare relationships of organisms with others and the environment.
- Appraise and compare the major phyla and classes of plants, including characteristics, life cycles, form and function, and adaptations to their habitats.

**Student Learning Outcomes:**
- Demonstrate a coherent understanding of the relationship between plant diversity, form and function, habitat, and life style.
- Express a fundamental comprehension of ecological principles by citing examples.
- Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

**Units & Hours**

**Minimum Units:**
5.0
Maximum Units
5.0

Total Hours
162.0

General Human Anatomy
BIOL239:

4.0 Units
Structure of the human body. Systems, organs, and tissues are studied from human skeletons, models, charts, slides and computer programs. Laboratory includes the dissection of a cat and periodic demonstrations of a prospected cadaver as available.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Biology

Learning Outcomes
Course Objectives:
Explain the organization of the human body

Identify and explore the structure and function of cells
Differentiate between the four types of primary tissues and their subtype
Identify the structures and discuss the functions of the skin, hair, nails
Illustrate and explain the function of the features of the skeletal system, and joint articulations
Differentiate the histology of the three types of muscle tissue
Describe the structures and explain the function of the sliding filament model
Identify skeletal muscles by region
Differentiate the origins, insertions, and actions of regional skeletal muscles
Discuss the functions of neurons and neuroglial cells
Identify the features and explain the functions of the brain and spinal cord
Demonstrate an understanding of the functions of each cranial nerves
Differentiate between the sympathetic and parasympathetic nervous system
Differentiate the locations and features of the endocrine glands and tissues
Identify and explain the main hormones and their functions in maintaining homeostasis
Differentiate the systemic and pulmonary circuits
Identify the structural and functional anatomy of the heart
Explain the gross and histological structures of the respiratory system and it's relationship to the cardiovascular system
Describe the locations and functions of the organs of the digestive tract
Identify the organs of the urinary system
Describe the nephron and it's functions
Examine how the kidneys control blood pressure and red blood cell production
Differentiate between the organs of the male and female reproductive systems
Illustrate the embryological relationship of the male and female reproductive systems
Differentiate between spermatogenesis and oogenesis
Explain hormonal control of oogenesis and ovulation
Describe the functional and structural relationship of the mother and fetus
Identify and locate the features of histological and gross anatomy
Explain the locations and features in relationship to each other
Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems

**Student Learning Outcomes:**
- Appropriately apply anatomical and directional terminology commonly used in the medical profession.
- Identify anatomical features of the body on a microscopic and/or gross level and indicate the relative location of each.
- Properly utilize and care for laboratory equipment following conventional procedures.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
108.0

**Human Physiology**

**BIOL249:**

4.0 Units
Microscopic, macroscopic and dynamic view of the human physiological processes. The lecture portion includes a thorough consideration of both “cell and systems” physiology. Laboratory work includes the use of techniques used in basic research, an introduction to the use of standard medical equipment, and the performance of medical lab tests. Non-invasive experiments are performed on students enrolled in the class.

Requisites
Prerequisite

**BIOL239 - General Human Anatomy**

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
IGETC - Plan C
  Area 5B: Biological Science
  Area 5C: Laboratory Activities

Course Identifier (C-ID)
Biology

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science.
Examine the structure of atoms, inorganic molecules, organic molecules, and chemical bonds
Demonstrate an understanding of how homeostasis is maintained in the body
Illustrate the function and role bone tissue plays in the maintenance of the body
Illustrate how the various organs systems are controlled by numerous mechanisms of the body
Examine meiosis, mitosis, and embryology
Identify the structure and function of cellular organelles
Explain replication, transcription, and translation
Illustrate the various functions of the integumentary system and it's role in the thermoregulation
Examine skeletal muscle histology
Illustrate the sliding filament model
Demonstrate an understanding of skeletal muscle energetics
Differentiate the structure and function of types neurons and types neuroglial cells
Identify the components of the reflex arc
Differentiate the components of the action potential and the electrochemical events that distinguish them
Examine the structure and function of the autonomic divisions and visceral reflexes
Illustrate the pharmacology of cholinergic and adrenergic agonists and antagonists
Differentiate endocrine and exocrine glands
Identify the features, hormones, and functions of the primary and secondary endocrine glands
Examine the mechanism of action of hormones and their regulation
Illustrate various endocrine pathologies
Identify the components of blood, hemopoiesis, blood typing, and blood clotting
Discuss the cardiac cycle and heart sounds
Identify cardiac pathologies
Identify the location and function of the structures of the lymphatic and immune system
Examine the physics and regulation of pulmonary ventilation
Explain the Bohr Effect and its role in gas exchange at the systemic and pulmonary capillaries
Discuss the transport dynamics of gases
Examine the enzymatic function of the digestive tract and accessory organs
Discuss the hormonal role of the digestive organs
Differentiate between the absorption of proteins, carbohydrates, and lipids
Identify and differentiate histological and functional features of the nephron
Examine the mechanisms of reabsorption and secretion
Explain the counter-current multiplier system
Illustrate the hormonal and neural regulation of urine formation
Identify the role of the kidneys in acid-base balance
Examine hormonal regulation of gametes, pregnancy, labor, and lactation
Demonstrate knowledge of metabolic and physiological disorders of the major organ systems throughout the entire course
Discuss the interdependent roles of the organ systems and their roles in homeostasis
Examine the physiological processes discussed in lecture
Apply the scientific method and philosophy of science by designing components of and carrying out physiological experiments

Student Learning Outcomes:
Illustrate a fundamental understanding of basic cellular chemistry and its role in homeostasis.
Demonstrate a coherent understanding of the relationship between tissues, organs, and organ systems from a structural and functional perspective.
Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

Environmental Biology
BIOL259:
4.0 Units
Environmental Biology includes the study of ecosystems, population dynamics, classification, diversity of plant and animal species, effects of pollutants at both the cellular and organismal levels, and principles of ecology. Field trips required.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0

**General Education Plan:**

- **Local - Plan A**
  - Area A: Natural Sciences

- **CSU GE - Plan B**
  - Area B2: Life Sciences
  - Area B3: Laboratory Activity

- **IGETC - Plan C**
  - Area 5B: Biological Science
  - Area 5C: Laboratory Activities

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Examine evolution and natural selection

Identify and differentiate local flora and fauna as well as describe local habitats

Evaluate social relations and life histories

Examine and evaluate growth and survivorship curves

Identify and explain population properties and population regulation

Examine and explain social relations such as predation, interspecific and intraspecific competition, and symbiosis

Identify community structure, community dynamics, and landscape ecology

Recognize and interpret the taxonomic hierarchy

Observe the diversity of organisms and compare their characteristics

Discover the effects of introduced species

Identify plant and animal adaptations to the environment

Investigate and compare soil types and characteristics, agriculture and regenerative farming

Examine water resources in California

Evaluate water quality

Compare water pollutants, both chemical and biological, and predict the impacts of water pollutants on organisms

Investigate the cellular, organismal, and physical impacts of air pollutants

Identify the characters of the atmosphere, climate and weather
Discover and discuss government land policies, regulation of wilderness areas, and the environmental impacts on flora and fauna

Conduct experiments, analyze data, and draw conclusions using the scientific method

Discover and interpret natural laws and energy, biogeochemical cycling, terrestrial and aquatic biomes, and biodiversity

**Student Learning Outcomes:**
- Demonstrate a cohesive understanding of the relationship between ecosystems, populations, and pollutants.
- Express a fundamental comprehension of ecological principles.
- Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units:**
4.0

**Total Hours**
108.0

**Biochemistry and Molecular Biology**

**BIOL290:**

5.0 Units

Introduction to biochemistry and molecular biology. Included are discussions of biological macromolecules, energy production, metabolic pathways and regulation, genetic code, genomics, DNA replication, transcription and RNA processing, translation, and gene regulation. Laboratory activities will include use of visible and UV spectroscopy, chromatography, cell fractionation, ultracentrifugation, protein purification, electrophoresis, and recombinant DNA methods. This course is designed for biology majors, health pre-professionals, and biotechnology majors.

**Requisites**

**Requisites:**

**Prerequisite**

**BIOL211 - Cellular and Molecular Biology**

**Objectives**

- Discuss the application of the scientific method within the discipline of biology.
- Relate basic chemical principles, including atomic structure, atomic bonds, properties of water, carbon compounds, and functional groups as they apply to the molecular structure, biochemical properties, and functions of organic macromolecules and lipids.
- Compare and contrast the molecular structures of carbohydrates, proteins, nucleic acids, and lipids.
- Relate the molecular structure and chemical properties of these major classes of organic compounds to their functions within cellular membranes, organelles, and metabolic components.
- Relate membrane structure, macromolecules, and lipids to cellular components and functions.
- Discuss the role of enzymes in metabolic pathways.
- Analyze the structure, function, and regulation of enzymes.
- Examine the metabolic pathways of energy production in terms of cellular localization, important enzymes, substrates, products, and molecules.
- Discuss biochemical and environmental factors that affect the functioning of these pathways.
- Examine the metabolic pathways of energy production in terms of cellular localization, important enzymes, substrates, products, and molecules.
- Discuss biochemical and environmental factors that affect the functioning of these pathways.
- Compare and contrast the molecular structure of DNA and RNA.
- Apply the processes of scientific inquiry and experimental design to the study of biological concepts.

**Outcomes**

- Express a coherent understanding of fundamental biological concepts that include cell structure, energy, cell reproduction, and genetics.
Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

AND

Prerequisite

CHEM100 - Introductory Chemistry

Objectives

Solve conversion problems using dimensional analysis and significant figures.
Distinguish between chemical and physical properties and between elements and compounds.
Write formulas of compounds, write balanced chemical equations and predict products from given reactants based on reaction type.
Calculate amounts of reactants and products based on balanced chemical equations.
Write electron configurations of different atoms and predict atomic properties based on the position of the element in the periodic table.
Recognize the type of bonding in different compounds and types of bonding.
Draw Lewis structures.
Predict molecular shapes and geometry.
Solve gas problems using gas laws and stoichiometry.
Explain properties of solids and liquids.
Identify intermolecular forces and its effect on properties.
Calculate concentration of solution using different methods.
Apply stoichiometry to solution problems.
Gain some knowledge in following laboratory techniques. Concept of experiment design is stressed. Students should be able to:
Follow the experimental procedure
Collect valid scientific data
Draw a conclusion As much as possible, the laboratory exercises will assist the classroom learning.

Outcomes

Describe chemical events through utilization of equations and solve problems using chemical concepts
Perform experiments with given directions and collect valid scientific data

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

CSU GE - Plan B
Area B2: Life Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5B: Biological Science
Area 5C: Laboratory Activities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Identify the types of biological molecules
Explain the characteristics of each type of biological molecule
Conduct molecular biology and biochemistry laboratory investigations according to given procedures.Collect reliable data.Analyze resulting experimental data using appropriate methods, including statistical methodologies.Formulate valid conclusions based o
Describe the key characteristics of enzymes at the molecular level

Describe the various mechanisms that affect enzyme function

Explain the relationship of thermodynamics to metabolic activity

Explain the chemical structure of carbohydrates and lipids

Explain the enzymatic pathways of glycolysis, fermentation and pentose phosphate.

Explain the enzymatic pathway of the transition reaction and the citric acid cycle

Explain ATP production with the electron transport system

Explain the enzymatic process of gluconeogenesis

Explain glycogen metabolism

Explain the enzymatic process of fatty acid metabolism

Describe the levels of protein structure

Explain the relationship of protein structure and protein function

Explain NADPH and ATP production using the photosystems

Explain the enzymatic Calvin-Benson cycle and G3P production

Explain the integrated relationship of the various catabolic pathways in fuel utilization

Explain the structure of nucleic acids

Explain the chemical properties of nucleic acids

Describe the mechanism for DNA replication

Explain the mechanisms of DNA repair in prokaryotes and eukaryotes

Explain gene structure in prokaryotes and eukaryotes

Explain gene alleles

Explain the concept of Hardy-Weinberg equilibrium

Explain the methodologies of genetic engineering and genomics

Explain the applications of the methods of genetic engineering and genomics

Describe the mechanisms used for gene regulation in prokaryotes

Describe the mechanisms used for gene regulation in eukaryotes

Describe the mechanisms used for protein synthesis and targeting in prokaryotic and eukaryotic systems

Describe the methods commonly employed in proteomics

Describe the structure and components of membranes

Describe the mechanisms of transport across membranes

Describe the functions of integral membrane proteins

Describe the mechanisms of cellular signalling

Provide specific examples of signalling pathways

Explain the urea cycle

Explain amino acid metabolism

**Student Learning Outcomes:**

Express a coherent understanding of fundamental biochemical concepts.

Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

162.0

**Principles of Project Management**

**BUS090:**

3.0 Units
Utilizing project planning tools and techniques, learn how to define, plan, execute and deliver projects of all types and sizes. Emphasizes practical application using case studies to organize, schedule and manage projects effectively. Industry guest speakers included.

Requisites

Requisites:

Anti-Requisite

PBLC080 - Principles of Project Management

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Describe purpose and objectives of project management
Identify and define project management terminology
Identify desired outcome and determine scope of a project
Describe the importance of project schedules
Define activities required to create schedules
Demonstrate ability to estimate activity duration and activity sequencing
Define basic principles of cost management and resource planning
Effectively use software that assists with time management
Define basic principles of project quality management
Describe tools and techniques for quality control
Define principles of project risk management
Describe qualitative and quantitative risk management
Describe performance reporting
Demonstrate effective use of project risk management software
Describe and explain components of a project closure report
Discuss and illustrate processes for post implementation project review
Identify skills and qualifications necessary to be a successful project manager
Describe the roles and responsibilities of a project manager
Identify and discuss methods for motivating project teams members
Illustrate methods for effective performance evaluation of project team members
Compare and contrast management and leadership
Describe effective techniques for delegation
Describe reasons and methods effective project communications
Compare and contrast effective and ineffective project communications
Explain forms of information distribution
Describe the challenges and benefits of creating a diverse work team
Illustrate guidelines for creating a constructive diversity climate

Student Learning Outcomes:

Create an effective plan and schedule for a business project
Describe techniques used to monitor, control, and measure performance of a project in progress.
Analyze the relationship between timing, costs, and resources in a business project.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Fundamentals of Business
BUS100:

3.0 Units

An introduction to the basic fundamentals of business. A survey of marketing management, production, accounting, finance, and economics and how they interrelate in the business environment.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

Business

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Identify the various ways the U.S. government affects, restricts, and protects business.

Compare and contrast the primary economic systems.

Identify the components of private enterprise.

Define business ethics and explain the role of social responsibility in an organization.

Identify how business operates in an international/global environment including legal, social, cultural, and interdependence and integrated financial markets.

Compare and contrast the advantages/disadvantages in each form of business ownership.

Identify and analyze primary reasons for small business success and failure.

Define and describe the key management functions of planning, organizing, leading, and controlling.

Identify and analyze current production and operations processes for services and manufacturing.

Describe and illustrate supply chain and quality management.

Explain methods for selecting, training, motivating and compensating employees.

Describe the role of unions and diversity in the workplace.

Identify the marketing mix and key tools, terms and strategies related to each element.

Explain the different marketing strategies, including the impacts of digital marketing and social media.

Evaluate the basic components of financial statements and ratio analysis.

Explain the importance of finance to the operations of business; the various types of financing; and the process of internal and external financing and controls.
Identify securities markets including investment options, mechanisms of investing, and how to conduct basic analysis of business financial information.

**Student Learning Outcomes:**
- Recognize and identify basic forms of business ownership.
- Formulate a relationship between business and its environment, including its legal and ethical responsibilities.
- Learn to think critically about business topics, understanding the relationship between marketing, management, and finance.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Legal Environment of Business**

**BUS105:**

3.0 Units

Fundamental legal principles pertaining to business transactions. Introduction to the law as an instrument of social and political control in society. Topics include sources of law and ethics, contracts, torts, agency, judicial and administrative processes, employment law, forms of business organizations, and domestic and international governmental regulations.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Course Identifier (C-ID)**
Business

**Learning Outcomes**

**Course Objectives:**
- Identify the basic classifications of the Common Law.
- Outline and define the jurisdiction of the Courts of California.
- Identify and explain certain aspects of the U.S. Constitution and understand how they apply to business issues.

Define and explain principals of Tort Law, Tort Liability, Strict Liability, and Product Liability.

Recognize the elements necessary to create a valid contract.

Define and explain the types of contracts used in most commercial transactions.

Distinguish between torts and crimes.
Describe the purposes of criminal and tort law.

Recognize and explain the concepts of Agency and Employment law.

Analyze various situations and apply those concepts to different factual situations.

Analyze laws governing employment discrimination, worker safety, and workers’ compensation.

Recognize, define, and assess the three primary forms of business ownership.

Describe the basic functions of the Securities Exchange Commission and the laws governing securities regulation.

Define, explain, and analyze the importance of corporate social responsibility.

Define and illustrate the provisions of the Sherman Antitrust Act (Sections 1 and 2) and of the Clayton Act.

Illustrate, by examples, principles regarding competition and antitrust law.

Identify local, state, and federal laws governing environmental protection.

Assess and debate the need for environmental and consumer protection laws.

Describe international law, including sources, legal principles and doctrines.

**Student Learning Outcomes:**

- Demonstrate a general understanding of the business law terminology and vocabulary that are used in the legal system and how they apply to the various principles.
- Demonstrate a working understanding of the elements of a contract and the types of transactions that take place in the business environment.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Principles of Management**

**BUS120:**

3.0 Units

Principles, methods, and procedures essential to the successful management of human and financial resources. Planning, decision making, staffing, directing, motivating, leading, communicating, controlling, and the application of managerial skills.

**Requisites**

**Requisites:**

**Anti-Requisite**

[MGMT120 - Principles of Management](#)

**OR**

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only
Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Describe the benefits and responsibilities of working in management.
Identify and discuss different management theories.
Explain and examine business ethics and social responsibility.
Describe the planning process, benefits of planning, setting goals, management by objective.
Examine the strategic planning process, including mission statements, grand strategies, SWOT analysis, forecasting, Porter’s competitive forces and strategies.
Contrast rational and non-rational decision making.
Interpret decision making styles and biases.
Recognize organizational culture and its impact on performance.
Identify different organizational structures and illustrate optimal industries for each structure.
Explain human resource management, including legal requirements, recruitment, selection, training, orientation, assessment and compensation.
Discuss strategies for change and innovation within organizations.
Describe personality dimensions and traits that affect and influence employee motivation.
Compare extrinsic and intrinsic rewards.
Examine equity theory, expectancy theory, and reinforcement.
Describe the advantages and disadvantages of teamwork.
Identify characteristics of self-managed teams.
Discuss methods for managing conflict.
Compare and contrast leadership and management.
Describe the communication process, including selection of effective communication channels.
Identify and describe communication barriers.
Describe techniques for effective reading, writing, speaking, and listening.
Explain the importance of measuring productivity and monitoring performance.
Identify and describe the four components of the balanced scorecard.
Discuss the importance of using measurable criteria for determining organizational success.
Describe the techniques used to ensure Total Quality Management (TQM).

Student Learning Outcomes:
- Explain the four management functions: Planning, Organizing, Leadership and Controlling.
- Recognize and identify management topics they need to know in order to succeed: customer focus, globalization, diversity, ethics, information technology, entrepreneurship, work teams, the service economy and small business.

Units & Hours
Minimum Units:
3.0

Maximum Units

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba9eb18
3.0

Total Hours

54.0

Human Relations and Organizational Behavior

BUS121:

3.0 Units

The role of the manager and management’s relationship to employees. Includes the application of motivational theories, communications, leadership, and organizational structure.

Requisites

Requisites:

Anti-Requisite

MGMT121 - Human Relations and Organizational Behavior

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Examine the role of a modern manager

Identify and describe behavioral and scientific approaches to management

Recognize and describe modern organizational theories

Summarize how managers approach setting objectives, decision making, communication, and controlling

Discuss the impact of technology on modern organizations

Recognize and illustrate motivation theories

Compare and contrast behavioral theories

Identify components of active listening

Illustrate the importance of active listening for managers

Recognize barriers to communications and describe methods for overcoming these barriers

Compare and contrast different leadership styles

Identify qualities of exceptional leaders

Describe myths about workplace leadership

Describe methods for identifying and addressing employee needs

Explain different methods for managing conflict

Discuss benefits and challenges of managing a diverse workforce

Student Learning Outcomes:

Describe how to survive, prosper, and be effective in the role of a manager within the organization.
Recognize organization principles and theory and explain how to apply them in developing an organizational structure.

Explain how organizational structure and dynamics affect the manager’s role.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Introduction to E-Commerce**

**BUS127:**

3.0 Units

Electronic commerce from a managerial perspective focusing on the retailing, business-to-business and service industries. Topics include: E-Commerce infrastructure, intranets and extranets, electronic payment systems, marketing research, advertising, E-Commerce strategies, and privacy issues.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Private Institution Comparable Transfer Courses**

Private Institution Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**

Understand scope, benefits, limitations, driving forces behind E-Commerce (Electronic Commerce). Analyze impact of E-Commerce on the business world.

Describe electronic retailing business models. Examine consumer's perspectives of electronic retailing. Analyze impact on the traditional retailing system.

Identify and explain Web advertising methods and strategies.

Discuss and examine online service industries.


Recognize architecture of the Internet, Intranet, and Extranet. Define and explain characteristics and applications of Intranets and Extranets.

Explain how electronic payment systems work. Identify and distinguish between different types of electronic payment methods.

Summarize public policy and privacy issues surrounding electronic commerce.

Recognize and evaluate E-Commerce infrastructure.
Describe economic and global issues surrounding E-Commerce.

**Student Learning Outcomes:**

Recognize and identify the challenges and potentials of running an E-Commerce business.

Analyze the differences between online and traditional business and adapt traditional business considerations to an online business environment.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Personal Finance**

**BUS130:**

3.0 Units

This course is an integrative approach to personal finance focusing on practical financial decision making as well as the social, psychological, and physiological contexts in which those decisions are made. Students will examine their relationships with money, set personal goals, and develop a plan to meet those goals. Topics include consumerism, debt, healthcare, investing, retirement, long-term care, disability, death, and taxes.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

Santa Ana College - Shared Course

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Illustrate the role of money in society, including its social, religious, and cultural implications.

Establish and evaluate personal goals and demonstrate the effect of daily financial decisions on the accomplishment of personal goals and their physical environment in various stages of the life cycle.

Recognize consumer behavior related to spending. Design and implement a personal spending plan (budget).

Identify, define, and compare the various forms of consumer debt (credit cards, home, car, student loans).

Identify the major private and government sponsored healthcare programs, and explain their purpose and function.

Evaluate the appropriateness of various investment products and investment strategies in achieving personal goals at different life stages.

Assess the impact of social security, tax advantaged accounts, and lifestyle decisions on individuals circumstances at retirement.
Describe the emotional, psychological, physiological, and cultural issues related to death and dying and financial decision making.

Recognize, explain, and differentiate strategies for minimizing income, estate, and gift taxes.

Recognize and discuss risk management alternatives, including life, casualty, and health insurance, Social Security, Medicare, annuities, and retirement plans.

**Student Learning Outcomes:**
- Recognize and identify the various aspects of financial management.
- Recognize and identify the relationship between long-term financial stability and financial decision making.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Introduction to Information Systems and Applications**

**BUS150:**

3.0 Units

Introduction to computer concepts and management information systems. Application software used to solve business problems.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Course Identifier (C-ID)**
Business

**Learning Outcomes**

**Course Objectives:**
Discuss the five components for an Information System

Define, compare and contrast:
- IS (Information System)
- IT (Information Technology)
- MIS (Managements System)
- Define Business Process
- Define Information
- Describe Information Systems support business processes
Define Organizational Strategy

Describe how businesses use Information Systems to gain a competitive advantage

Describe input, processing, output, and storage hardware

Operate application and system software, and recognize client servers

Illustrate how relational databases work

Describe Metadata, Data Base Management System (DBMS), Forms, Reports, and Queries

Describe Networks, Local Area Networks (LAN), and Wide Area Networks (WAN)

Identify components of a LAN

Recognize Internet Service Providers (ISP), Digital Subscriber Lines (DSL), and cable

Define purpose of a Firewall and Virtual Private Networks (VPN)

Identify the stages of the BPM Cycle

Discuss functional and cross-functional processes

Describe interorganizational processes and Business Process Model and Notation (BPMN) Symbols

Illustrate the advantages of the Service-Oriented Architecture (SOA)

Describe how companies use E-Commerce

Discuss economic factors that disfavor E-Commerce

Identify technology needed for E-Commerce

List benefits of Web 2.0

Define social networking and User-Generated Content (UGC)

Explain memory sizes

Describe business intelligence systems

Compare and contrast data-mining systems, data marts, and data warehouses

Identify and explain systems development life cycle

Describe system testing

Summarize a system conversion

Describe IT Department responsibilities and organization

Summarize IT Planning and Budgeting

Identify sources of security threats

Describe elements of a security program and technical safeguards

Identify malware protection

Discuss disaster preparedness

**Student Learning Outcomes:**

Create and analyze reports to support business decision making.

Explain basic business systems and apply them to business situations.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**
Total Hours
54.0

Principles of Small Business Management
BUS170:

3.0 Units
Practical business skills needed to start and operate a small business. Includes information on risk management, site location, legal aspects, financing, budgeting, merchandising, promotion, and management techniques.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Determine objectives for a business.

Explain, in general, the legal environment.

Explain the reasons for success and failure in a business.

Use the factors pertaining to location.

Organize a business.

Describe resources available through the Small Business Administration.

Identify other sources of information and support for small businesses.

Compute initial and ongoing financial needs for a small business.

Describe financial reporting for small businesses.

Explain budgeting, expense control, and forecasting for small businesses.

Determine the following for a small business: methods of distribution, markets, pricing, customer relations, and methods of promotion.

Discuss human relations skills needed in a small business. Identify hiring criteria for a small business.

Student Learning Outcomes:
Recognize and identify problems faced in a small business environment.

Identify and apply business and marketing strategies to increase success for a small business.

Analyze the differences between large and small business, and adapt traditional "big business" considerations to a small business environment.

Analyze startup procedures for small business and implement them.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Business Plan for Small Business
BUS171:
3.0 Units

Business planning for the opening or continued successful operation of a small business through the preparation of a written business plan.

Requisites
Requisites:
Advisory

BUS170 - Principles of Small Business Management

Concurrent enrollment

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Establish objectives for a small business

Plan, make decisions, and learn how to solve problems faced by a small business
Identify sources of information in the community to gather the data for the business plan
Create a small business plan
Use demographic information to choose a location site
Evaluate potential profitability of a chosen site
Identify target groups and competitors, then use that information to understand local market
Establish the budget, cash flow statement, balance sheet, and projected income statement
Use ratio analysis to assess profitability
Recognize which governmental agencies must be contacted for licenses, permits, and inspections
Identify reports, taxes, and fee payment required by government entities.
Create policies, procedures, and rules that give the business structure and guide behavior
Locate suppliers for machinery, money, materials, and human resources
Discuss negotiation techniques and describe professional behavior appropriate for a small business owner.
Student Learning Outcomes:

Recognize and identify elements of a small business plan.
Identify and apply business and marketing strategies to increase success for a small business, and implement them in a comprehensive small business plan.
Analyze the needs of a specific small business including basic considerations such as site location, customer identification, legal, organizational and financial requirements.
Analyze startup procedures for small business and implement them in a comprehensive business plan.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Online Entrepreneurship
BUS175:

3.0 Units
This class is designed to help potential online entrepreneurs develop startup procedures, explore ideas and implement plans. Students will learn how to build and implement a business strategy for the Internet, including business specific considerations, online marketing and Ecommerce strategies.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Define a business idea and develop a business plan
Identify sources of expert advice for business plans, finances, operations, merchant accounts, and product procurement
Analyze the market for products
Identify customers
Understand legal issues affecting online businesses
Compare and contrast traditional, online, and combination business models
Describe Ebay and other online auction sites
Examine virtual malls and marketplaces
Distinguish between drop-shipping and other marketing intermediaries
Describe how to select a business name and a domain name
Describe and discuss business licenses, tax requirements, copyrights, and trademarks

Identify Ecommerce website components, including shopping carts

Compare and contrast Turnkey Sites vs Custom Solutions

Analyze hardware and software needs

Distinguish hosting services

Address website design issues, including browser compatibility

Describe niche marketing and how online retail differs from in-store retail

Illustrate features or services businesses can offer online

Design online content from offline procedures and forms

Identify revenue generation models for online businesses

Describe privacy, security, order fulfillment and fraud

Explain website maintenance

Define site analytics

Demonstrate website marketing and promotion techniques

Discuss search engine optimization

Appraise new product offerings

Create powerful customer emails, warranties, and guarantees

Student Learning Outcomes:

- Recognize and identify problems faced in an online business environment. They will be able to determine the best type of online business for themselves and identify what is needed to start and operate that business
- Apply business and Ecommerce strategies to increase success for an online business
- Analyze the differences between online and traditional business and adapt traditional business considerations and marketing strategies to an online business environment.
- Develop startup procedures for an online business and learn how to implement them

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Business Writing

BUS222:
3.0 Units

Overview of oral and written communication skills used in business; emphasizes guidelines for improving writing and speaking skills, common solutions to common communication problems, ethical issues facing business communicators today, instructions on how to identify areas of legal vulnerability, and tested techniques for communicating successfully in today's high-tech, international business environment. Designed for students transferring to a university.

Requisites

Requisites:
Prerequisite
ENGL100 - Freshman Composition with Integrated Support

OR

Prerequisite
ENGL101 - Freshman Composition

OR

Prerequisite
ENGL101H - Honors Freshman Composition

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Course Identifier (C-ID)
Business

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Explain how communication skills fuel career success and understand why writing skills are vital in a digital workplace embracing social change.

Explain the importance of effective media choices, and understand how to overcome typical barriers to organizational communication.

Analyze the purpose of a message, anticipate its audience, and select the best communication channel.

Improve writing techniques by emphasizing important ideas, employing the active and passive voice effectively, using parallelism, and preventing misplaced modifiers.

Deliver complete business messages by revising for clarity and editing for conciseness.

Compose direct messages that request information or action, respond to inquiries, make direct claims, and respond to customer claims.

Describe the components of effective negative messages and create an effective bad news message.

Describe effective persuasion techniques and create effective persuasive messages that request action, make claims, and deliver complaints.

Create an effective resume and a powerful cover letter.

Describe what to do before, during, and after a job interview in order to be successful.

Identify and describe the components of effective listening.

Describe techniques for making meetings productive.

Discuss strategies for enhancing intercultural communication and apply techniques for successful oral and written interactions across cultures.

Discuss effective practices and technologies for business communication, including social media.
Identify secondary sources and conduct primary research.

Organize, compose, and revise a business report.

Create effective graphics in a business report.

Create an effective presentation and deliver a business report to a live audience.

**Student Learning Outcomes:**

- Develop skills in planning, writing, speaking, and listening techniques essential to effective business communication.
- Write effective memos, letters, and reports covering typical business situations.
- Work effectively in teams to present a practical business presentation and report.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Business Management, CERT**

Certificate of Proficiency

**Control Number:**

**Curriculum Id:**

SCC.BM.CERT

The Certificate of Proficiency in Business Management is designed to enable students to handle basic problems encountered in managing within a business environment. Entry-level careers include management trainees and assistant managers or supervisors.

**Program Courses**

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ACCT100</td>
<td>Accounting for Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT101</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS150</td>
<td>Introduction to Information Systems and Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS222</td>
<td>Business Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CMPR100</td>
<td>The Computer and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT122</td>
<td>Business Communications</td>
<td>3.0</td>
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</table>

**Available Program Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>BUS100</td>
<td>Fundamentals of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS120</td>
<td>Principles of Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGMT120</td>
<td>Principles of Management</td>
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</table>

**Program Requirements**
Certificate of Proficiency

Certificate requirements: 9.0 - 10.0 Units

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT100 - Accounting for Small Business</td>
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<tr>
<td>OR</td>
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<tr>
<td>ACCT101 - Financial Accounting</td>
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<td>AND</td>
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<tr>
<td>OR</td>
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<td>CMPR100 - The Computer and Society</td>
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<td>AND</td>
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<td>BUS222 - Business Writing</td>
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<td>OR</td>
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<td>MGMT122 - Business Communications</td>
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Select one (1) course from the following: 3.0 Units

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<th>Course Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS100 - Fundamentals of Business</td>
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<tr>
<td>OR</td>
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<tr>
<td>BUS120 - Principles of Management</td>
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<tr>
<td>MGMT120 - Principles of Management</td>
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Total Units: 12.0 - 13.0

Learning Outcomes

Secure entry-level job skills.

Labor Market Data

<table>
<thead>
<tr>
<th>Accountants and Auditors</th>
<th>Job Growth</th>
<th>Wages</th>
<th>Competition</th>
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<td></td>
<td>AVERAGE</td>
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<td>Openings</td>
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<td>Graduates*</td>
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<td>*For Program</td>
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</table>

<table>
<thead>
<tr>
<th>Chief Executives</th>
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<th>Wages</th>
<th>Competition</th>
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<td>141K 141K</td>
<td>20K 446K</td>
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<tr>
<td></td>
<td>AVERAGE</td>
<td>LOW HIGH</td>
<td>Openings</td>
</tr>
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</table>
C1: Arts (Art, Dance, Music, Theatre)

ART101H - Honors Introduction to Art Concepts ART101H - Honors Survey of Western Art History I: Prehistory Through the Middle Ages
DNCE100 - Dance History and Appreciation MUS101 - Music Appreciation MUS101H - Honors Music Appreciation MUS102 - World Music
MUS103 - Jazz in America MUS104 - Rock Music History and Appreciation THEA100 - Introduction to Theatre

C2: Humanities

ASL110 - American Sign Language I ASL111 - American Sign Language II ASL210 - American Sign Language III FREN194 - Conversation and Composition I HIST102 - World Civilizations Since the 16th Century HIST102H - Honors World Civilizations Since the 16th Century
HIST152 - Latin American History HIST162 - Asian Civilizations PHIL106 - Introduction to Philosophy SPAN110 - Spanish for Spanish Speakers 1 SPAN111 - Spanish for Spanish Speakers 2 SPAN194 - Beginning Conversational Spanish

Child Growth and Development (DS1)

CDEV107:

3.0 Units

This introductory course examines the interactions between maturational processes and environmental factors and the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences, and analyze characteristics of development at various stages. Field-based assignments may be required. No credit for students who have taken Psychology 157. A negative TB test result and state-mandated immunizations are required for some fieldwork assignments and certificate completion.

Requisites

Requisites:

None

Transferability & General Education Options
**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area B2: Social and Behavioral Sciences: Social Science Elective
- Area F1: Lifelong Understanding and Self-Development

**CSU GE - Plan B**
- Area D: Social Sciences
- Area E1: Lifelong Learning

**IGETC - Plan C**
- Area 4: Social and Behavioral Sciences

**Course Identifier (C-ID)**
- Child Development

**Learning Outcomes**

**Course Objectives:**
Identify, define and use appropriate scientific vocabulary for genetic and heredity.

Identify mechanisms of heredity including the role of deoxyribonucleic acid (DNA) and dominant and recessive inheritance patterns.

Determine the possible genotype/phenotype outcomes and describe the most common genetic and chromosomal abnormalities.

Analyze the environmental and personal behavioral factors affecting prenatal development.

Identify the assisted reproductive technologies and interventions and the impacts on individuals and families.

Discuss the impact of technology on the human genome including the introduction of genetically modified foods.

Identify and discuss the impact on development caused by specific teratogens.

Identify and discuss personal characteristics influenced by heredity and the environment.

Identify, examine, and discuss the history of the major developmental theories.

Examine and discuss the relationship between the grand theories and emerging theoretical frameworks.

Examine bilingual language theories and how they relate to developing identity and self-esteem.

Examine the ways in which the developmental domains are continuous, sequential and interrelated.

Identify, define and use the basic vocabulary of child psychology and child development.

Investigate and explain sources of developmental change and reasons for disturbances in the developmental process.

Explain the developmental perspective.

Discuss the historical, bioecological, and social contexts of development.

Describe the steps in the scientific method and articulate the ethics of research with children.

Use the scientific method in conducting observations.

Demonstrate knowledge of current research findings as they apply to child development.

Demonstrate objective techniques and skills when observing, interviewing, describing, documenting, and evaluating child development research related to children of all ages cultures and backgrounds.

Examine and explain how bias can influence the research process.
Discuss presentation findings and research validity.

Identify, define, and use the basic vocabulary of child psychology and child development.

Demonstrate knowledge of the physical, social/emotional, cognitive and language development of preschoolers both typical and atypical development.

Demonstrate objective techniques and skills when observing, interviewing, describing and evaluating behavior in children of all ages, cultures and backgrounds and their caregivers.

Examine and evaluate the importance of the preschool years and the effects of interaction between the individual and her/his environment.

Examine and evaluate the role of play and its relationship to development.

Identify requirements for a quality preschool experience.

Critically examine the research on trauma and the effects on development.

Identify and describe risk factors that impact children, families and caregivers.

Examine and evaluate the role of parents, teachers and other professionals in facilitating child development.

Describe and explain bioecological, biocultural, and environmental factors influencing the development of gender and social roles, moral codes, identity and the self-esteem preschoolers.

Examine the developmental risks for preschoolers in the cognitive, physical, and psychosocial domains.

Discuss the impact of social systems and contemporary issues including technology, child care, reading, language acquisition, bilingualism, and bilingual education theories on the preschool child.

Demonstrate knowledge of the physical, social/emotional, cognitive and language development of middle childhood children both typical and atypical development.

Apply the understandings to the issues of this stage including disabilities, peer group relationships, sibling relationships, family structure, ethnic affiliation, home language and impact of poverty.

Identify and describe risk factors that impact families, children and caregivers.

Examine and evaluate the role of play in learning and development.

Describe and explain the bioecological, biocultural, and environmental factors influencing the development of moral codes, identity, and self-esteem.

Examine and evaluate the role of parents, teachers, and other professionals in facilitating development of middle childhood children.

Examine the causes and discuss solutions to peer aggression, bullying, and school violence.

Examine the research on the influence of technology on relationships, achievement, and self-esteem.

Discuss the influence of the family and caregivers on child development.

Address issues and concerns about gender roles, physical development and sexual development and orientation.

Discuss the impact on child development of social systems and contemporary issues including bilingual education and language acquisition theories, media and technology, peer groups and bullying, afterschool care, poverty, and atypical social, physical, and emotional development.

Demonstrate knowledge of the physical, social/emotional, cognitive and language development of adolescents both typical and atypical adolescents.

Apply understandings of adolescent development to the issues of this stage, including puberty, schools and learning, identity formation, sexuality and gender identity and the special problems of drug use, delinquency, sexuality, risky behaviors, and adolescent mental health.

Describe and identify major afflictions of adolescence such as depression, attention deficit hyperactivity disorder, schizophrenia, mood and personality disorders.

Describe and explain bioecological, biocultural, and environmental factors influencing the development of gender and social roles, moral codes, identity and the self-esteem in adolescents.

Demonstrate knowledge of the developmental characteristics of the adolescent brain and intellectual development.

Examine stage/age appropriate discipline strategies.
Identify and use personal learning styles, strengths, and talents.

Examine the role that parents, teachers and peers play in adolescent development.

Examine the causes and discuss solutions to peer aggression, bullying, and school violence.

Discuss the impact of social systems and contemporary issues on adolescent development including dating, sex, technology, homework, reading, sports, bilingualism, and bilingual education theories.

Discuss psychosocial development including identity formation, risks, and resilience.

Discuss conception and problems that could arise.

Examine alternative methods for achieving a pregnancy, including but not limited to, in vitro fertilization, artificial insemination (partner or donor), and womb transplants.

Identify environmental and nutritional factors that may affect conception.

Identify the assisted reproductive technologies and interventions and the impacts on individuals and families.

Discuss moral and ethical issues surrounding technology assisted conception.

Define the stages of prenatal development.

Analyze the factors affecting the timing and development of organs and systems.

Identify and discuss the impact of specific teratogens, including but not limited to chemicals, foods, pathogens, and stress, on development.

Define paternal influences on conception and prenatal development.

Discuss bioecological and sociocultural influences on conception and prenatal development.

Describe the normal birth process and the cross-cultural variations, problems, and solutions that can occur.

Identify the stages of childbirth and the post partum period.

Discuss birth complications and their aftermath.

Identify the behavior of a healthy newborn.

Examine the role of the father and doulas in the birth process.

Identify common neonatal screening exams.

Discuss the benefits to the neonate and parents of bonding.

Identify the signs and symptoms of post partum depression and mental illness in pregnancy.

Discuss contemporary issues surrounding the birthing process such as medication, surgical births, home births, breastfeeding, midwives, and work accommodations for pregnant women.

Examine the bioecological and sociocultural influences on the birth process.

Examine major theories infant/toddler development such as Piaget’s cognitive development theory, behaviorism, sociocultural, and information processing theories.

Discuss infant/toddler development across the social, emotional, cognitive and physical domains.

Discuss the role of bonding and attachment on development.

Examine the influence of nutrition and breast feeding on development.

Identify and assess infant/toddler developmental milestones and atypical development.

Examine infant/toddler language development, bilingualism, and characteristics of early speech.

Examine the influence of social interaction and caregiving practices on infant/toddler development.

Discuss the role of parenting and caregiver interaction on early development.

Examine causes and remedies for atypical development.
Discuss contemporary issues affecting infant/toddler development such as child care, use of technology and genetically modified organisms (GMO) in food.

Identify bioecological and sociocultural influences affecting infant and toddler development.

Identify community resources for atypical development, care, and nutrition.

**Student Learning Outcomes:**
- Describe development of children from conception through adolescence in the physical, social, emotional and cognitive domains.
- Critically evaluate the cultural, economic, political, historical contexts that impact children’s development.
- Apply developmental theory to child observations, surveys, and/or interviews using investigative research methodologies.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Observation and Assessment for Early Learning and Development (DS3)**

**CDEV108:**

3.0 Units

This course focuses on the appropriate use of assessment and observation strategies to document young children's development and learning. Emphasizes use of findings to inform and plan learning environments and experiences. Recording strategies, rating systems, portfolios, and multiple assessment tools will be explored along with strategies for collaboration with families and professionals. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for some field work assignments and certificate completion.

**Requisites**

**Prerequisite**

CDEV107 - Child Growth and Development (DS1)

or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Course Identifier (C-ID)**

Early Childhood Education

**Learning Outcomes**

**Course Objectives:**

Learn and discuss the role of ongoing observations as a basis for developmentally appropriate practice.

Know and discuss how different observation strategies provide qualitatively different information.
Discuss and identify the role of assessment in early intervention.

Identify and apply basic quantitative and qualitative observation and recording techniques.

Compare and analyze historic and currently recognized assessment tools.

Use observation tools to identify patterns, trends, and anomalies in individuals and groups of children (e.g. DRDP-R, Ages and Stages).

Use observation tools to identify quality in play-based environment curriculum and care routines (e.g. ECERS-R, ELLCO).

Know the different uses of assessment such as for screening or achievement evaluation.

Learn about and practice making bias limited evaluations.

Apply the basic elements of child development theory and knowledge of developmental domains to observations and assessments.

Evaluate and identify environmental and behavioral circumstances that affect development such as health, well-being and social context.

Identify and evaluate logistical challenges, biases and preconceptions about assessing children.

Understand issues of standardization vs. individualization in observation and practice.

Determine the multiple purposes of observation and assessment (screening, referral and intervention, achievement, program evaluation, curriculum, environments, and teaching strategies) and explain how interpretation is affected by observation and assessment.

Learn about reliable and valid measurement and the strategies for achieving it.

Use observation and assessment in the on-going cycle of curriculum development.

Use observations and assessments as tools to create appropriate learning environments.

Discuss bias, developmental delays, differences and disorders in the context of assessment.

Discuss the impact of situational factors related to the child, the environment, and the observer on observation and assessment.

Apply basic qualitative and quantitative assessment techniques.

Describe and practice the use of various methods and tools for documentation and record keeping.

Describe and practice the use of developmentally appropriate observation and assessment strategies.

Describe and practice the use running records and anecdotal notes to collect qualitative data.

Select the appropriate evaluation tools for assessing motor abilities.

Use anecdotal notes to conduct developmentally appropriate evaluations.

Practice using various evaluation tools to collect qualitative and quantitative data.

Demonstrate the use of the appropriate evaluation tools for assessing outdoor play, the physical environment, and the program.

Choose appropriate representation strategies to compare a single child to group norms.

Learn the difference between group norms and the range of normative development.

Identify the differences in development and skills among children.

Observe and document children’s behavior.

Understand key similarities and differences in the measures.

Become familiar with the various evaluation tools commonly used in early childhood education such as: The California Desired Results Developmental Profile (DDRP-R), Ages and Stages Questionnaires (ASQ), the High Scope Child Observation Record (COR), Early Developmental Assessment Scales (EDAS), and the Early Learning and Assessment Tools (ELAT).

Compare and analyze position statements of key groups including NABE and NAEYC regarding assessment and documentation.

Compare and contrast the similarity and differences between past and current practices and NAEYC recommendations.

List the required classes for working in Title 5 and Title 22 programs.

Critically evaluate the National and State standards for learning and assessment.

Examine the relationship between assessment and appropriate curriculum.
Discuss environmental changes that may be employed to support group or individual needs.

Identify and evaluate logistical challenges, biases, and preconceptions about assessing children.

Identify and assess typical and atypical socio-emotional development.

Identify cultural influences on assessment.

Examine and discuss the effect of language (evaluator’s and the child’s) on assessment.

Discuss and identify the limits that environment and activities place on observation.

Identify and use observation and assessment strategies that support appropriate teaching practices for dual language learners.

Complete directed assignments to observe and document children’s behavior.

Explore the linkages between child development theory and research to observation and assessment.

Explain the value of involving families and other professionals in the observation and assessment process.

Examine the effect of social context, child’s state of health and well-being, primary language, ability and the environment on assessment processes.

Prepare and interpret simple graphs.

Identify and practice using formal, informal, subjective, and objective data collection systems for evaluating children and groups.

Identify and use appropriate strategies for communicating with children and parents.

Investigate methods of establishing cooperative relationships with professionals, families and teachers to support children and nurture family involvement.

Define and use appropriate collaboration strategies, assessment data, and referral processes with parents and other professionals.

Observe and document children’s behavior.

Examine various types and purposes of documentation instruments commonly used in early childhood education such as: The California Desired Results Developmental Profile (DDRP-R), Ages and Stages Questionnaires (ASQ), the High Scope Child Observation Record.

Discuss and evaluate current accountability laws and mandates.

Examine state mandated and/or commonly used assessments of child outcomes and classroom quality.

Examine the legal and ethical responsibilities in relation to confidentiality, personal biases, and expectations, recordkeeping, referral processes, and rights of children and families.

Describe legal and ethical responsibilities in relationship to observation, documentation, and recordkeeping.

**Student Learning Outcomes:**

- Describe and evaluate the characteristics, strengths, limitations and applications of contemporary observations and assessment tools.
- Complete systematic observations using a variety of data collection methods to inform environmental design, interactions, and curriculum.
- Identify and evaluate the role of partnerships with families and other professionals in utilizing interpretations of observational data to inform teaching practices.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Child, Family and Community (DS2)**
CDEV110:

3.0 Units

This course examines processes of socialization focusing on the interrelationship of family, school, and community and the influence of multiple societal contexts. Explores the role of collaboration between family, community, and schools in supporting children's development. Field trips and field-based assignments may be required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B

Area D: Social Sciences

Course Identifier (C-ID)

Child Development

Learning Outcomes

Course Objectives:

Compare and contrast major current and historical frameworks of socialization.

Discuss interrelatedness of family, school, and community as agents of socialization.

Examine the role of family values, traditions modes of interaction, rules, conventions, responsibilities, change, transitions and family dynamics.

Examine and discuss the plight of a child developing within a system that is influenced by many different socialization factors.

Examine diverse family structures, parenting styles and values.

Discuss and analyze moral and social/emotional development and how these constructs relate to attachment and self-understanding.

Evaluate the mass media's influence, technology, and how important societal advances have impacted children, families, and the education system.

Examine and discuss theories that explain the role of the family, school, community, attachment, and moral behavior in the process of socialization and the interrelationships between children, families and professionals.

Interview support agency personnel and meet with community partners.

Identify and analyze risk factors.

Determine appropriate steps to find resources, support families and/or find/solve problems and recommend appropriate community resources.

Critically assess the effects and outcomes of current accountability laws and mandates, issues of standardization, individualization in assessment and practice, roles of institutions, diverse abilities, language and culture, racial identity and ethnicity.

Identify stereotypes and assumptions that affect the attitudes and actions within the family, culture and professional community.

Identify and examine the impact on socialization of the different types of schooling, including home-schooling and childcare on all children and programs.
Examine the role of group childcare and early schooling.

Discuss the teacher's role in researching their needs and family contexts of dual language learners.

Examine the socioeconomic factors that affect children and families, work, child care, single parent families, poverty, incarceration, health, etc.

Discuss teacher's and caregiver's influence on families.

Discuss the socioeconomic factors that impact children and families: work, childcare, single-parent families, poverty, incarceration, health, etc.

Identify community agencies, referral systems, procedures, and availability of specialized services and support for families and children.

Examine National Association for the Education of Young Children's policies and relate to brain development research and how these relate to current practices and quality recommendations.

Examine the impact of societal changes and transitions on development and early childhood practices that support all children and families.

Critically examine the research regarding the needs and programs for children with special abilities and their families.

Discuss challenges and benefits of early childhood practices that support children and families: creating partnerships sharing knowledge and expertise, two-way communication, sharing power, and decision-making acknowledging and respecting diversity, and c

Compare contemporary social issues and the effect on children and families.

Examine research on stereotypes, biases, and assumptions and their effect upon the family, the culture, and the professional community.

Identify how the child develops within a system and is influenced by numerous factors of socialization including the roles of the family, childcare, schooling and community.

Define and examine a variety of contemporary issues that influence family functioning and develop appropriate strategies to assist families experiencing stress.

Recognize diverse communication styles and discuss how a family's cultural background influences children's development and behavior.

Evaluate diverse family strengths and stresses and investigate strategies that support families and positively impact children's learning.

Recognize and support strategies that empower parents to become advocates for their children and family friendly policies.

Compare and contrast diverse family structures, family roles in socialization, types of families, parenting styles, culture, traditions and values and the impact upon development.

Examine the stages of parenthood and identify the styles of parenting and rearing techniques.

Appropriate and effective communication strategies for working with diverse and special needs population.

Develop appropriate strategies to assist families experiencing stress.

Analyze diverse practices, patterns, and styles of communication and demonstrate positive communication strategies that support all families.

Know how to contact policymakers, how laws are made and how to write a constituent letter.

Examine the professional's role in regards to advocating children's rights and protecting children.

Explore and implement programs to educate parents about policy and making effective changes.

Examine advocacy strategies that influence public policy on behalf of children and families.

Explain the effects of age, gender, diverse abilities, language, culture, racial identity, ethnicity, and socioeconomic status on children, families, and institutions.

Identify appropriate community resources that support children and families including at risk populations.

Demonstrate knowledge of the legal requirements and ethical responsibilities of professionals working with diverse children and families.

Compare and explain self-esteem and self-efficacy.
Identify the qualities of temperament, learning styles and multiple intelligences and how these constructs impact socialization and development.

Examine the research on how siblings, peers and friends affect children's development.

Develop personal goals and access personal learning and cognitive styles.

Interview parents and reflect on personal values and goals.

Evaluate how childhood and adulthood events affect who you become.

Discuss factors contributing to resiliency in children.

Evaluate at risk children and families and related community resources.

Explore one's own family history and examine how it affects one's relationship with children and families.

**Student Learning Outcomes:**
- Describe socialization of the child focusing on the interrelationship of child, family, and community.
- Critically evaluate the educational, political, and socioeconomic impacts on children and families.
- Describe strategies that empower families and encourage family involvement in children's development.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Principles and Practices of Teaching Young Children**

**CDEV111A:**

3.0 Units

An examination of the historical context and theoretical perspectives of developmentally appropriate practices in early care and education. Examines the role of the early childhood educator, identifying best practices for environmental design, curriculum, and teaching strategies. Explores teacher-child relationships, professional ethics, career pathways, and professional standards. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for some fieldwork assignments and certificate completion.

**Requisites**

**Requisites:**

**Prerequisite**

*CDEV107 - Child Growth and Development (DS1)*

**AND**

**Prerequisite**

*CDEV108 - Observation and Assessment for Early Learning and Development (DS3)*

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0
General Education Plan:
Course Identifier (C-ID)
Early Childhood Education

Learning Outcomes

Course Objectives:
Describe developmentally appropriate practice.

Explain the importance of developmentally, culturally and linguistically appropriate practice.

Apply developmentally appropriate practices to normative and atypical development.

Discuss the developmental needs of children of different ages (infant/toddler, preschool, school-age).

Examine the indicators of developmentally appropriate practice for curriculum, environments, and teaching strategies.

Discuss how DAP affects planning, observation, and assessment and planning for individual needs.

Examine the impact of DAP on behavior indoors and outside.

Discuss the role of DAP in teacher communication, teacher-child interactions and guidance.

Investigate the impact of DAP on culture and language acquisition.

Differentiate between program types (age, funding stream, purpose, policies, environments etc), delivery systems, quality standards, licensing and regulation structures in early care settings.

List strategies for family involvement.

Describe the current California Community Care Licensing regulations regarding early childhood facilities.

Identify licensing and regulations (e.g., Title 22, Title 5, Fire Code) and personnel requirements.

Determine the National Association for the Education of Young Children (NAEYC) recommendations for environments that support physical, language/cognitive, social, and emotional development environment.

Recognize the influence of the environment on curriculum.

Demonstrate the ability to design a classroom environment that supports developmentally appropriate curriculum activities.

Distinguish between the different forms of play and the value for development.

Describe the role of play in cognitive development.

Identify the domains and content areas addressed in early childhood programs.

Describe the relationship between observation, planning, implementation, and assessment in effective programming.

Identify the essentials of program planning and the interrelationship of planning, observation, and assessment.

Differentiate between program types (age, funding streams, purpose, policies, environments etc), delivery systems, quality standards, licensing and regulation structures in early childhood settings.

Identify the historical roots, learning theories and professional pathways in early childhood education including ethical and professional standards.

Examine delivery systems (non-profit, publicly funded, alternative payments/vouchers).

Differentiate between program types, (age, funding stream, purpose, policies, environments etc), delivery systems, quality standards, philosophies, licensing and regulation structures in early childhood settings.

Examine various program types (family child care, centers, after school programs, license exempt, infant-toddler, preschool, school-age, and recreational).

Describe quality indicators of programs (e.g., accreditation, assessment tools.)

Use indicators of quality to analyze various early childhood settings, curriculum, and teaching strategies.

Examine state and national standards.

Examine the history of early care and learning programs.
Explore the characteristics of quality in an early learning environment.

Develop a personal teaching philosophy.

Define and discuss the attributes of effective early childhood educators.

Assess professional esteem and attitudes towards ongoing professional development.

Take self-assessments such as learning styles, multiple intelligences strengths, Myers-Briggs profile.

Examine the National Association for the Education of Young Children (NAEYC) ethical code of conduct for early care and learning professionals.

Discuss career paths and options.

Examine professional organizations and opportunities for advocacy.

Discuss the early childhood educator's role as a guide/mentor/advocate.

Analyze the impact of various theories of development on teaching strategies.

Discuss collaboration strategies for families, colleagues and other professionals.

Describe characteristics of effective relationships, positive guidance, and teacher-child interactions.

**Student Learning Outcomes:**

- Compare and contrast historical and current early childhood education perspectives, theories, and program types and philosophies.
- Describe the role of the early childhood educator, including ethical conduct, and professional pathways.
- Identify quality in early childhood programs related to the environment, curriculum, and teaching strategies.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Introduction to Curriculum for Young Children**

CDEV111B :

3.0 Units

This course examines developmentally appropriate curriculum and environments for young children. Explores teaching strategies and curriculum development based on theoretical frameworks, observation and assessment. Emphasizes the teacher's role in supporting development and learning across the curriculum. Emphasizes the teacher's role in supporting development and learning across the curriculum, including content areas. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for some fieldwork assignments and certificate completion.

**Requisites**

**Prerequisite**

CDEV107 - Child Growth and Development (DS1)

AND

**Prerequisite**

CDEV108 - Observation and Assessment for Early Learning and Development (DS3)
AND

Prerequisite

CDEV111A - Principles and Practices of Teaching Young Children

Previously or concurrently enrolled

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Course Identifier (C-ID)
Early Childhood Education

Learning Outcomes

Course Objectives:
Identify theoretical and program model implications for curriculum.

Analyze activity plans with regard to theory and program model foundations.

Demonstrate an understanding of the assessment, curriculum planning, implementation, documentation cycle and use it to plan, implement, and evaluate sample ECE activities.

Evaluate observation and assessment strategies as they apply to curriculum planning and evaluation.

Examine developmental theory as it applies to curriculum development.

Examine developmentally, linguistically, and culturally appropriate curriculum to support the development of the whole child.

Explain verbally and in writing, the sequence of play as central to development and learning for young children.

Explore emergent curriculum, webbed curriculum, themes and project approach.

Explore standards from legislation and accrediting groups.

Examine guidelines for selecting, planning and preparing creative learning experiences.

Debate the conditions necessary to foster motivation.

Compare and contrast the tents of cultural, linguistic, ethnic, economic, ability and gender diversity including the acquisition of English as a second language in planning for young children.

Examine the components of effective learning environments.

Discuss the effect of the environment on behavior.

Plan activities, curriculum assessments, and environments that are appropriate for children’s ages, stages and needs.

Design appropriate experiences in multiple content areas to support children’s learning.

Observe and document children at play and purpose appropriate activities and possibilities for expanding children’s learning in a variety of curriculum areas.

Examine the impact of diverse learning styles, motivations, interests, and abilities on learning.

Assess and evaluate curriculum plans for affirmation and respect for cultural, linguistic, ethnic, ability, economic class and gender diversity.

Analyze techniques and materials to plan curriculum activities in all content areas including, but not limited to: math, science, English language development, language and literacy, history and social science, social-emotional development, visual and performance.

Analyze and evaluate the role of play materials in the classroom and in the cognitive development of children.

Integrate language and literacy activities and strategies into areas of all curriculum planning.
Identify developmental characteristics of young children and the main tenets of the theories of environmentalists, maturationalists and interactionalists as they relate to how children learn and curriculum strategies.

Investigate standards from national and state legislation and accrediting groups.

Examine strategies and plans for developing curriculum for diverse learning needs such as: age, abilities, culture, language, gender, interests, temperaments and ways of expression.

Document observations of children's developmental stages in various early childhood settings for planning curriculum and environments.

Plan and record the curriculum development process using various forms of documentation.

Identify ways in which the environment functions as an essential component of curriculum.

Compare and contrast various models and approaches to early childhood curriculum.

Examine the ongoing cycle of observation, assessment, planning, and documentation.

Identify the influence of daily schedules and routines on curriculum and activities.

Demonstrate ability to select safe and appropriate materials and equipment.

Identify ways in which the environment functions as an essential component of curriculum.

Identify ways in which development in all domains and learning in all content areas can be integrated across the curriculum.

Identify the effective use of learning centers and integrated curriculum.

Examine the components of effective learning environments.

Examine and construct appropriate learning activities in major content areas (math, science, literacy, social studies, visual and performing arts).

Compare various models and approaches to early childhood education (Reggio, Montessori, High Scope, Creative Curriculum, Waldorf, Bank Street, etc.).

Use current research information to establish appropriate learning environments.

Evaluate use of multicultural and self-concept materials and subjects in all curriculum.

Demonstrate proficiency in planning and implementing developmentally appropriate curriculum in the indoor/outdoor classroom.

Identify ways in which the environment functions as an essential component of curriculum.

Compare and contrast various models and approaches to early childhood curriculum.

Demonstrate ability to document curriculum planning process with written curriculum plans.

Demonstrate curriculum and environment designed and adapted for children's unique and individual ages, stages, and needs.

Demonstrate ability to select safe and appropriate materials and equipment.

Discuss strategies for family engagement and involvement.

Examine the effect of environment on behavior.

Consider the effects of cultural, linguistic, ethnic, economic, ability and gender diversity including the acquisition of English as a second language in planning for young children.

Examine infant and toddler use of materials and environments.

Evaluate and use the continuing cycle of observation, assessment, curriculum planning, and documentation.

Discuss the development of the "whole child" (Physical, cognitive, language, social/emotional development, socialization, self-regulation and self-help skills).

Identify various ways of engaging with children's families in curriculum planning and documenting of children's involvement and learning.

Discuss the impacts of language and culture on children's play and learning.

Examine the impacts of social identities, learning styles, and modalities on learning and development.
Design curriculum plans and activities to include support of home language as well as development of English as a second language.

Analyze the role of the environment in: designing appropriate learning centers, managing behaviors, routines, schedules, supporting and defining quality environments, and the effective integration of content.

Identify and evaluate teaching behaviors for research-based best practices.

Explore innovative and best practices in teaching.

Identify the key roles of the teacher in the cycle of observation, assessment, planning, set-up, instruction and elaboration of curriculum.

Use current professional standards to observe and document children at play and propose appropriate curriculum and possibilities for expanding children’s learning in a variety of curriculum content areas.

Demonstrate the effective use of learning centers and integrated curriculum.

Identify observation and assessment strategies as they apply to curriculum planning, evaluation and environmental design.

Observe and evaluate teaching strategies and environmental design.

Demonstrate ability to document curriculum planning process with written curriculum plans.

Identify ways in which development in all domains and learning in all content areas can be integrated across the curriculum.

Compare and contrast program models and approaches (Reggio, Montessori, High Scope, Creative Curriculum, Waldorf, Bank Street, etc.).

Examine the role of the teacher:

In fostering social attitudes, values and skills

As an informed, caring, thoughtful decision-maker

Honoring linguistic diversity and understanding of power issues related to language

Selecting appropriate activities, materials and equipment

Self-reflection, evaluation and work-life balance

Collaboration with other staff and families

Develop strategies and programs to facilitate family involvement

Planning for diverse learning styles, motivations, interests, and abilities

Student Learning Outcomes:

Differentiate between various models, approaches, environments and standards for early learning including indicators of quality.

Identify the teachers’ role in early childhood programs, including planning, implementing and evaluating activities and environments.

Select and apply developmentally appropriate teaching strategies and theories to curriculum and environmental design.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Health, Safety and Nutrition for Children

CDEV112:

3.0 Units
Introduction to the laws, regulations, standards, policies and procedures, and best practices related to child health safety and nutrition in early childhood programs. Includes prevention strategies, nutrition and meal planning for various ages and abilities and planning educational experiences integrated into daily routines designed to teach children positive health, safety, and nutrition habits. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for some fieldwork assignments and certificate completion.

Requisites
Prerequisite
Six (6) units of Child Development classes

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Course Identifier (C-ID)
Early Childhood Education

Learning Outcomes
Course Objectives:
Discuss injury prevention and care for all children including automobile safety and drowning prevention.

Identify and create safe environments for children of all ages (ages 0-8).

Examine the safety policies of the National Association for the Education of Young Children (NAEYC).

Demonstrate effective strategies for evaluating safety policies and procedures.

Identify safety and environmental risks in children's programs.

Plan early childhood curriculum on the topics of safety in accordance with culturally, linguistic and developmentally sound practice for children of all ages.

Compare and contrast various methods of collaboration with teachers and families to promote safety in early childhood settings for all children (infants, toddlers, preschoolers, school-agers).

Define the broad concept safety

Discuss the interrelationships between health, safety, and nutrition

Compare and contrast various methods of collaboration with teachers and families to promote healthy environments for all children (infants, toddlers, preschoolers, school-agers).

Identify health risks in early childhood programs.

Identify symptoms of common communicable diseases and other conditions that affect young children's health from birth to age 8.

Identify communicable and acute illnesses for all children (ages 0-8).

Identify zoonotic (animal to human transfer) illness and diseases.

Discuss the infectious process and effective disease control.

Discuss physical fitness as it relates to children of all ages (infants, toddlers, preschoolers, school-agers).

Discuss common health conditions such as: obesity, asthma, autism, allergies.

Examine the research on the impact of physical fitness on health.

Describe the difference between emergency care and first aid.
Research the effects of trauma and neglect on brain development

Plan learning experiences on health topics that promote health

Identify health assessment tools

Examine developmentally appropriate practices for sleeping and napping

Discuss the role of the staff and management in promoting a healthy environment

Discuss Centers for Disease Control recommendations for safe diapering and toileting practices

Discuss guidelines for daily health checks and exclusion of ill children

Examine mental health support for children and staff

Define the physical and mental health

Discuss the interrelationships between health, safety, and nutrition

Discuss special considerations for infants and toddlers, children with special needs, medical needs and other interventions.

Identify and discuss environmental and health risks for children ages 0-8.

Plan early childhood curriculum on the topics of health, safety, and nutrition education in accordance with culturally, linguistic and developmentally sound practice for children of all ages.

Describe a caregiver’s role and responsibility in promoting appropriate health, safety and nutrition practices

Discuss responsibilities of teacher as role model of best health, safety and nutrition practices.

Create appropriate lesson plans for children’s health, safety, and nutrition education.

Collaborate with families and health care professionals.

Demonstrate effective strategies for evaluating health and safety policies and procedures.

Write appropriate early childhood curriculum on the topics of health, safety, and nutrition for families and children.

Design strategies to maximize the mental and physical health of children and adults in a program for young children respecting the cultural, linguistic, and developmental differences of families, teachers and children

Identify quality indicators related the nutrition, health, and safety for programs serving children of all ages.

Develop respectful attitudes and policies for the cultural, linguistic, and developmental differences of families, teachers, and children.

Examine strategies for adjusting strategies and approaches depending on age or special need of the child.

Plan learning experiences in health, safety, and nutrition using developmentally sound practice

Describe a caregiver’s role and responsibility in modeling good health, safety, and nutrition habits

Identify laws and regulations supporting health, safety, and nutrition in early childhood settings including mandated reporting and characteristics of an abused and neglected child.

Research laws, codes and regulations that guide health, safety and nutrition policies in group settings.

Recall regulations, standards, policies, and procedures related to health, safety, and nutrition in support of young children, teachers, and families.

Review laws and regulations (e.g. Title 22, Title, 5, Fire code) supporting Health, Safety and Nutrition in children’s programs (0-8).

Evaluate and discuss emergency evacuation and disaster preparation.

Examine policies and prevention strategies related to child abuse and neglect.

Review nutrition guidelines, diet analyses and mealtime policies, food safety and menu planning considering culture, traditions and family choices.

Analyze the nutritional needs of children of various ages (0-8)

Discuss the relationship between healthy development and nutrition.

Differentiate the nutritional needs of various ages of children (0-8)
Plan economical and nutritional meals and snacks based on the individual needs of children.

Research current nutrition issues related to children and families.

Examine the benefits of breastfeeding to bottle feeding infants

Discuss the social/political considerations for breastfeeding women

Discuss the interrelationships between health, safety, and nutrition

Define nutrition.

Plan nutritious learning experiences

Discuss adjusting the nutritional program to accommodate infants and toddlers, preschoolers, school-agers, children with medical requirements or special needs

Student Learning Outcomes:

- Evaluate environments for both positive and negative impacts on children’s health and safety.
- Identify regulations, standards, policies and procedures related to health, safety, and nutrition in early childhood settings.
- Describe strategies used to promote health, safety, and nutrition of children and adults in early childhood settings.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Infant/Toddler Growth and Development (DS4)

CDEV116A:

3.0 Units

A study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development. Partially fulfills the requirements for state licensing. With Child Development 116B, this class fulfills infant/toddler specialization for Child Development Center permits. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for some fieldwork assignments and certificate completion.

Requisites

Prerequisite

CDEV107 - Child Growth and Development (DS1)

AND

Prerequisite

CDEV108 - Observation and Assessment for Early Learning and Development (DS3)

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:
General Education Plan:
Learning Outcomes

Course Objectives:
Identify the terms, principals, and current research concerning infant/toddler group care.

Analyze, in reference to a child’s growth and development, a variety of parenting styles in relation to diverse cultural backgrounds.

Identify and analyze growth and developmental patterns of a child from conception through age 3, including:

Prenatal development
Physical development
Perceptual and motor development
Cognitive development (including brain development)
Language development
Social/emotional development (including temperaments)

Examine the prenatal influences that affect cognitive development and behavior.

Use current research to evaluate the impact of birth practices on the newborn and family.

Link neurobiological processes to infant and toddler development.

Summarize the developmental milestones, characteristics, and growth patterns of a child from conception through age 3, including:

Prenatal development
Physical development
Perceptual and motor development
Cognitive development (including brain development)
Language development
Social/emotional development (including temperaments)

Discuss the influence of multi-lingual households on language acquisition.

Identify behavioral characteristics of the sensorimotor period of development.

Examine the importance of attachment in all areas of development.

Examine the importance of implementing primary care giving, continuity of care and small groups to promote strong attachment and quality infant/toddler programs.

Identify children with special needs.

Plan and implement appropriate curriculum for successful inclusion of children with atypical development.

Research and compile resources and referral agencies for children (birth to three years) and their parents/families.

Examine the importance of forming positive interactions/partnerships with families of infants/toddlers.

Discuss a variety of ways to enhance family partnerships.

Analyze, in reference to a child’s growth and development, a variety of parenting styles in relation to diverse cultural backgrounds.

Examine and evaluate the importance of infant/toddler observation.

Explore different types of observation formats.

Describe the primary role of the family in the development of the child.

Relate developmental theory to infant and toddler development, interactions, and relationships.
Student Learning Outcomes:
- Demonstrate knowledge of biological and environmental factors that influence pre-conception and prenatal health and development.
- Connect observed behaviors of children from birth to 36 months to developmental concepts and theories in the physical, cognitive, language, social and emotional domains.
- Analyze the multiple contextual influences on infant and toddler development including diverse family practices and environments.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Care and Education for Infants and Toddlers (DS3)
CDEV116B:

3.0 Units

Applies current theory and research to the care and education of infants and toddlers in group settings. Examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. This class partially fulfills the requirements for state licensing. With Child Development 116A, this course fulfills infant/toddler specialization for Child Development Center permit. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for some fieldwork assignments and certificate completion.

Requisites

Requisites:

Prerequisite
CDEV107 - Child Growth and Development (DS1)

AND

Prerequisite
CDEV108 - Observation and Assessment for Early Learning and Development (DS3)

AND

Prerequisite
CDEV116A - Infant/Toddler Growth and Development (DS4)

Previous or concurrent enrollment

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Integrate knowledge of infant toddler development in all domains with appropriate infant/toddler curriculum, including routines and activities.
Examine the importance of daily routines as the primary curriculum for infants and toddlers.

Plan curriculum based on the developmental needs of each child.

Examine individual cultures and routines to support culturally diverse families.

Examine and discuss the importance of play in the development of infants and toddlers.

Choose appropriate activities in the areas of toys, books, music, etc.

Plan and implement the physical environment, including equipment and materials, for an infant/toddler facility.

Examine appropriate materials that represent the children/families of the center and the world.

Discuss and examine the relationship between philosophy, professionalism, and ethical conduct.

Discuss and demonstrate positive guidance strategies for infants and toddlers.

Examine and discuss the California's licensing regulations.

Explore the importance of developing a collaborative relationship with parent.

Explore strategies that facilitate partnerships, including record keeping charts, needs and service plans and acknowledging developmental needs of individual children and parents.

Examine California Early Childhood Educator Competencies.

Document development of infants/toddlers.

Evaluate appropriate learning environments and activities for infants and toddlers.

Observe, document, and reflect on infant and toddler play and interactions to plan for care and learning.

Examine community-based programs for developmental screening and assessments.

Identify delivery systems and licensing regulations in infant and toddler care programs.

Identify laws and regulations supporting health, safety and nutrition in group care programs.

Discuss teacher dispositions and behavior desirable to work with and care for infants and toddlers.

Define and examine quality indicators in infant care programs.

Examine California Learning Foundations and standards.

Define the program policies of primary care, continuity of care, and small group size.

Describe reciprocal communication techniques that promote brain development and healthy relationships.

Identify and discuss cultural differences that support self-esteem.

Use practices that support and respect the diverse values and beliefs of families and caregivers.

Discuss and examine what is required for positive guidance of infant/toddler.

Identify communicable diseases and acute illnesses causes and prevention strategies common to infant and toddlers in group care.

Examine considerations for infants and toddlers with special needs, medical needs, and interventions.

Describe curriculum and practices that support the unique abilities of all children birth to 36 months.

Design appropriate play spaces and care routines that support infant and toddler care and learning.

Describe how staff/child interaction affects the development of the infant/toddler's self-esteem.

Explore diversity including cultural differences in order to promote self-esteem.

Recognize how staff interrelationships affect the quality of care.

Identify and analyze the personal characteristics which influence a child's development.

Design appropriate play spaces and care routines that support infant and toddler care and learning.

Examine health and safety issues to promote quality programming, to include communicable illnesses and universal precautions.
Describe how staff/child interaction affects the development of the infant/toddler’s self-esteem.

Explore diversity including cultural differences in order to promote self-esteem.

Recognize how staff interrelationships affect the quality of care.

Identify and analyze the personal characteristics which influence the child’s development.

**Student Learning Outcomes:**

- Summarize the essential policies and practices of quality infant and toddler programs.
- Demonstrate strategies to promote healthy relationships in the care and education of infants and toddlers.
- Evaluate infant and toddler curriculum and environments based on observation, documentation, and reflection.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Development of the School-Age Child (DS5)**

**CDEV120A :**

3.0 Units

Examines the physical, cognitive/language, and psychosocial development of children five to twelve years old emphasizing the interactions between maturational processes and environmental factors. Using developmental theory and investigative research methodologies, students will observe and evaluate children addressing issues of typical and atypical development and diversity. Fulfills partial requirements for the School Age Child Development Permit. Not offered every semester. Field trips to local child development centers may be included. A negative TB test result and state-mandated immunizations are required for certificate completion.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

Transferable:

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Discuss the role the teacher plays in development and the child care setting

Critique the characteristics of an effective caregiver/teacher

List the desirable education requirements and experience

Discuss the National Association for the Education of Young Children (NAEYC) ethical considerations for school-age caregivers

Investigate different leadership styles and learning preferences and use this information to establish a more diverse team able to meet many challenges

Examine elements of developmentally appropriate practice in school-age programs
Critically examine the terms and principles related to school-age childcare

Analyze the characteristics of school-age children at various stages in their development

Evaluate various assessment instruments and use them to access developmental milestones and appropriate learning environments

Explore employment opportunities available working with school-age children and become familiar with relevant legislation, advocacy, and professional organizations

Examine developmental theory and maturational guidelines for physical development

Discuss brain development and implications for school-age classrooms

Discuss development of girls and boys and stereotypes

Identify major developmental changes and variations in physical growth

Discuss the implications for children and teachers of early maturing children

Cite the causes of obesity and how child care staff can support children and families

Discuss chronic health conditions affecting school-age children and implications for staff and children.

Investigate the role nutrition plays in school-age development and learning

Discuss school-age motor development in typical and atypical children

Examine the development of the brain and cognitive processes during the school-age years

Compare and contrast various developmental theory principles that examine how children learn to think during middle childhood

List concerns by critics of the developmental theories

Discuss ways in which children develop and use language in middle childhood

Discuss strategies for memory and retrieval

Discuss critical thinking and problem solving in middle childhood

Examine the theories related to intelligence and learning in middle childhood

Critically examine the cognitive/language, biological/brain, and psychosocial development in the context of social relationships of children during the middle childhood years

Compare and contrast major theories of psychosocial and moral development

Examine the role socialization plays in moral development according to Gilligan and Kohlberg

Discuss the NAEYC Code of Ethical Behavior in relation to school age environments

Examine cultural influences on development and critically evaluate the effects of pre-judgments on personality and school success.

Evaluate and assess the role that environment and development play in shaping prosocial and antisocial behavior.

Develop appropriate behavioral management strategies

Describe the factors to consider in the development of a sense of self

Discuss the role resilience plays in healthy self-esteem

Discuss bullying and strategies to support bully and victim

Examine the role of friendship

Discuss the role of teacher to support emerging child leadership and friendship-making

Identify the socio-emotional developmental milestones for school age children

Critically evaluate and apply specific behavioral techniques based on knowledge of brain and child development

Discuss ways in which children learn to be cooperative

Examine misbehavior and mistaken behavior
Describe the support and strategies needed for typical and atypical school age children

Examine issues of diversity in school-age (sexual orientations, gender, race, ethnicity, ability, etc.) programs

Analyze various aspects of relationships of middle childhood children, especially with peers, and how social control mechanisms differ from when they were younger

Discuss the role of peers and family

Examine family differences and influences on development

Describe current family forms

Describe the effects of home environment on school-age children

Examine the role of the caregiver in supporting families

Examine NAEYC Ethical Guidelines in reference to families

Explore creative ways to collaborate with parents, schools and community agencies to establish a network of support for children, families, and caregivers

Examine the elements in the development of a racial and cultural identity

Critically examine the needs of students with disabilities

Identify responsibilities and develop strategies for assessment and observation and meeting standards mandated by legislation

Discuss the influence of the media environment and viewing habits of today's youth

Examine media effects on brain maturation, behavior, learning and relationships

Discuss the developmental differences in how children process media

Examine the historical changes in children's advertising

Identify the stages of consumer behavior during childhood

Examine strategies and content for teaching advertising literacy

Discuss advertising regulations

Examine media influence on racial identity and stereotypes

**Student Learning Outcomes:**

Using investigative methodologies, apply developmental theory in creating learning environments for children from 5 to 12 years of age.

Analyze and use understanding of major developmental milestones in the context of family, community, culture, ability, gender, and development to create prosocial learning environments for school-age children.

Examine a variety of guidance and interaction strategies that increase children's social competence and promote a caring classroom community.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**School-Age Child Care and Recreation Activities (DS5)**

CDEV120B:

3.0 Units
Focuses on school-age creative activities including planning and implementing an appropriate before and after school curriculum. Attention will be paid to integrating academics, recreation and creative activities suitable for school-age child care programs. Field trips and field-based assignments may be required.

**Requisites**

**Requisites:**

**Prerequisite**

CDEV120A - Development of the School-Age Child (DS5)

Previous or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Critically examine the terms and principles related to school age childcare

Discuss the history of school-age care

Examine developmental theories relevant to school-age programs

Discuss the need for school-age care

Examine the caregiver’s role in designing school-age activities and curriculum

Critically evaluate and apply specific behavioral techniques based on knowledge of brain and child development

Examine ways to sport development of friendships among children

Encourage children to ask for assistance from classmates and encourage classmates to respond appropriately

Provide equipment, games and activities that promote cooperation and joint play

Design activities and experiences that support children in developing empathy

Communicate with parents about goals and behavioral expectations

Investigate different leadership styles and learning preferences and use this information to establish a diverse team able to meet many challenges

Assess individual staff strengths

Use personality profiles and preferences to establish supportive teams

Explore creative ways to collaborate with parents, schools and community agencies to establish a network of support for children, families, and caregivers

Explain the importance of preparing children for adult roles

Plan and implement experiences that help children explore a variety of job, workplaces and academic opportunities

Discuss how child care staff can help children practice the skills they may need as future workers

Examine the cultural, linguistic, ethnic, economic, ability and gender diversity including the acquisition of English as a second language in planning for school-age children

Describe how to begin the program planning process

Explain the difference between the holistic and academic approach to program planning
Discuss developmentally appropriate practices in program planning
Discuss the importance of planning for afterschool school-age programs
Discuss the difference in planning for summer and afterschool programs
Plan, design, and implement appropriate learning activities for school-age environments
Examine lesson plans for attention to diverse learning styles, motivations, interests, and school-agers with differing abilities
Describe the ways the physical environment supports development and curriculum
State general guidelines and regulations for planning indoor and outdoor environments
Draw a plan for an appropriate school-age classroom space
Discuss the issue around sharing classroom space
Analyze, plan, and implement emotionally supportive indoor and outdoor environments for children and their families
Explore the curriculum framework and concepts used in elementary and middle schools for developing activities for school age children in elementary and middle schools
Define rules and regulations for establishing a safe environment for school-age children
Discuss the academic work/play balance in school-age programs
Discuss the role of technology in afterschool curriculum
Apply developmental theory and maturational guidelines in planning and implementing age appropriate art and craft activities
Apply developmental theory and maturational guidelines in planning and implementing school age music and movement activities
Apply developmental theory and maturational guidelines in planning and implementing competitive and non-competitive physical games and activities in the school age environment
Apply developmental and maturational theories to school-age drama and art activities using the latest technological tools such as portable computing devices, cell phones, MP3 players, and video cameras
Using the scientific method, plan and implement school age science activities that encourage children to invent, inquire, imagine, explore, discover, create, compare, and to observe scientific phenomena
Apply developmental theory and maturational guidelines in planning and implementing school age cooking and nutrition activities
Discuss the importance of the visual and performing arts, science, math, reading, language and nutrition activities to children's well-being, development and academic success
Design a portfolio of school-age activities taking into account the developmental guidelines, curriculum topics, and diverse learners
Explore play in school-age programs
Examine brain research on the effects of health, nutrition, rest, stress on development and learning
Discuss physical health and common chronic conditions affecting school-age children
Plan and implement age and developmentally appropriate nutritional activities
Plan and implement developmentally appropriate fitness activities

**Student Learning Outcomes:**

- Apply developmental theory and maturational guidelines in planning, choosing, directing and implementing school age activities and learning environments.
- Demonstrate learning by solving problems, explaining results, and choosing appropriate strategies to deal with middle childhood behavior.
- Create and explain developmentally appropriate lesson plans for academic topics and leisure activities.
- Design a developmentally appropriate portfolio of school-age academic and leisure activities representing at least six academic and leisure topics.

**Units & Hours**

**Minimum Units:**
3.0 Maximum Units

3.0 Total Hours

54.0 Total Hours

Introduction to Technology in Early Childhood Education
CDEV200:

3.0 Units

This course provides students knowledge about and experience with technological tools used in early childhood settings. Students will have the opportunity to evaluate the impact of technology as it relates to growth and development of children and developmentally appropriate practices. Emphasis will be on basic knowledge and practice in a wide variety of current and emerging technologies and how to integrate them into the learning environment. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes

Course Objectives:
Examine the developmental theory applicable to technology learning by young children.

Use technology tools to support social-emotional learning.

Discuss using hand-held technology devices with young children.

Discuss the effects of technology on development.

Identify the history of technology and computer use in early learning classrooms.

Identify developmentally appropriate practice for computer use in an early childhood classroom.

Identify normative trends, developmental outcomes, and individual differences when it comes to computer competency and use of computers.

Integrate computers into classroom themes and activities.

Examine developmental norms and individual differences.

Create a coursework portfolio of student’s work in applying technology principles and strategies to early learning curriculum.

Compare and contrast computer hardware, including input and output devices for classrooms.

Create classroom curriculum enrichment and resources for early childhood using a variety of computer software tools.

Describe ergonomics and compare experiences with classmates.

Evaluate software for young children’s use.

Assess the use of technology to support dual language learners.
Use Microsoft Office programs to create assignments, games and learning opportunities.

Identify licensing requirements needed in the classroom in relation to technology.

Identify appropriate and reputable websites on the computer.

Identify strategies for preventative practices for parents to use in protecting children from internet danger.

Develop strategies for engaging parents in motoring and supporting children's activities.

Examine myths about computer use in the classroom.

Examine research about the effects of technology use on development.

Discuss NAEYC principles for appropriate practice for use of technology in early learning programs.

Communicate appropriate computer goals and activities to colleagues, parents, and children.

Examine the components of an early education website.

Discuss credibility and Internet use.

Use technology to engage families and the community.

Examine the role of the educator in supporting technology learning.

Identify applications, how to download and use them and hand-held devices.

Demonstrate proficiency in using technology to

store and backup online.

communicate using email, internet and other technological sources.

use Microsoft Office programs (Word, Excel, Power Point, and Publisher)

create and deliver a computer based presentation

access and use features of the learning management system

access, use and reference clip art

access and use appropriate technology for classroom and online assignments

install and trouble basic software and hardware

Evaluate and apply ergonomic principles for technology use by children and teachers

Discuss ISTE Standards for children's computer use

Assess teacher proficiency in using social media, learning platforms, creative tools, and word processing software

Develop and assess appropriate use of technology to communicate with families, accommodate children's developmental needs, and include diverse learning opportunities in the early learning setting

**Student Learning Outcomes:**

Identify, implement, and evaluate developmentally appropriate technology tools and strategies for early learning environment. Design, implement and evaluate technology teaching and learning experiences that promote positive best practices for all young children.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0
Introduction to Children with Special Needs
CDEV205:

3.0 Units

Introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process. Field trips and field-based assignments may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Discuss the processes and procedures required by IDEA for developing and individual education plan (IEP).

Identify techniques for teachers of culturally diverse exceptional children.

Describe special education and the related services it provides to students and families with disabilities.

Discuss types, causes, detection, educational approaches, and behavioral approaches used in working with those with disabilities.

Use people first language

Examine compensatory education programs

Discuss an overview of the history of inclusion

Provide a rationale for inclusive practices in early learning programs

Identify concerns and challenges about inclusion for children with and without disabilities

Discuss landmark legislation and advocacy

Identify symptoms, causes, kinds of treatment and educational approaches for deafness and hard of hearing.

Discuss types, causes, detection, educational approaches, and behavioral approaches used in working with those with intellectual disabilities.

Become familiar with definitions, identification, and treatment approaches for learning disabilities.

Identify kinds, causes, detection and educational approaches for deafness.

Explain symptoms, causes, kinds of treatment and educational approaches for vision difficulties.

Identify types, causes, ways of diagnosing and treating speech difficulties.

consequences for the individual with physical impairments requiring special health care.

Describe the profile of children who demonstrate exceptional ability and/or performance in school.

Demonstrate an awareness of specialized programs and curriculum needed to support the development of children with exceptional ability

Analyze major types of emotional and behavioral disorders found in children and young adults and identify symptoms, prevention, and treatment approaches.
Discuss techniques for teachers of culturally diverse exceptional children.

Research special education and the related services provided to students and families with disabilities.

Discuss Kubler-Ross' Coping (grief cycle), Turnbull's family system approach, crisis intervention and grief management.

Identify techniques for teachers of culturally diverse exceptional children.

Define the concept of family uniqueness and explain how this concept affects teachers and families in special care settings

List five ways teachers can support families in special care settings

describe the ways families can participate in the program

Discuss the NAECY's principles and guidelines for Family Engagement and Reciprocal Relationships with Families

Know Epstein's Framework for family involvement

Discuss strategies and considerations to avoid bias during the assessment process

Examine special education and the related services it provides to students and families with disabilities.

Discuss legal policies and procedures for measurement and assessment

Know the various types of assessment methods and type of data gathered

Examine the purposes of assessment in special education

Discuss the role of the family in assessment

Examine methods used in collecting data and monitoring progress

Identify community resources for families and special needs children

Identify advocacy and family support groups

Explain eligibility criteria and the referral process

**Student Learning Outcomes:**

Recognize various exceptionalities and conditions of children and identify interventions based on the developmental continuum.

Evaluate the role of history and society in shaping current policies related to best practices of inclusion and serving children with special needs.

Collaborate with families and community members in supporting inclusion of children with special needs.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Curriculum and Intervention Strategies for Children with Special Needs**

**CDEV206:**

3.0 Units

This course focuses on the curriculum and intervention strategies desirable for supporting young children's individual needs in partnership with their families. Focuses on the use of observation and assessments in meeting the individualized needs of children in inclusive and natural environments. Includes the role of the teacher as an intentional professional working with families, collaborating with interdisciplinary teams, and demonstrating cultural competence. Field trips and field-based assignments may be required. Previous Title: Child Development 206, Curriculum and Strategies for Children with Special Needs (2018)
Requisites

Requisites:

Prerequisite

CDEV205 - Introduction to Children with Special Needs

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Explain current special education laws and their impact on early childhood practice.

Use people first language.

Define inclusion and describe the history.

Identify and discuss the challenges for inclusion in a classroom with children with and without disabilities.

Explain the impact of landmark inclusion legislation.

Examine the public policy guidelines for gifted and ability limited children.

Summarize the major requirements of an IFSP, IEP and 504 plan.

Identify and evaluate applicable community resources and agencies.

Identify and find out how to participate in public policy events and advocacy.

Examine the history of family rights.

Define and discuss response to intervention (RTI) requirements under the Americans with Disabilities Improvement Act of 2004.

Define and examine least restrictive environment (LRE) inclusion.

Observe and document use of applicable mandates and interventions in a field-based setting.

Describe strategies that support the central role of families and their collaborative partnerships with team members and community professionals.

Evaluate the National Association for the Education of Young Children’s Guidelines for family engagement and reciprocal relationships with families.

Evaluate practices and programs for six types of parental involvement.

List five or more ways teachers can communicate with parents.

Define the concept of family uniqueness and family centered practice.

List the components of a family-centered program.

Discuss the importance of relationships and support appropriate child-to-child interactions.

Discuss anti-bias and equity issues related to access, care and inclusion.

Use strategies with families in a field-based assignment.

Demonstrate knowledge of reflective practice, cultural responsiveness, confidentiality, and professional practices when working with colleagues, children and families.

Examine cultural considerations to consider when dealing with ability and access.
Observe an inclusive preschool or child development center.

Determine the type and benefit of augmentative and alternative communication systems.

Discuss the role of the educator as a member of the team.

Compare the types of supplemental professional development in specific states.

Identify the characteristics of an effective Inclusive program educator.

Practice reflective listening skills.

Examine ethics surrounding care of children in inclusive environments

Model ethical practices and standards for the industry in field-based assignments

Identify curriculum, environment and natural learning opportunities to meet individualized needs, outcomes, abilities, and goals of young children and families.

Design modifications and accommodations based on observation, DAP, evidence-based practices, and legal requirements to support children's developmental stage and behavior.

Examine curriculum related goals and embedded learning in daily and/or routine activities.

Create a model of safe outdoor curriculum and environments in a field-based setting.

Evaluate and use consistent strategies and DAP across learning environments.

Establish developmentally appropriate learning environments for infants and toddlers with differing abilities.

Identify and document teachable moments.

Create an environment arranged for learning taking into account the various types of learning in preschool settings.

Create a sample daily schedule.

Incorporate self-care skills into the daily curriculum.

Examine the role of play.

Discuss classroom adaptations, equity and anti-bias implications for the curriculum and program.

Employ curriculum strategies in a field-based assignment.

Examine and use various formal (norm-referenced screenings, checklists, and curriculum referenced tools) and informal observation and assessment procedures (parent interview, interactions, portfolios/anecdotal records) used to guide identification and int

Identify and define data collection methods/tools and determine their best use in the assessment process.

Define the six steps in the assessment process.

Examine role of observation and assessment in the identification process.

Describe early identification including Child Find and screening procedures.

Discuss the role of the family in the assessment process.

Examine the role of the early learning professional in the identification of developmental problems, referral, and placement according to IFSP/IEP processes.

Summarize the assessment requirements and documentation needed for IFSP/IEP and 504 plan and processes.

Determine the availability of developmental screening in the community.

Use assessment, referral, and placement strategies in a field-based assignment in a field-based assignment.

**Student Learning Outcomes:**

Evaluate program, educational and professional policies, based on special education laws and evidence based practices.

Design and implement curriculum strategies based on children's individualized needs in inclusive and natural environments.

Advocate for effective partnerships with families, interdisciplinary team members, and community resource specialists.

**Units & Hours**
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Supporting and Empowering Families of Children with Special Needs
CDEV207:

3.0 Units

This course will provide teachers, intervention assistants, administrators, and parents the tools necessary to support and empower families of children with disabilities and other special needs in early childhood and school age programs. Techniques, strategies, and resources will be provided to support children in a natural and/or inclusive educational setting and to help guide parents to be advocates of their children. Field trips may be required. Vaccinations as mandated by state statues are required.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Examine and define chronological and brain development in children with exceptional needs and abilities.

Debate influence of theories of development and brain research on resources and outcomes.

Examine the environmental factors (family, SES, Health and Safety) on resources and outcomes.

Examine personal characteristics (temperament, intellectual ability, emotional regulation, sensory processing and responsiveness to others and the environment) and the effect on acquiring appropriate resources and support.

Discuss challenges and strategies for working with culturally diverse groups including children with disabilities and other special needs.

Examine persistence goals and strategies in seeking services "Family Focus" empowerment and advocacy.

Discuss strategies for approaching the parents/guardians for documenting concerns.

Identify and apply strategies for soliciting input from family and for building a relationship of trust.

Examine approaches to sharing your concerns or when suspecting a problem (formal, informal).

Collect informal (observations, parent interview, interactions, portfolio/anecdotes) and formal data (norm referenced screens and checklists, curriculum-referenced tools).

Reflect on and practice reflective listening and responsiveness.

Examine historical views of grief, loss, and recovery (Kubler Ross’ coping and grief model and Turnbull’s family system approach).

Develop a collaborative plan for negative reactions of parents/guardians.
Discuss criteria and documentation needed for making referrals.

Identify supportive roles, team roles (parents, ECE, ECSE) roles in the special education process.

Identify and use family input to develop an IEP/IFSP.

Define and support the inclusive placement in the natural environment.

Define and Discuss the parent’s goal in ECE (Early Childhood Education).

Elaborate on the range of affecting options for child placement and support.

Discuss and evaluate personality styles as they influence affect parental attitudes towards children with special abilities or atypical development.

Examine family composition and structure as they influence learning and care of children with atypical development.

Identify and discuss the impact and influence of diversity issues on programs and support for children with special needs or atypical development.

Review role of assessment plans and public education agencies and regional centers.

Examine the input, influence, and availability of children's services.

Discuss the criteria for eligibility for services.

Discuss legal indications for consent, parental and guardian permission and release of information.

Examine placement options (LRE/FAPF).

Student Learning Outcomes:

- Demonstrate ability to use appropriate language, interventions, and strategies to plan and implement learning opportunities for empowering and supporting parents of children with exceptional abilities.
- Based on theories and conventional practice, demonstrate ability to identify, assess, evaluate and communicate appropriate intervention strategies to parents and families of children with exceptional abilities.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Administration I: Programs in Early Childhood Education (DS6)

CDEV215:

3.0 Units

Introduction to the administration of early childhood programs. Covers program types, budget, management, regulations, laws, development and implementation of policies and procedures. Examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for certificate completion.

Requisites

Requisites:

Advisory

Twelve (12) units in early childhood education

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Summarize systems and methods to support sound fiscal operations in a variety of ECE settings
Examine effective policies and procedures for staffing and scheduling
Describe major sections of a personnel policy
Write a job description
Examine the interview process
Develop an orientation process for new hires
Identify the resources needed for marketing the program
Develop a program brochure and staff and parent handbooks
Name the various child care options available to families
Identify information that will help you determine the types of child development services needed now and in the future
Describe the budget process
List items included in the budget
Analyze budget categories and establish priorities
Explain your child development philosophy
Describe characteristics of different types of centers
Explain the function and purposes of boards
Identify the roles of committee members of a governing board
List the components of bylaws
Discuss the ways centers are organized
Explain the purpose of a mission, vision and strategic plan
Develop a mission, vision and strategic plan
Examine the role of a needs assessment in strategic planning
Examine the role of the director in funding the program
Investigate the difference between start-up funds and operating funds
Describe financial reports that must be prepared by the director
Examine the role of the director in advocacy
Investigate various professional organizations supporting directors
Establish a web presence for your program
Explain the merits of joining social media outlets such as Facebook, Twitter, Instagram, etc
Examine use of technology in the program to support teachers and communicate with families
Establish a staff training schedule

Demonstrate knowledge of compliance with regulatory systems

Discuss the purpose of licensing

Identify the legal steps in the licensing process

Examine the various types of regulators and their specific purposes

Explain the difference between licensing and accreditation

Examine disaster procedures and emergency preparedness

Discuss various accrediting criteria and organizations

Discuss mandated reporter guidelines

Examine the health and safety regulations as this pertains to the early care setting

Communicate to parents health information and requirements for sick children

Develop a Director's portfolio of emergency responses

Discuss the health and safety codes as they pertain to the program

Compare and contrast various program structures, philosophies and curriculum models

Identify strategies to ensure equity and respect for children, families, staff and colleagues

Assess various methods and tools of evaluation

Discuss the relationship of the mission, philosophy and values to programs

Examine the program culture and climate

Use the NAEYC Code of Ethical Conduct in planning programs and curriculum for children and families

Develop program curriculum using developmentally appropriate practices

Describe the role of the Director in evaluation

List the criteria for selecting assessment tools

Examine several methods and tools for evaluating children and the program

Establish program schedules and routines

Establish plan for dealing with diverse populations and needs

Discuss inclusion as it pertains to the school environment

**Student Learning Outcomes:**

- Apply administration skills in various types of early care and education programs.
- Demonstrate knowledge of strategic and fiscal planning.
- Evaluate components of quality programs, facilities and operations.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0
Administration II: Personnel and Leadership in Early Childhood Education (DS6)
CDEV216:

3.0 Units

This course acquaints students with effective strategies for personnel management and leadership in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. Field trips and field-based assignments may be required. A negative TB test result and state-mandated immunizations are required for certificate completion.

Requisites
Requisites:
Advisory

CDEV215 - Administration I: Programs in Early Childhood Education (DS6)

AND

Advisory

Twelve (12) units in early childhood education

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Evaluate the factors needed to create a diverse and inclusive environment.

Describe the legal requirements and responsibilities of administering an early care and education program.

Identify personal biases that can interfere with effective teaching and mentoring and ways to support the development of anti-bias, people first supervision and leadership.

Summarize essential practices for collaboration with staff, families and community.

Identify components of hiring practices, observation and evaluation practices of staff.

Explore the role of effective communication to support observation, reflection, and planning.

Formulate strategies for compensation and professional growth opportunities in programs.

Connect staff needs to professional development and opportunities.

Articulate the importance of professional integrity and confidentiality.

Define and improve the role of the supervisor and teacher-leader as mentor/coach.

Explore and discuss the change process and identify how this relates to professional development.

Student Learning Outcomes:

Demonstrate effective practices for managing and leading staff and administering early care and education programs.

Implement ongoing professional development plans based on evaluation of staff and administrative needs.

Establish professional relationships and facilitate collaboration and communication between colleagues, families, and stakeholders.
Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Creative Music and Performing Arts for Early Learners
CDEV217:

3.0 Units

Introduction to the performing arts domain of the California Preschool Learning Foundations and Frameworks including strands of music, drama, and dance. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Explores musical expression through songs and ballads, the elements of music, and diverse types of instruments as used in the early childhood curriculum. Includes the study of musical growth and development in young children and the use of music as a classroom management tool. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Define the role of the California Preschool Learning Foundations and Frameworks: Performing Arts in the education of young children and their relationship to current assessment tools including the Desired Results, Developmental Profile (DRDP), and Content

Discuss performing arts curriculum in relation to developmentally appropriate practices (DAP) and brain development

Examine the characteristics of children, ages 0-8, as related to listening, producing and appreciating music, drama, and movement.

Identify and discuss the role of the teacher in creating, supporting learning environments and implementing performing arts awareness, curriculums, and programs.

Examine the role of the teacher in performing arts play.

Use knowledge of the performing arts strands to select materials and plan experiences to promote children's awareness of the arts based on observation of children in a classroom setting.

Building on children's natural movements, demonstrate appropriate use of instruments and props to enhance and extend music and movement.

Examine conceptual learning through music and movement.

Identify and analyze the value of music in different situations within early childhood programs.

Identify and develop strategies classroom management solutions using music and/or dance.
Describe ways to support diversity and promote cross-cultural respect and abilities using musical instruments, dance, drama, sounds, and artistic traditions.

Review recordings, musical forms, and songs for age appropriateness

Plan activities based on daily routines, children’s diverse interests, and skills in music and the performing arts

Participate with children in performing arts strands

Select and integrate music, movement, and props across the curriculum

Share strategies and design ideas for integrating music and the performing arts opportunities across all areas of the curriculum.

Discuss the ways teachers collaborate with parents and other caregivers to support children’s appreciation and participation in music, dance/movement, and dramatic play.

Plan and set-up classroom environment to encourage participation and enjoyment in music, movement, and dramatic play.

Lead performing arts activities for peers during class.

Create lesson plans involving drama, music and dance/movement activities

Develop and share strategies for using performing arts as a classroom management tool.

Create a musical instrument, dramatic play setting, and movement exercise that could be used in the early childhood setting.

Design dramatic play, music and movement curriculum and transition activities for early childhood environments.

Discuss and compile a list of free community performing resources.

Assemble a student performing arts resource file.

Examine conceptual learning through drama.

Discuss the goals of drama and dramatic play.

Create drama and dramatic play activities for three diverse age groups.

Using drama and dramatic play strategies, identify and develop practical solutions for classroom management and curriculum

Describe ways to foster cross-cultural understanding through drama and dramatic play.

Incorporate language, costumes, and props that reflect the diversity of human experience.

Create lesson plans using drama and dramatic play techniques.

Plan and set-up the classroom environment to encourage participation and enjoyment of drama and dramatic play.

Share strategies and design ideas for integrating drama and dramatic play across all areas of the curriculum.

Discuss the ways teachers collaborate with parents and other caregivers to support children’s appreciation and participation in drama and dramatic play.

Create dramatic play boxes for classroom use.

Use drama and dramatic play techniques to teach history and social/emotional competence.

**Student Learning Outcomes:**

- Explain the roles of the California Preschool Learning Foundations and Frameworks in the education of young children and their relationship to current evaluation methods including the Desired Results Developmental Profile (DRDP), and Content Standards for Plan environments and opportunities to support children’s development of an appreciation of the performing arts including opportunities to express themselves and learn academic concepts through music, dance, and dramatic play.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0
Total Hours
54.0

Visual Art Experiences for Early Learning Environments
CDEV218:

3.0 Units

Introduction to the visual arts domain of the California Preschool Learning Foundations and Frameworks including artistic expression and response, and skills using various art media. Emphasizes the child’s ability (ages 2 through 8 years) to represent and expressively use art mediums and techniques. Includes theoretical, as well as, practical applications and explores the role of adults in fostering creativity. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required and/or professional development units for Child Development Permit holders, preschool, transitional kindergarten, and early-primary teachers. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Explain the roles of the California Preschool Learning Foundations and Frameworks: Visual Arts in the education of young children and their relationship to the Desired Results Developmental Profile (DRDP), and Content Standards for California Public Schoo

Discuss visual arts curriculum in relation to DDRP and brain development

Examine the characteristics of children, ages 0-8, as related to listening, producing and appreciating visual arts programs.

Identify and discuss the role of the teacher in creating, supporting and implementing visual arts curriculums and programs.

Discuss the purpose and use of California Preschool Learning Foundations and Frameworks

Examine conceptual and academic learning through the visual arts.

Identify and develop solutions using visual arts as a classroom management tool.

Use knowledge of the visual arts strands to select materials and plan meaningful experiences in the classroom to promote children’s ability to create, invent, and express themselves through visual art strands.

Building on children’s natural movements, demonstrate appropriate use of artistic media and props to enhance and extend visual arts in early learning programs.

Review visual arts tools, strategies, and media for age appropriateness.

Experiment with various media and tool

Describe opportunities for art appreciation and expression in daily routines and across all areas of the curriculum.

Share situations, strategies and design ideas for integrating the visual arts opportunities across the curriculum.

Plan and set-up classroom environment to encourage participation, development of skills and enjoyment of the visual arts.

Lead developmentally appropriate visual arts activities for peers during class.
Create lesson plans for environments involving diverse visual arts and media.

Develop and share strategies for using visual arts as a classroom behavior management behavior tool.

Create a resource file of visual arts projects that could be used in the early childhood setting with children.

Design visual arts curriculum and transition activities for early childhood environments.

Discuss and compile a list of free visual arts community opportunities for children.

Discuss the ways teachers collaborate with parents and other caregivers to support English literacy skills while engaging in the visual arts.

Identify and develop solutions using visual arts a classroom management tool.

Identify and analyze the value of visual arts in different situations within early childhood programs.

Assess classroom for quality diversity indicators.

Identify strategies for using visual arts across the curriculum.

Discuss the ways teachers collaborate with parents and other caregivers to support children in their development of artistic awareness and skills.

Describe ways to be diversity aware and more respectful of different cultures and abilities using visual arts media.

**Student Learning Outcomes:**

- Explain the roles of the California Preschool Learning Foundations and Frameworks in the education of young children and their relationship to the Desired Results Developmental Profile (DRDP), and Content Standards for California Public Schools (kindergarten)
- Plan appropriate environments and experiences to support children's development of visual arts skills based on knowledge of development and observation of children.
- Demonstrate ability to collaborate with parents and colleagues to support children's development of artistic skills.
- Demonstrate knowledge of developmentally appropriate visual arts media for children.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**The Child As Victim**

CDEV220:

3.0 Units

Exploration of battered, molested, and neglected children from five vantage points: child, law, parents, social services and education.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32fa6eb18
Learning Outcomes

Course Objectives:
- Identify and describe various conditions of child abuse.
- Discuss the societal trends and changes in abuse and neglect legislation.
- Examine effects of child abuse on the developing child.
- Explore the variety of causes, both societal and individual, of child abuse.
- Discuss suspected child abuse cases and possible outcomes.
- Identify ways of helping to rehabilitate child victims.
- Examine the effects of stress and trauma on brain development.
- Discuss signs and symptoms of child abuse in the school setting.
- Discuss the difference between abuse and discipline.
- Explore specific cases of child abuse and their outcome.
- Examine state mandates, laws, and responsibilities as they relate to child abuse and neglect.
- Identify various reporting procedures and demonstrate an understanding of when and how to use the services.
- Identify the resources available for individual and/or potential child abuse situations.
- Examine the laws and penalties associated with various forms of child abuse.
- Learn Children’s Bill of Rights, Parent’s Rights.
- Discuss the role of the court, law enforcement, and social service agencies.
- Examine issues around family court.

Student Learning Outcomes:
- Examine the causes and effects of stress and trauma on development and behavior.
- Evaluate regulations, standards, policies and procedures related to child abuse and neglect in support of young children, teachers, and families.
- Identify types of abuse and neglect and the possible environmental, personal risks and community support agencies.

Units & Hours

Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 54.0

Living and Teaching in a Diverse Society

CDEV221:
- 3.0 Units

Examines the impact of various societal influences on the development of children’s social identity. Covers developmentally appropriate, inclusive and anti-bias approaches. Self examination and reflection on issues related to social identity, stereotypes, and bias will be emphasized. Field trips and field-based assignments may be required.

Requisites

Requisites: None
Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area D: Cultural Breadth

Course Identifier (C-ID)
Early Childhood Education

Learning Outcomes

Course Objectives:
Examine theories of diversity in education.
Critically evaluate the historical, scientific, and current perspectives on diversity and inclusion.
Define and identify various forms of diversity
Review and critique social and developmental theories and look at the impact on young children's social identity.
Discuss and clarify terminology associated with diversity content such as sex, gender, gender role, sexual orientation, racial, ethnic, cultural, national identity, nuclear family, blended family, single-parent family, trans-racial family, gay-lesb
Discuss overt and covert ways stereotypes and prejudices are learned.
Explore the influences of stereotypes and bigotry
Address issues of inequity and access how they relate to young children in a world of diversity.
Explore how children think, prejudice, impacts of silence, overt, and covert social messages.
Explore the common misconceptions about multicultural and anti-bias education.
Identify and explore the overlapping influences of cultural identity and various "isms" as they relate to children, families, and early childhood settings
Identify ways to effectively negotiate and resolve conflict related to issues of diversity
Investigate the nature and processes of systemic and internalized privilege and oppression have on the teacher/child dyad and their impacts on identity formation, self-efficacy, learning and teaching outcomes.
Discuss various forms of "privilege" such as race-based, religion, gender-based, ability-based, sexual orientation, etc.
Examine the influence stereotypes, "isms," bias, prejudice, fear, and hatred
Examine the unique and overlapping issues in racism, sexism, classism, heterosexism, ableism, genderism, homophobia, and ethnocentrism as they relate to families and children in early care and education settings.
Identify environments and curriculum that challenge children's biases and support the acquisition of authentic information about human differences.
Identify stereotypes and biased messages in the media.
Explain the nature and processes of systemic and internalized privilege and oppression.
Differentiate between various sources of diversity.
Summarize the history and influence of systemic, internalized privilege and oppression.
Examine the influence of learned helplessness on performance
Examine the influences on the development of social identity
Summarize the history and influences of systemic, internalized privilege and oppression

Examine the impact of inequity and access in the context of the media and silence

Discuss challenging stereotypes and how stereotypes and prejudice develop

Explore and define issues of cultural identity including factors such as language, ethnicity, religion, immigration, and economic class in relationship to children, families, and early care and education settings.

Examine environments and curriculum that respectively reflect children’s cultures, and experiences that expose children to the larger communities in which they live.

Examine the effects of the dominant holiday culture curriculums and culturally and class embedded traditions of diverse groups.

Acknowledge and include culturally relevant language, stories, music, and traditions.

Discuss the impacts on our identities, our personal choices and teaching with children and families.

Compare the historical and current perspectives involving diversity and inclusion and their impacts on children’s identity development and learning.

Define and assess the impacts of factors such as language, ethnicity, religion, immigration, and economic class in the personal history of the teacher and student and the subsequent impact on teaching young children and families.

Identify stereotypes and biased messages in the media and classroom and explore educational approaches that teach children how to challenge such messages and develop alternative behaviors.

Discuss culturally and developmentally appropriate classrooms including, but not limited to, curriculums, environments, and human relationships.

Explore anti-bias thinking for diverse groups when it comes to culture, traditions, stories, and music.

Discuss the impact on children and families of personal histories and experiences, internalized privilege and oppression, our identities, choices, and teaching strategies.

Conduct a self-examination of recognition and respect for differences, responsive behaviors, acknowledgement and struggle with bias.

Examination of the teacher’s role as a change agent for children and families.

Acknowledge the teacher’s responsibility to assess power dynamics and make a commitment for co-creation of anti-bias approaches.

Discuss the role children’s books and media have on anti-bias thinking and development.

Develop strategies for creating diverse and inclusive learning environments for all children which include: books and media, materials, curriculum, interactions, assessment methods, holidays and celebrations, and family involvement.

Evaluate classroom environments, materials, and approaches for developmental, cultural, and linguistic appropriateness.

Identify issues of social injustice and bias that occur in classrooms.

Evaluate the relationship between one’s own experiences and the development of personal bias

Plan classroom environments, materials and approaches to effectively promote pride in one’s own identity and delight and respect for social diversity.

Demonstrate strategies for helping children negotiate and resolve conflicts caused by cultural, class and gender differences, with a focus on using anti-bias approaches in the classroom.

Examine children’s books, media and learning materials that support identity development and anti-bias thinking and representing home languages, cultures and traditions, stories and songs.

Evaluate inclusive classroom environments, materials and approaches that are developmentally, culturally and linguistically appropriate for specific groups of children.

Include personal histories and experiences in examining and explaining bias, privilege, culture, and ethnicity.

Examine and propose strategies to challenge prevailing misconceptions.

Review professional ethics and responsibilities and legal implications of bias, prejudice and/or exclusion.

Discuss the role of the teacher as a model.
Identify and assess teacher’s roles and responsibilities in creating a more just world and equitable learning environment for every child.

Assess power dynamics and commitment to co-creation of anti-bias approaches that benefit all stakeholders in the learning environment.

Examine a variety of strategies for creating partnerships with parents through building mutual, collaborative relationships, and challenge bias and injustice in the lives of children.

Examine the impact of teaching choices in relation with family and children’s development.

Describe different strategies for creating partnerships with parents through building mutual, collaborative relationships, and to challenge bias and injustice in the lives of their children.

Evaluate inclusive classroom environments, materials and approaches that are developmentally, culturally and linguistically appropriate for specific groups of children.

Investigate the differences between individual prejudice and the systems within a society that support unequal access based on race, gender, economic class, ability, sexual orientation, religious beliefs, family groupings, culture, language and all "isms.

Discuss how teachers influence children’s lives

Examine the influence of personal history and bias

Model respectful and inclusive behaviors

Examine the diversity in communication patterns and the influence on educators

**Student Learning Outcomes:**

- Examine the impact of various societal influences on the development of children’s identity.
- Evaluate the ways that developmentally appropriate, inclusive and anti-bias approaches support learning and development.
- Evaluate the impact of personal experiences and social identity on teaching effectiveness.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Brain Development and Learning**

**CDEV229:**

2.0 Units

This class explores the development of the brain for children from birth through adolescence, and how behavior and learning are affected. Brain-based learning strategies will be used to teach new ways of approaching learning including how to understand diverse learning styles. This course is designed for educators, parents, and students who are interested in knowing more about how the brain operates and how the environment affects the brain. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**
2.0

General Education Plan:
Learning Outcomes

Course Objectives:
Describe basic brain anatomy and functions
Identify areas of the brain involved in learning
Develop lesson plans using knowledge of the brain
Evaluate windows of opportunity for learning potential
Critique the role of the body in learning
Evaluate the prenatal environment
Examine the effects of teratogens and give real-world examples
Discuss the effect of the prenatal environment on learning
Name critical and sensitive periods
Examine the neuronal development in children
Compare the information processing and brain-compatible models
Use imagery, and movement to learn brain information
Examine the Multiple Intelligences
Explore other learning models
Discuss the role of movement in learning
Use music to develop a learning module
Define the different types of memory and how this applies to learning
Examine the use of music as a learning strategy
Explore the role of the arts in development and learning
Identify the effects of early deprivation and maltreatment on development and learning
Define child maltreatment
Identify research and key findings that link childhood maltreatment to overall health and well-being
Define major types of stress
Examine the effects of poverty and poor nutrition on the brain
Discuss the effect of long-term synaptic pruning
Interpret the findings on the effects of poverty
Analyze the causes and solutions of children getting kicked out of preschool
Look at and interpret the social-emotional data for Orange County’s children
Examine acute and chronic childhood traumas
Discuss theories of play
Define the types of play
Discuss the role of play in development and learning
Examine the role that culture has on play and brain development
Create appropriate outdoor play lesson plans
Examine free play and learning
Compare and contrast forms of play
Discuss lesson planning versus free play
Assess multiple intelligence strengths
Examine gender differences
Discuss the role schools play in brain organization
Examine learning styles preferences and behavior
Design brain-compatible learning activities
Examine the role assessment plays in learning.
Create mock brain compatible assessments for skills and/ or developmental milestones
Discuss rubric
Define authentic assessment
Use incorporate learning foundation information into assessments
Examine standard assessment tools

**Student Learning Outcomes:**
- Compare and contrast the critical, sensitive, and optimal periods of development and learning strategies relevant to preschoolers and early learning environments.
- Apply brain-compatible theory to child observations, simulated scenarios, and/or interviews using investigative research methodologies.
- Identify and use 10 brain-compatible strategies relevant for teachers in early learning environments.

**Units & Hours**

**Minimum Units:**
2.0

**Maximum Units**
2.0

**Total Hours**
36.0

**Child Guidance and Classroom Management**

**CDEV230:**

2.0 Units

This course will explore expectations about young children’s behavior and the importance of teacher interaction skills in addressing and managing behavior issues. Behavior expectations will be defined, skills for managing various behaviors will be developed and a file of community resources in regards to behavioral issues will be created. It is advised that participants take this course in conjunction with working in a classroom setting. Field-work and state required immunizations may be required.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only
Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes

Course Objectives:
Discuss typical behaviors of various ages of children
Examine the role of brain development and maturity in behavior
Identify developmental milestones and the effect on behavior
Discuss strategies for managing atypical behaviors
Discuss “mistaken behaviors”
Debate medical intervention to control behavior in children in preschool
Examine the role of positive adult/child interactions in behavior management
Discuss the impact of genetic factors versus the environment
Discuss attachment and attunement
Define temperament
Discuss the hidden messages in social misbehavior
Examine the concepts of conscious discipline
Define and practice active listening
Discuss how to set limits
Discuss and practice developmentally appropriate guidance techniques
Discuss and practice supporting children to solve problems
Define personal multiple intelligence strengths
Examine the role of the classroom setting and environment on behavior
Discuss the effect of sitting still and other strict classroom rules on behavior
Examine research on lighting, ozone level, and color as it relates to behavior
Discuss the role of technology
Develop a file of community resources to help families manage atypical behaviors
Review activities that help assess and alleviate behavior difficulties
Evaluate the classroom environment for impact on behavior
Assess the role of the teacher in behavior difficulties
Develop a plan for transition times to prevent misbehavior
Develop coaching activities for children
Develop a resource file of appropriate responses to classroom misbehavior

Complete Behavior Management Survey

Student Learning Outcomes:
Examine and apply social and emotional developmental theories and its implications for managing behavior in the early learning setting.
Explain and manage difficult classroom behaviors using developmentally appropriate practices.

Units & Hours
**Minimum Units:**
2.0

**Maximum Units**
2.0

**Total Hours**
36.0

**Brain Compatible Guidance and Classroom Management for Early Learning Settings**

CDEV234:

2.0 Units

Introduction to the social and emotional development domain of the California Preschool Learning Foundations and Frameworks including the strands of self, social interaction, and relationships. Using current cognitive research, provide practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

**Requisites**

None

**Transferability & General Education Options**

Transferable:

Transferable to CSU only

**Weekly Lecture Hours:**

2.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Define the roles of the California Preschool Learning Foundations and Frameworks in the education of young children and their relationship to the Desired Results Developmental Profile (DRDP) and Developmentally Appropriate Practices (DAP)

Organize the learning environment to reflect the importance of emotional responsiveness, consistency, and continuity

Develop Daily experiences and routines as a vehicle to provide diverse opportunities for children to learn and use social skills

Discuss motivation research and attribution theory

Use knowledge of the social and emotional strands to select materials and plan meaningful experiences in the classroom to promote children's development of social and emotional awareness and skills.

Plan opportunities for young children to understand own emotions and to respond to the emotions of others.

Supports and contributes to an environment where children and adults feel safe to explore their emotional experiences and to receive support as needed.

Explore brain structures involved in self-control

Teach strategies for self-control thought self-talk and self-monitoring

Examine peer relationships

Complete a Strengths-based assessment
Explore the role of multiple intelligence talents, learning preferences and personality traits in developing self-esteem.

Discuss the role of motivation and mediation in managing classroom behavior.

Describe opportunities to include the practice of social skills and emotional regulation into daily routines and across all areas of the curriculum.

Use a variety of terms to describe children's individual emotional experiences.

Model appropriate expression of empathy and feelings.

Develop daily experiences and routines as a vehicle to provide diverse opportunities for children to learn and use social skills.

Support English language learners in developing English literacy skills while concurrently developing social skills and emotional regulation.

Create learning environments that support children and families' communication in their home language and English.

Define brain-compatible behavior.

Identify brain structures involved in behavior management.

Organize the learning environment to reflect the importance of emotional responsiveness, consistency, and continuity.

Develop daily experiences and routines as a vehicle to provide diverse opportunities for children to learn and use social skills.

Discuss motivation research and attribution theory.

Explore the biology of a healthy social and emotional brain.

Develop strategies for managing impulsive behavior.

Investigate pathways that process emotional signals.

Discuss the issues with managing the behavior of girls and boys.

Explore the merits of movement-based instruction.

Examine the biology of happiness and gratitude.

Explore genetic and environmental factors that may contribute to difficulty behavior.

Examine brain-compatible strategies to facilitate:

- Composure and Choices
- Encouragement
- Assertiveness
- Making choices
- Dealing with consequences
- Empathy

Examine brain-compatible strategies to manage common behavior issues.

Brain-compatible strategies to manage feelings and behavior: journals, art, vision boards, peer groups, positive affirmations, mentoring.

Discuss the role that stress and trauma play in mistaken behavior.

**Student Learning Outcomes:**

- Explain the roles of the California Preschool Learning Foundations and Frameworks in the education of young children and their relationship to the Desired Results Developmental Profile (DRDP), brain-compatible discipline and developmentally appropriate practice.
- Plan environments and experiences, based on brain-compatible strategies and observation of children to support children's development of self-regulation and social skills.
- Describe how teachers can collaborate with parents and other caregivers to support children's social and emotional development using current social-emotional research.

**Units & Hours**

**Minimum Units:**
Maximum Units
2.0

Total Hours
36.0

Engineering, Math and Science Strategies for Early Learning Environments
CDEV236:

3.0 Units

Introduces the science and math domains of the California Preschool Learning Foundations and Frameworks and design and engineering process including the strands of scientific inquiry, engineering and mathematical concepts, skills and process skills, the "Rational" model, strands of number sense, physical, life, and earth sciences and provides practical strategies for implementing the curriculum frameworks developed for these domains. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. Students will develop a personal file of appropriate math/science/engineering activities for early learning environments. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Explain roles of the CA Foundations and Frameworks: Science/Math and their relationship to the Desired Results Developmental Profile (DRDP), California Common Core State Standards for kindergarten and Content Standards for California Public Schools (kindergarten standards).

Explain brain-compatible learning

Examine the purpose of science and math curriculum in relation to the CA frameworks

Discuss the role of science and math learning in cognitive development

Discuss integrating science, math and engineering processes and concepts throughout the curriculum

Describe how the five math strands can be implemented into a daily routine, classroom experiences, and in multiple places in the environment.

Identify and practice science and math concepts and operations

Use knowledge of math and science processes and skills

Select materials, and plan meaningful experiences in the classroom to promote children's learning

Identify and apply language, multicultural, and gender equity understandings to teaching units

Develop math activity resource file

Describe the National Science Foundation's Content Standards (NSCS)
Explain appropriate early learning practices for science education

Use knowledge of the science strands to select materials and plan meaningful experiences in the classroom to promote children's learning and use of scientific language and concepts.

Collect, sort, and assemble basic science materials

Use non-traditional curriculum supplies from sources such as hardware stores, fabric stores, offices, etc.

Define and apply multicultural, language and gender considerations in selecting science materials for early learning environments

Develop science activity resource file

Suggest multiple ways to provide a math, science, and engineering rich environments.

Demonstrate how to use the CA Foundations and Frameworks to plan curriculum experiences for various interests and abilities of children in mathematics, science, and engineering.

Use DDRP to assess development and proficiency in science and math domains

Recognize and build on preschool children's natural interests in math, science, and engineering

Plan brain-appropriate science and math activities based on observation of children's interests, skills, and abilities

Use inquiry and exploration to foster problem-solving and math, science, and engineering reasoning

Use of daily experiences and routines as a vehicle to promote children's math, science, and engineering knowledge

Develop hands-on opportunities to explore math, science, and engineering concepts

Explore the impact language has on concept and skill development

Identify relevant and meaningful objects and materials to promote math, science, and engineering thinking

Integrate of math, science, and engineering-related materials into all areas of the classroom

Design and maintain indoor and outdoor learning environments to support children's participation in math, science and engineering-related content using open-ended, developmentally appropriate materials and activities that engage children based on observation

Select materials, books, and supplies that promote active mathematical, engineering and scientific inquiry across the curriculum

Use teachable moment experiences to support children's curiosity, motivation and learning in mathematical, science and engineering

Describe strategies to support English language learners in developing science, math and engineering knowledge as they concurrently acquire English.

Design strategies that incorporate knowledge of children's cultural and linguistic backgrounds and experiences into the curriculum.

Create opportunities for young dual-language learners to engage in a range of mathematical, science and engineering learning experiences using their home language and English.

Communicate with families and colleagues about children's mathematical, engineering and scientific literacy experiences while learning academic subjects at home and in the early education setting.

Collaborate with families to develop science, math, and engineering units supporting English language acquisition while respecting the role of the home language

Articulate the role of the teacher in the partnership with parents and other caregivers in supporting children's learning in science, engineering, and mathematics

Discuss how concepts develop

Examine relevant theories

Develop curriculum that promotes children's sense of identity by integrating home culture and language with learning science activities and environments.

Incorporate appropriate resources and include families to facilitate collaboration and support for children learning math, science and engineering concepts.

Teach parents and other caregivers to recognize and use teachable moments to foster mathematical and scientific literacy

Discuss and identify the suggested three truths pertaining to the concept of design
Examine the four stages of the rational model

Compare the three design strategies

Compare and contrast the engineering process with the scientific process

Develop a related engineering lesson plan for different age groups

Discuss challenges to students and teachers and how to minimize them

Identify and apply language, multicultural, and gender equity understandings to engineering units

Develop engineering resource file

**Student Learning Outcomes:**

- Explain the roles of the California Preschool Learning Foundations and Frameworks in the education of young children and their relationship to the Desired Results Developmental (DRDP), California Common Core State Standards for kindergarten, Content Stand
- Plan environments and experiences to support engineering, scientific, mathematical learning, based on the observation of children in classroom settings.
- Articulate the teacher's role in facilitating supportive relationships to collaborate with families to support children's learning in math, science, technology, engineering, arts, and math.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Adult Supervision and Mentoring in Early Care and Education**

**CDEV250:**

2.0 Units

Methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. Field trips and field-based assignments may be required.

**Requisites**

**Requisites:**

**Prerequisite**

*CDEV111B - Introduction to Curriculum for Young Children*

**OR**

**Prerequisite**

*CDEV116B - Care and Education for Infants and Toddlers (DS3)*

**OR**

**Prerequisite**

*CDEV120B - School-Age Child Care and Recreation Activities (DSS)*
Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes

Course Objectives:
Identify characteristics of effective leaders and mentors
Examine methods of supervision for student teachers and others in early childhood education settings
Examine the NAEYC code of ethical behavior
Identify the career levels of educators to plan professional development strategies
List four principles of supervision
Define characteristics of effective mentors/leaders
Examine brain-based theory in relation to leadership
Examine beliefs and values for including diverse populations
Research advocacy opportunities
Define time management and list the advantages and disadvantages
Discuss skills needed by 21st century leaders
Define the role of the 21st century manager (Coach-Teacher-Educator-Trainer)
Discuss the relationship of planning to time management
Demonstrate reflective practice, cultural competency, and ethical conduct
Critique and practice strategies to support adult learners
Examine the advantages and disadvantages of five mentoring models
Discuss the California Early Childhood Mentor Project
Discuss the art of giving and receiving feedback
Discuss the merits of reflection and metacognition
Define supervision and management
Critique the elements of coaching
Define active listening
Explain what is meant by effective communication
Create a philosophy of teaching statement
Discuss attributes of a reflective educator
Develop effective interactions and communication techniques
Read 12 Strategies for Solving Problems
Discuss the role expectations of directors, supervisors, and teachers
Compare and contrast adult learning theories
List ways to motivate learners
Discuss ways to create a positive climate
Examine the problem-solving approach to resolving conflict
Rehearse and role play conflict resolution scenarios
Develop a new employee orientation program
Construct a role-job description of center jobs
Rehearse new employee orientation scenario
Discuss norms or conduct and behavior that support collegiality and cooperation
Evaluate various personnel, program and environmental assessment tools
Differentiate between observation and assessment in early care programs
Use assessment and evaluation tools
Take learning style assessment and multiple intelligences survey
Examine program examination instruments

**Student Learning Outcomes:**

- Individualize mentoring and supervision strategies based on the roles and developmental stages of adult learners.
- Demonstrate competency in communication and reflective practices when working with diverse adult populations.
- Use a variety of personnel, program, and environmental assessment tools to inform leadership decisions.

**Units & Hours**

**Minimum Units:**
2.0

**Maximum Units:**
2.0

**Total Hours:**
36.0

**Analyzing and Applying Teacher Strategies in the Classroom**

**CDEV297:**

3.0 Units

This course provides students with essential skills to use a variety of current statewide assessment tools that evaluate the quality of early childhood programs and the developmental levels of young children. Students will identify strategies to help teachers use effectively curriculum that is intentional, child-focused, and content-driven. Students will also learn the value of including a variety of cultural groups, abilities, families, and English language learners in the early learning setting. Field trips and fieldwork assignments may be required. By the third week of the semester, verification of the state-mandated Tdap vaccination, MMR immunization, and negative TB test will be required.

**Requisites**

**Requisites:**

**Prerequisite**

CDEV111B - Introduction to Curriculum for Young Children

OR

**Prerequisite**

CDEV116B - Care and Education for Infants and Toddlers (DS3)
OR

**Prerequisite**

CDEV120B - School-Age Child Care and Recreation Activities (DS5)

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Examine the use of DDRP and ECERS

Explain goals of standardized assessments

Compare and contrast the outcomes of qualitative versus quantitative assessment

Identify and discuss cultural biases and how they may affect assessments

Examine the NAEYC standards for assessment

Examine and use common district, state, and nationally adopted assessment tools

Select appropriate assessment tools for child’s needs

Consider and use a variety of methods for collecting, organizing, and recording data based on observations

Identify licensing requirements for appropriate classroom learning strategies

Outline your understanding of various assessment tools in the early learning field

Identify various laws and policies affecting early learning settings

Explain the types and purposes of developmentally appropriate assessment

Discuss legal and ethical responsibilities related to assessment

Explain high quality in early learning environments

Describe the importance of environmental changes upon children’s growth, development, and behavior

Define quality and effective interactions

Use assessment data to evaluate teaching practices, curriculum, and environments.

Compare assessment results collected over multiple points in time to document student’s progress

Identify issues and trends relating to ECE, educational experience, and curriculum for children

Practice writing objective, non-biased observation records.

Explain the types and purposes of developmentally appropriate assessment.

Discuss legal and ethical responsibilities related to assessment.

Demonstrate effective communication practices that include cultural and linguistic responsiveness.

Discuss bias related issues and learning opportunities.

Brainstorm appropriate strategies for dealing with biases.

Create persona dolls and talking sticks.
Use assessment data to evaluate teaching practices, curriculum, and environments.

Practice writing objective, non-biased observation records.

Evaluate the use of Universal Design for Learning (UDL) in ECE programs.

Examine the role of culture in assessment and evaluation

Brainstorm strategies to improve family/school partnerships

Define roles and responsibilities of team members

Use formal and informal assessments

Examine the effect of socioeconomic status on development.

Discuss parenting strategies

Design and implement a unique way to share and showcase the culture and unique assets of the families in the classroom

Examine stress-causing factors for families

Develop family assessment survey to identify how parents/caregivers respond to a family crisis

Identify the infrastructure of resiliency, social connections and the unique culture and assets of families

Use assessment data to evaluate teaching practices, curriculum, and environments

Describe the importance of social/emotional development as it relates to children's educational growth

Explain high quality in ECE learning environments

Select tools for different purposes

Examine various methods for collecting data

Identify community resources for advocacy

Examine legislation that supports children and families

Outline a progressive and extensive study of children's development

Examine personal qualities for successful teaching and leading

Develop plan and strategies for dealing with difficult peer interactions

Discuss group team process

Examine differentiated instruction

Review and explain the Protective Factors Framework .pdf document

Assess learning preferences and personality attributes for teaching and leadership

Assess level of critical thinking and problem-solving

Review attributes of Universal Design for Learning in the early learning setting

Create UDL curriculum and lesson plan for early learning settings

Review referral guidelines

Create a mock IEP

**Student Learning Outcomes:**

- Use a variety of tools and methods to collect data in ethically responsible, and developmentally appropriate ways.
- Use assessment outcomes and data to guide instruction, teaching strategies, design environments, and plan curriculum to meet individual needs.
- Use assessments and data outcomes to involve families and professionals to meet the needs of children and support development.

**Units & Hours**

**Minimum Units:**
Maximum Units
3.0

Total Hours
54.0

Introductory Chemistry
CHEM100:

4.0 Units

This course prepares students for Biology and Chemistry 200 by exploring the basic concepts of matter such as: atomic structure, formulas, equation writing, nomenclature, gases, and kinetic theory. Properties of solutions and the mole concept in quantitative chemistry will be emphasized.

Requisites

Requisites:

Prerequisite

MATH080 - Intermediate Algebra

Outcomes

- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite

MATH085 - Intermediate Algebra with Integrated Support

Outcomes

- Identify different types of equations and solve by applying appropriate algebraic methods.
- Solve a variety of real-world applications using different types of functions and/or equations.
- Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite

Qualifying profile from the mathematics placement process.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:

Local - Plan A

- Area A: Natural Sciences

CSU GE - Plan B

- Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

Course Identifier (C-ID)
Chemistry

Learning Outcomes

Course Objectives:
Solve conversion problems using dimensional analysis and significant figures.

Distinguish between chemical and physical properties and between elements and compounds.

Write formulas of compounds, write balanced chemical equations and predict products from given reactants based on reaction type.

Calculate amounts of reactants and products based on balanced chemical equations.

Write electron configurations of different atoms and predict atomic properties based on the position of the element in the periodic table.

Recognize the type of bonding in different compounds and types of bonding.

Draw Lewis structures.

Predict molecular shapes and geometry.

Solve gas problems using gas laws and stoichiometry.

Explain properties of solids and liquids.

Identify intermolecular forces and its effect on properties.

Calculate concentration of solution using different methods.

Apply stoichiometry to solution problems.

Gain some knowledge in following laboratory techniques. Concept of experiment design is stressed. Students should be able to:

Follow the experimental procedure

Collect valid scientific data

Draw a conclusion As much as possible, the laboratory exercises will assist the classroom learning.

Student Learning Outcomes:
Describe chemical events through utilization of equations and solve problems using chemical concepts
Perform experiments with given directions and collect valid scientific data

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

General Chemistry A
CHEM200A:

5.0 Units
This is the first semester of a year-long sequence covering the fundamental principles and concepts of chemistry and is intended for students studying physical science, life science, and engineering. The topics are to include, but not limited to, atomic structure, quantum theory, periodic properties, stoichiometry, oxidation-reduction, molecular structure and bonding, gas laws, states of matter, solutions, chemical kinetics and chemical equilibrium. This course is a requirement to earn a degree in the physical science, life science, and engineering majors.

Requisites

Requisites:

Prerequisite

CHEM100 - Introductory Chemistry

or passing score on the chemistry placement test

AND

Prerequisite

MATH080 - Intermediate Algebra

Outcomes

Identify different types of equations and solve them by applying the appropriate algebraic methods.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite

MATH085 - Intermediate Algebra with Integrated Support

Outcomes

Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite

Qualifying profile from the mathematics placement process.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities
Course Identifier (C-ID)
Chemistry

Learning Outcomes

Course Objectives:
- Write formulas from names of compounds
- Write balanced chemical reactions
- Compute calculations that deal with amounts in a chemical reaction
- Compute quantities of volume, pressure, temperature, and/or moles of gas using gas laws
- Relate the total pressure of a mixture of gases with the pressure of each individual gas
- Predict the relationship of diffusion and diffusion of different gases
- Write electron configuration of elements
- Relate an atom's structure to its properties
- Correlate quantum numbers to the electron configuration
- Predict properties of elements by understanding periodic trends
- Diagram Lewis structures for ionic and covalent compounds
- Predict molecular shape
- Predict molecular polarity
- Infer molecular properties using hybridization and molecular orbitals models
- Determine the major intermolecular forces and their affect on the physical properties of substances
- Relate the energy required for the change of state of matter
- Interpret information from a phase diagram
- Compute the concentration of solutions
- Predict and compute the change in solvent properties based upon the amount of solute in a solution
- Determine the rate law of a reaction
- Compute the activation energy of a reaction
- Determine the mechanism of a reaction
- Explain the effect of a catalyst on a reaction
- Perform an experimental procedure
- Organize quantitative data and observations
- Compute with quantitative data
- Interpret quantitative data and observations to generate a conclusion

Student Learning Outcomes:
- Identify the essential parts of a problem and apply known chemical concepts in solving the problem
- Write in scientific terms and explain observed scientific phenomenon using the language of Chemistry
- Perform experiments with given directions, collect valid scientific data, analyze the data and interpret laboratory results

Units & Hours

Minimum Units:
5.0

Maximum Units:

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321a6eb1b18
1293/2244
Total Hours
162.0

Honors General Chemistry A
CHEM200AH :

5.0 Units
An in-depth Honors study of the fundamental principles and concepts of chemistry. This course is intended for students studying physical science, life science, and engineering. The topics are to include, but not limited to, atomic structure, quantum theory, periodic properties, stoichiometry, oxidation-reduction, molecular structure and bonding, gas laws, states of matter, solutions, chemical kinetics and chemical equilibrium. This course is a requirement to earn a degree in the physical science, life science, and engineering majors.

Requisites
Requisites:

Prerequisite
CHEM100 - Introductory Chemistry
or passing score on the chemistry placement exam
AND

Prerequisite
MATH080 - Intermediate Algebra

Outcomes
Identify different types of equations and solve them by applying the appropriate algebraic methods.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite
Qualifying profile from the mathematics placement process.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

Course Identifier (C-ID)
Chemistry

Learning Outcomes

Course Objectives:
Write formulas from names of compounds
Write balanced chemical reactions
Compute calculations that deal with amounts in a chemical reaction
Compute quantities of volume, pressure, temperature, and/or moles of gas using gas laws
Relate the total pressure of a mixture of gases with the pressure of each individual gas
Predict the relationship of diffusion and diffusion of different gases
Write electron configuration of elements
Relate an atom's structure to its properties
Correlate quantum numbers to the electron configuration
Predict properties of elements by understanding periodic trends
Diagram Lewis structures for ionic and covalent compounds
Predict molecular shape
Predict molecular polarity
Infer molecular properties using hybridization and molecular orbitals models
Determine the major intermolecular forces and their affect on the physical properties of substances
Relate the energy required for the change of state of matter
Interpret information from a phase diagram
Compute the concentration of solutions
Predict and compute the change in solvent properties based upon the amount of solute in a solution
Determine the rate law of a reaction
Compute the activation energy of a reaction
Determine the mechanism of a reaction
Explain the effect of a catalyst on a reaction
Perform an experimental procedure
Organize quantitative data and observations
Compute with quantitative data
Interpret quantitative data and observations to generate a conclusion
Student Learning Outcomes:
Identify the essential parts of a problem and apply known chemical concepts in solving the problem
Write in scientific terms and explain observed scientific phenomenon using the language of Chemistry
Perform experiments with given directions, collect valid scientific data, analyze the data and interpret laboratory results

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
162.0

General Chemistry B
CHEM200B:

5.0 Units
Continuation of Chemistry 200A, including but not limited to ionic equilibrium, acid and base equilibrium, thermodynamics, electrochemistry, nuclear chemistry, organic chemistry and descriptive chemistry.

Requisites
Prerequisite
CHEM200A - General Chemistry A

OR

Prerequisite
CHEM200AH - Honors General Chemistry A

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

Course Identifier (C-ID)
Chemistry

Learning Outcomes
Course Objectives:
solve various types of equilibrium problems
predict the shift of reaction at equilibrium based on Le Chatelier’s principle.
differentiate strong acids and bases from weak acids and bases
calculate pH of a solution
identify buffer solutions
solve the pH calculation for buffers
solve for pH in titrations types
solve for solubility equilibrium, solubility products and complex ion equilibrium.
define thermodynamic terms
use the laws of thermodynamics to solve the problems.
diagram a galvanic or electrolytic cell
calculate cell potentials as well as various quantities in electrolytic cells
relate thermodynamic terms to cell reactions.
correlate the properties and reactivity of a main group elements 1A-8A.
write electron configurations
explain the properties of transition metals
correlate properties to photon absorption/color of complex ions
name coordination complexes
identify types of isomerism.
write and balance nuclear equations
apply all quantitative aspects of decay laws
compare fission and fusion.
identify and name main carbon skeletons and different functional groups.

Follow experimental procedures
Collect data and observations
Perform needed calculations
Draw valid conclusions

Student Learning Outcomes:
Identify the essential parts of a problem and apply known chemical concepts in solving the problem.
Write in scientific terms and explain observed scientific phenomenon using the language of chemistry.
Act with experimental competency, collect and analyze data, identify sources of error and interpret laboratory result.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
162.0
Organic Chemistry A
CHEM280A :

5.0 Units

This course is the first semester of a year of organic chemistry. This course will cover structure and bonding, nomenclature, descriptive chemistry, reaction mechanisms, synthetic methods and IR spectroscopy for different functional groups including alkanes, alkenes, alkynes, alkyl halides, organometallics, alcohols, and ethers. Laboratory will include separations/purifications identification, and simple syntheses.

Requisites
Requisites:
Prerequisite

CHEM200B - General Chemistry B

or Chemistry 229

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
Course Identifier (C-ID)
Chemistry

Learning Outcomes
Course Objectives:
Identify hybridization of various atoms
Predict molecular shape and geometry and draw valid Lewis structure
Draw molecular orbital representation of bond formation
Draw valid resonance structures
Calculate formal charges
Determine bond polarity based on electronegativity difference
Determine acid and base properties of various organic molecules
Draw and name various alkanes or cycloalkanes
Predict products from various alkane reactions
Draw alkane conformations and compare them in energy
Draw various cycloalkane conformations and compare their stability
Identify chiral centers
Determine the configuration of chiral centers
Identify enantiomers and diastereomers
Draw curved arrows to represent reaction mechanism
Draw energy diagram to represent various steps in the reaction and their energies
Understand the difference between kinetic control and thermodynamic control
Predict products from reactions
Develop a synthetic pathway for synthesis of required materials
Draw various reaction mechanisms
Predict products from reactions
Develop a synthetic pathway for synthesis of required materials
Draw various reaction mechanisms
Predict products from reactions
Develop a synthetic pathway for synthesis of required materials
Compare and contrast conditions needed for each reaction mechanism
Explain stability for each reaction intermediate and reaction mechanism
Do retrosynthetic analysis
Predict products of multi-step syntheses
Provide all reagents necessary to make a compound from a given starting material
Predict products from reactions
Develop a synthetic pathway for synthesis of required materials
Write different reaction mechanisms
Explain IR spectroscopy theory
Identify functional groups in an IR spectrum
Demonstrate an understanding of proper laboratory experiment and safety protocols.
Follow published protocols to synthesize organic compounds.
Perform physical and spectroscopic analyses of materials and compare these results with those expected for the products involved.
Write-up laboratory report that requires procedures, results, data analysis and conclusion.
Compare and contrast the different techniques.

Student Learning Outcomes:

- Apply major concepts of chemical reactivity of organic compounds to solve problems
- Write in scientific terms and interpret patterns of reactivity on the basis of mechanistic reasoning
- Follow published reaction protocols to synthesize, isolate, purify and characterize compounds using standard laboratory equipment and modern instrumentation and then interpret laboratory results

Units & Hours

Minimum Units: 5.0

Maximum Units: 5.0

Total Hours: 162.0

Organic Chemistry B
CHEM280B :

5.0 Units
This course is the second semester of a year of organic chemistry (continuation of Chemistry 200A). It includes units on structure elucidation, aromatic compounds, carbonyl compounds, carboxylic acids and their derivatives, amines, and classes of biologically important compounds. More complex synthetic routes are explored. Laboratory work includes multi-step syntheses and unknown identification. Reaction mechanisms and use of spectroscopic techniques continue to be emphasized. This course is intended for science majors.

**Requisites**

**Requisites:**

**Prerequisite**

CHEM280A - Organic Chemistry A

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

5.0

**General Education Plan:**

**Course Identifier (C-ID)**

Chemistry

**Learning Outcomes**

**Course Objectives:**

Analyze IR spectra

Analyze mass spectra

Analyze U.V. spectra

Analyze proton and C-13 spectra

Analyze combined spectra to determine structure of a given formula

Name aromatic compounds

Explain the exceptional stability of aromatic compounds

Predict aromaticity

Write EAS mechanism

Predict product of various reactions

Explain the effects of substituents

Predict products from reactions

Develop a pathway for synthesis of required materials

Draw various reaction mechanisms

Name various acids and their derivatives

Predict products from reactions

Develop a pathway for synthesis of required materials

Draw various reaction mechanisms

Predict products from reactions

Develop a pathway for synthesis of required materials

Draw various reaction mechanisms
Name compounds from this class
Predict products from reactions
Develop a pathway for synthesis of required materials
Draw various reaction mechanisms
Identify biolocules
Compare and contrast the different classes of biomolecules
Demonstrate an understanding of proper laboratory experiment and safety protocols
Follow published protocols to synthesize organic compounds
Perform physical and spectroscopic analyses of materials and compare these results with those expected for the products involved
Write up of laboratory report that requires description of procedures followed and results obtained and an analysis of why the particular procedures were followed and what changes might bring about better results
Compare the different techniques and choose which technique is best in a particular situation.
Separate, Purify and Identify general unknowns based on physical, chemical and spectral properties

**Student Learning Outcomes:**
- Apply major concepts of chemical reactivity of organic compounds to solve problems
- Write in scientific terms and interpret patterns of reactivity on the basis of mechanistic reasoning
- Perform experiments with published protocols, use standard laboratory procedure and instruments to analyze data to determine the identity of an unknown organic compound

**Units & Hours**

**Minimum Units:**
5.0

**Maximum Units**
5.0

**Total Hours**
162.0

**Elementary Chinese I**

**CHNS101:**

5.0 Units

Practice and integration of pronunciation, grammar, vocabulary, and common idioms through listening, speaking, reading, and writing to begin to express thoughts orally and in writing. The class will also introduce students to cultural, social, and linguistic items appropriate to Chinese-speaking societies. Chinese 101 is equivalent to two years of high school Chinese.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
5.0

**General Education Plan:**
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 6: Language Other than English

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Compare the sound system and structure of the language and then respond to linguistic, structural and cultural situations.

Use and develop spoken Chinese with increased accuracy and proper intonation.

Acquire beginning level vocabulary and develop basic fluency of expression.

Apply grammar sufficiently to communicate orally and in writing in a variety of meaningful real life situations moving toward the intermediate level of proficiency.

Describe the differences and similarities between Chinese and other cultures.

Identify fundamental cultural values in language usage.

Explain how language reflects cultural patterns and traditions.

Apply the basics of writing Chinese characters in combination with the Pinyin system.

Compose fundamental Chinese sentences about a limited variety of meaningful topics with appropriate beginning level vocabulary, idiomatic expressions, syntax, and grammar using an adequate range of Chinese characters.

Identify main and supporting ideas.

Relate with a basic conversation appropriately and spontaneously about a limited variety of meaningful real life situations.

Recognize variations of Chinese pronunciation.

Use a variety of responses while utilizing a basic knowledge of pronunciation, grammar and vocabulary and culture common in everyday situations.

Use variations of Chinese pronunciation and alphabet with accuracy and proper intonation.

Use listening comprehension skills.

Student Learning Outcomes:
Demonstrate understanding of the grammar, vocabulary, commonly used expressions and culture of Chinese speakers to communicate orally using appropriate pronunciation and intonation at the beginning level.

Integrate grammar, vocabulary, commonly used expressions and phrases, Pinyin and Chinese characters and culture of Chinese speakers to communicate in writing at the beginning level.

Apply effectively, vocabulary, grammar, commonly used expressions, Pinyin and Chinese characters and culture of Chinese speakers to derive meaning of implicit and explicit written material at the beginning level.

Apply vocabulary, grammar, commonly used expressions, the culture of Chinese speakers and understanding of the sound and stress system to recognize and comprehend spoken messages at the beginning level.

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
Elementary Chinese II
CHNS102:

5.0 Units

Continuation of Chinese I which furthers training in language skills providing avenues for the expression of ideas in both oral and written forms and provides enhanced study of cultural and socio-linguistic knowledge aspects appropriate to Chinese-speaking societies. Chinese 102 is equivalent to the third year of high school Chinese.

Requisites
Requisites:
Prerequisite

CHNS101 - Elementary Chinese I

or two years of high school Chinese with a grade of C or better

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6: Language Other than English

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:

Compare the sound system and structure of the language and then respond to linguistic, structural and cultural situations.

Use and apply spoken Chinese with accuracy and proper intonation.

Use and acquire beginning level II vocabulary and develop basic fluency of expression.

Apply the control grammar sufficiently to communicate orally and in writing in a variety of meaningful real life situations moving toward the intermediate level of proficiency.

Compare and contrast Chinese culture with others.

Outline fundamental cultural values in language usage.

Explain how language reflects cultural patterns and traditions.

Explain Chinese geography and its reflection in art history.

Use a wider range of Chinese Characters.

Produce complex paragraphs, dialogues and simple guided composition.
Apply appropriate level of syntax and grammar.

Identify the main and supporting ideas.

Demonstrate an understanding of the explicit and implied meanings in written material in a variety of ways.

Compose answers to content questions using the target language.

Articulate crucial aspects of tone sounds and stress patterns to identify the differences in meaning.

Use communication and expanded vocabulary through discussions and oral presentations.

Paraphrase and summarize written work.

Identify and apply stress patterns and sounds.

Relate to simple connected discourses.

Identify the main and supporting ideas in oral messages.

Classify variations of Chinese pronunciation and alphabet with accuracy and proper intonation.

Compose informal and formal messages.

Use a variety of responses while applying the basic knowledge of pronunciation, grammar and vocabulary common in everyday situations.

Apply and develop the four skills: Listening, speaking, reading and writing.

**Student Learning Outcomes:**

- Demonstrate understanding of the sound and stress system of Chinese, the grammar, vocabulary, commonly used expressions, and the culture of Chinese speakers to communicate orally using appropriate pronunciation and intonation on designated topics at the elementary level II.
- Integrate grammar, vocabulary, commonly used expressions and phrases, Pinyin and Chinese characters and culture of Chinese speakers to communicate in writing at the elementary level II.
- Apply effectively, vocabulary, grammar, commonly used expressions, Pinyin and Chinese characters and culture of Chinese speakers to derive meaning of implicit and explicit written material at the elementary level II.
- Apply vocabulary, grammar, commonly used expressions, the culture of Chinese speakers and understanding of the sound and stress system to recognize and comprehend spoken messages at the elementary level II.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

108.0

**History of Film to 1945**

**CINE103:**

3.0 Units

A survey course exploring film as an art form and developing an appreciation of historical, artistic and technical advances from the 1890s to 1945. Former Title: TV/Video Communications 103, History of Film to 1945 (2018)

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A  
Area C: Humanities

CSU GE - Plan B  
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C  
Area 3A: Arts

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Demonstrate and analyze the concept of movie making and how films were invented globally, to include the works of the Lumieres, Edison, Melies, Porter, etc.

Demonstrate an understanding of the language of film, by focusing on the works of Griffith, DeMille, and early film stars: Pickford, Fairbanks, Swanson, Valentino, etc.

Analyze and discuss the contributions of Lang, Mumau, Lubitsch, Gance, etc.

Explore and analyze the techniques of Chaplin, Keaton, Lloyd, etc; and view, and analyze “The Gold Rush”.

Analyze and develop a perspective on “The Jazz Singer” and early talkies; to include a discussion and understanding of Hollywood scandals and the need for Will Hays. Develop an understanding of the Studio System.

Develop and discuss an understanding of the contributions of Busby Berkeley, to include viewing and analyzing “42nd St.”

View, analyze and discuss the “Roaring Twenties”.

Discuss and understand the contributions of John Ford; to include viewing and analyzing “Stagecoach”.

Developing an understanding of the contributions by Preston Sturges and Frank Capra; and, view and analyze “It Happened One Night”.

View and analyze “Yankee Doodle Dandy” as an example of biography films.

Develop an understanding of horror films like “Dracula”.

View and analyze “Making of Gone with the Wind” and “Wuthering Heights”.

Demonstrate an understanding of Hollywood’s contribution to the war effort; and, view and analyze “Casablanca”.

Demonstrate an understanding of the genius of Orson Welles and “Citizen Kane”.

View, discuss and analyze “Robin Hood” as an example of the development of color.

View, discuss and analyze “Double Indemnity” while developing an understanding of the darker side of film making.

Student Learning Outcomes:

Trace the rise of the Hollywood studios and “the studio system” from their beginnings through their peak in the early 1940s including the “star system” and vertical integration of production, distribution and exhibition.

Trace the history, development and tropes of Hollywood film genres including but not limited to Musicals, Horror, Romantic Comedies and Westerns.

Units & Hours

Minimum Units:
Maximum Units
3.0

Total Hours
54.0

History of Film From 1945 to Present
CINE104:

3.0 Units

A lecture/visual aids course exploring film as an art form and developing appreciation of historical, artistic and technical advances.
Previous Title: TV/Video Communications 104, History of Film From 1945 to Present (2018)

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3A: Arts

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Analyze early film history and the rise of the Hollywood Studio System.
Compare American Social Realism films like “Best Years of our Lives” to Italian Neo-Realism works directed by DeSica and Rosselini.
Explain why the Studio System begins to fade by 1950s.
Analyze films of the 1950s
Study and outline the styles of global film directors of the 1950s including: Bergman, Fellini, Ray, and Kurosawa
Distinguish between the Japanese and U.S. versions of the “Seven Samurai”
Demonstrate an understanding of the relationship of world politics to filmmaking
Provide and critique examples shown like “High Noon” and “Dr. Strangelove”
Develop and discuss they ways movies and rock music are combined to seek out a more affluent young audience
Discuss and analyze the James Dean cult and Method Acting explored in “Rebel Without a Cause”
Develop an understanding of the historical significance of Rodgers & Hammerstein's work and other musicals

View and critique "West Side Story"

Develop an understanding of the ingredients in French New Wave films of Truffaut, Godard; and English films of Lester and Richardson

Develop the Auteur Theory

View and discuss clips comparing Truffaut with Hitchcock

Examine the impact of French New Wave on Vietnam War era films like "Bonnie and Clyde" and "The Graduate"

Develop an understanding of the style and structure of "Blaxploitation" and Black-related comedies; and the later works of Spike Lee and John Singleton

Demonstrate an understanding of the development and coming of age for Lucas, Coppola, Scorsese, and Spielberg

Discuss and analyze the directors' blockbusters

Analyze the evolution of mainstream directors as filmmaking further evolves into new genre of Independents

Student Learning Outcomes:

- Discuss the establishment of the production code and self-censorship of Hollywood studio films in the early 1930s through its replacement by the rating system of the late 1960s and how film content and subject matter was affected by both systems.
- Trace the history of motion picture technology from the earliest days of the silent era through the development of digital and 3-D formats of today.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Mass Media and Society

CINE105:

3.0 Units

Exploration of the history, effects, and role of mass media in U.S. society. Examines major media forms (TV, radio, film, newspapers, magazines, ads, internet) in our information-conscious culture. Field trips may be required. Previous Title: TV/Video Communications 105, Mass Media and Society (2018)

Requisites

Requisites: None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A

Area C: Humanities
CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Journalism

Learning Outcomes

Course Objectives:
Understand and analyze the size and scope of media's technological impact on the world today and tomorrow, including use of internet.

Review communications from primitive cultures up to the satellite age

Demonstrate an understanding media terminology research emphasizing source credibility and the inter-media competition for an audience

Develop an understanding of the effect of media on our social habits, those we idolize, our philosophy and religion

Develop an aesthetic approach to critiquing media's impact on our culture

Analyze the newsgathering media in these historical eras: 1690–1790 — role of colonial papers in securing press freedoms, 1790–1830 — political press domination, 1830–1900 — The Penny Press and personal journalism, and 1900–present — the press as big business.

Review and develop an understanding of shifts in trends from 1740s to present involving periodicals going from mass appeal to specialized formats.

Compare and analyze radio's Golden Age of the 1920s, 1930s, 1940s, with the current medium’s current musical and talk formats.

Demonstrate and understanding of the TV business from its roots in the 1920s until today.

Review and analyze the U.S. and world filmmaking business from the 1890s to the present.

Develop an understanding of the computer's role in new media technology.

Analyze the way commercials are made and the impact of ads on our consumer culture.

Compare press-government relations worldwide with emphasis on uniqueness of the U.S.'s First Amendment, libel, copyright, and pornography laws.

Develop an understanding of the special focus on the press and the presidency.

Review and analyze the way in which women and minorities have been treated by the mass media.

Review and analyze career information relating to jobs in journalism, broadcasting, film and cable.

Student Learning Outcomes:

Explain the development of news gathering in the U.S. from the Penny Press and Yellow Journalism through the heyday of TV network news to the 24 hour cable new cycle and internet news aggregators of today.

Discuss how technology has changed the business of Mass media today with the advent music piracy, news aggregators and social media infringing upon and often replacing the traditional media platforms of print and broadcast.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0
Great Directors
CINE107:

3.0 Units

This class involves a survey and critical analysis of films by various film directors within the Film Industry. The class will deconstruct a film director's work (instructor's choice) throughout the course of the semester, focusing specifically on technical, thematic and socio-cultural similarities that span the director's career. Students will be expected to articulate specific insights into the director's work through essay writing and exams. Emphasis on auteur theory, film style and visionary contributions to film history.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3A: Arts

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Evaluate the evolving thematic, narrative, and stylistic signatures of Bill Wilder
Examine the evolving thematic, narrative, and stylistic signatures of John Ford.
Discuss how Hitchcock's style and theme influence succeeding directors in Cinema.
Describe Capra's use of sentiment in his evolving thematic, narrative, and stylistic signatures.
Compare and contrast how Kurasawa influences and is influenced by western cinema.
Analyze Kubrick's technological themes in his use of narrative and stylistic signatures.
Examine the evolving thematic, narrative, and stylistic signatures of Martin Scorsese.
Evaluate the evolving thematic, narrative, and stylistic signatures of Steven Spielberg.
Analyze and summarize the thematic, narrative, and stylistic signatures of Woody Allen.
Define and describe the stylistic signatures of Ridley Scott.
Appraise the evolving thematic, narrative, and stylistic signatures of The Coen Bros.
Compare and contrast the evolving thematic, narrative, and stylistic signatures of A. Iñárritu, A. Cuaron, G. del Toro.
Summarize and examine Eastwood's thematic approach to cinema.
Analyze and identify the evolving thematic and stylistic signatures of Tim Burton.
Compare the evolving thematic, narrative, and stylistic signatures of Christopher Nolan.

**Student Learning Outcomes:**
- Evaluate and identify the works of major American and International film directors.
- Analyze the evolving thematic, narrative, and stylistic signatures of a particular film artist.
- Discuss and analyze the major film works by individual artists, situating them within the collaborative filmmaking process.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Film Genres**

**CINE108:**

3.0 Units

Critical survey of a variety of film genres, including gangster, musical, comedy, film noir, Westerns, and others. Hollywood, independent and international examples, from different time periods.

**Requisites**

None

**Transferability & General Education Options**

Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area C: Humanities

**CSU GE - Plan B**
- Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**
- Area 3A: Arts

**UC Comparable Transfer Courses**
- UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**
- Discuss and analyze the major film works, studios and artists contributing to the development of film genres.
- Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected horror films, and interpret their thematic and philosophical preoccupations.
- Examine how various forms of censorship impact genre films and trace the development of technology and its impact on the genre and how the genre mirrors and shapes society.
Discuss and analyze the major film works, studios and artists contributing to the development of film genres.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected horror films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship impact genre films and trace the development of technology and its impact on the genre and how the genre mirrors and shapes society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Gangster genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Gangster films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship impact Gangster films and trace the development of technology and its impact on the genre and how the genre mirrors and shapes society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Western genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Western films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship impact Western films and trace the development of technology and its impact on the genre and how the genre mirrors and shapes society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Film Noir genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Film Noir films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship affect Film Noir films and trace the development of technology and its impact on the genre and how the genre mirrors and shapes society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Musical film genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Musicals, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship affect Musical films and trace the development of technology and its impact on the genre and how the Musicals mirror and shape society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Animation film genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Animation films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship affect Animation films and trace the development of technology and its impact on the genre and how the Musicals mirror and shape society.

Discuss and analyze the major film works, studios and artists contributing to the development of the War film genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected War films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship affect War films and trace the development of technology and its impact on the genre and how the Musicals mirror and shape society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Romantic/Screwball Comedy film genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Romantic/Screwball Comedy films, and interpret their thematic and philosophical preoccupations.

Examine how various forms of censorship affect Romantic/Screwball Comedy films and trace the development of technology and its impact on the genre and how the Musicals mirror and shape society.

Discuss and analyze the major film works, studios and artists contributing to the development of the Fiction/Fantasy film genre.

Examine the conventions of narrative, subject matter, plot, character, setting, tropes, and style of selected Fiction/Fantasy films, and interpret their thematic and philosophical preoccupations.
Examine how various forms of censorship affect Fiction/Fantasy films and trace the development of technology and its impact on the genre and how the Musicals mirror and shape society.

**Student Learning Outcomes:**
- Describe the distinguishing characteristics of various film genres.
- Describe the ways various film genres have changed throughout film history.
- Describe the ways technology and censorship have affected film genres.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Screenwriting for Digital Media**

**CINE122:**

3.0 Units

Writing scripts for digital media. Scriptwriting fundamentals, format, dramatic structure; and applying skills to use in the form of non-narrative and narrative scripts for clients and employers. Previous Title: TV/Video Communications 122, Screenwriting for Digital Media (2018)

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**
- Define the elements of a digital screenplay.
- Recognize and articulate the elements of a successful digital scene
- Distinguish between narrative and non-narrative digital screenwriting
- Correctly format a script using cloud based screenwriting software
- Utilize conflict to create engaging narrative and non-narrative scenes
- Compose scenes in which the audience is given the information they need to understand the larger narrative
- Write scenes which share details with the audience that the characters of the narrative are not aware (creating heightened tension)
- Incorporate inanimate objects to heighten the drama in both narrative and non-narrative scripts
Demonstrate the ability to create drama using pre-existing scenes of digital footage
Shape that footage into a compelling narrative structure
Demonstrate the ability to write engaging and informative scenes intended for corporate training
Construct a music video treatment (1 page proposal) for a corporate music label
Demonstrate the ability to heighten the drama of their narrative or non-narrative scripts by enlisting the techniques of inversion - denying a character one of their senses
Collaborate and construct a pilot episode for a scripted narrative or non-narrative web series
Construct a proposal for an online video game or smart phone app game
Demonstrate the ability to prepare a script for production
Demonstrate the ability to implement revisions based on peer and client criticism
Interpret and solve issues client has with the production
Register ideas, locate legal representation, and analyze basic writing contracts

Student Learning Outcomes:
  Articulate the necessary components of a successful digital video script.
  Identify and analyze scriptwriting techniques.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Digital Media Production
CINE124:
3.0 Units

This course introduces Digital Single Lens Reflex (DSLR) video acquisition, dual channel audio acquisition, lighting and non-linear digital editing equipment. Students will use professional procedures from pre-production through post-production to develop, produce and execute to completion various commercial and industrial video formats applicable to digital production. Previous Title: TV/Video Communications 124, Introduction to Digital Media Production (2018)

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Demonstrate an understanding of introductory non-linear editing programs.
Practice and demonstrate operation of Digital Single Lens Reflex cameras.
Practice and demonstrate editing digital single lens reflex methodologies, reflected through a video project.
Practice and demonstrate lighting and audio dialogue recording.
Practice and demonstrate NLE dialogue editing.
Analyze, categorize, assess and compare elements of video and film.
Develop, design and produce a video commercial.
Develop, design and evaluate a promotional video.
Develop, design and evaluate a promotional video.
Develop, design and evaluate a promotional video.
Develop, design and produce a Music Video.
Develop, design and evaluate a promotional video.

Student Learning Outcomes:
Operate DSLR, dual track audio and location lighting video production equipment.
Edit digital video utilizing non-linear editing software.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Film Appreciation
CINE130:

3.0 Units

This course provides a background in understanding the aesthetics used in television, motion pictures, video games, and digital media and explores the development and impact of mediated messages. The interplay and structuring of elements of sight, sound, and motion as message components, and their capacity to generate impressions, stimulate feelings, shape attitudes, and convey information are examined.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Examine and evaluate how the use of light and shadow generate impressions, stimulate feelings, shape attitudes, and convey information in film and TV.

Examine and evaluate how the use of screen size, aspect ratio, and composition generate impressions, stimulate feelings, shape attitudes, and convey information in film and TV.

Examine and evaluate how the use of camera lenses generate impressions, stimulate feelings, shape attitudes, and convey information in film and TV.

Examine and evaluate how the use of camera movement generates impressions, stimulates feelings, shapes attitudes, and conveys information in film and TV.

Examine and evaluate how the use of color generates impressions, stimulates feelings, shapes attitudes, and conveys information in film and TV.

Examine and evaluate how the use of sound generates impressions, stimulates feelings, shapes attitudes, and conveys information in film and TV.

Examine and analyze how editing generates impressions, stimulates feelings, shapes attitudes, and conveys information in film and TV.

Examine and analyze how a narrative generates impressions, stimulates feelings, shapes attitudes, and conveys information in film and TV.

Identify and differentiate aesthetics between film and digital technology.

Student Learning Outcomes:

Identify the various production techniques such as color, sound, editing and lighting used in filmmaking.

Identify the intended effects of the various production techniques on the audience.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Film/TV Producing I

CINE150A:

3.0 Units

Introduction to all aspects of planning the production of film and TV projects. Students are taught the skills to estimate, calculate, negotiate and evaluate all costs, legal concerns, insurance issues, permits, and pitfalls. Project budgets and organization for shorts, music videos, commercials, documentaries, and low-budget narrative films are examined.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses
Private Institution Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Describe and identify the production team and their duties and responsibilities.

Break a sample 30 or 60 minute TV script down in order to schedule a production.

Comprehend what has to be done before TV shows can go into production.

Demonstrate an understanding of a producer's role during a production in studio and on location.

Demonstrate an understanding of a producer's responsibilities and duties in dealing with unions, guilds, and talent for TV productions.

Recognize a producer's role in clearing music, video, and locations in TV productions.

Distinguish the differences between productions, specifically for television rather than theatrical.

Produce short/low-budget films outside the studio system.

Produce short films on a low, non-studio production budget.

Produce commercials and material for the internet.

Recognize and analyze the producer's duties and responsibilities in post-production.

Student Learning Outcomes:
Analyze sample scripts and generate a budget for a film production. Create a business plan that includes the funding, marketing, and promotion of a film.

Possess entry-level skills to become part of the producer's team for television productions.

Breakdown sample TV scripts for production budgeting and scheduling and distribution.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Film/TV Producing II
CINE150B:
3.0 Units

Continued study of planning the production of feature film and large-scale TV projects. Students are taught the skills to estimate, calculate, negotiate and evaluate all costs, legal concerns, insurance issues, permits, and pitfalls. Project budgets and organization for feature films are examined.

Requisites
Requisites:
Advisory
CINE150A - Film/TV Producing I

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Appraise and assess the production team and their duties and responsibilities.
Break a sample feature film script down in order to schedule a production.
Comprehend what has to be done before a feature film can go into production.
Describe and assess a producer's role during a production in studio and on location.
Describe and analyze a producer's responsibilities and duties in dealing with unions, guilds, and talent for film productions.
Examine and interpret a producer's role in clearing music, video, and locations in feature film productions.
Produce feature films outside the studio system.
Produce feature films on a medium budget production.
Produce commercials and material for the internet.
Recognize and analyze the producer's duties and responsibilities in post-production.

Student Learning Outcomes:
Analyze feature film scripts and generate a budget for a film production. Create a business plan that includes the funding, marketing, and promotion of a feature film.
Possess entry-level skills to become part of the producer's team for feature film productions.
Breakdown feature film and TV scripts for production budgeting and scheduling and distribution.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Microsoft Office
CIS101:
3.0 Units
Learn the basics of Microsoft Office, a suite of applications for Windows (Word, Excel, Access and PowerPoint). Acquire skills for creating, formatting, printing and editing business documents.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Private Institution Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**
- Identify Microsoft Office suite components
- Demonstrate an understanding of operating in a windows environment
- Apply the basic document commands in Word
- Apply the basic spreadsheet commands in Excel
- Apply the basic database commands in Access
- Create simple presentations
- Apply the basics of other applications

**Student Learning Outcomes:**
- Create usable documents in Word, Excel, Access and PowerPoint
- Use critical thinking to apply these software programs to business situations.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Microsoft Word**

**CIS103:**

3.0 Units

Step-by-step procedures are taught for creating, editing, and printing business documents with Microsoft Word.

**Requisites**

**Requisites:**
None
Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Describe how microcomputers fit into office systems and what functions they can perform
Use keyboard and function keys on straight copy
Create a file and open a folder when producing memos and letters
Create files, memos, letters, and reports
Edit documents
Move documents around to print or file together
Create and edit documents which include headers and footers
Utilize enhanced print features
Set up multi-column documents
Apply advanced editing applications

Student Learning Outcomes:
Use functions and procedures of Word to create documents in a word processing employment situation.
Analyze a problem and create a mailable document using correct functions and formats.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Introduction to Microsoft Excel

CIS105:

1.5 Units
Introduction to Excel spreadsheets including formatting, graphics, and formulas common to business applications. Prepares student for MS Excel Certification.

Requisites

None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.5

General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Explain and apply the basics of worksheets and workbooks
Edit and format worksheets using basic commands and functions
Apply and edit formulas and functions within and between worksheets
Utilize workbook files, names, and worksheet outlines
Analyze data, create conditional formatting, create templates, set up pages and printing
Create and format charts and web pages
Complete a project for evaluation by class and instructor

Student Learning Outcomes:
Analyze and create a spreadsheet and chart using the most efficient formulas and functions with a suitable business format in an office practicum.
Use functions and procedures of Excel to create documents in an employment situation.

Units & Hours

Minimum Units:
1.5

Maximum Units:
1.5

Total Hours:
27.0

Microsoft Excel

CIS106:
3.0 Units
Introduction to Microsoft Excel and how it facilitates solving business problems. Covers data management and reporting using spreadsheets, charts, database tools and macros.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

**General Education Plan:**

Private Institution Comparable Transfer Courses

Private Institution Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**

Operate machines and care for equipment and software

Gain access to a worksheet

Identify limitations

Create and format worksheets

Apply formulas, including sums and averages

Edit worksheets

Extract data from several worksheets and combine them into one new worksheet

Use a database

Draw graphs and charts

Design and Use

**Student Learning Outcomes:**

Create useful Excel spreadsheets that can be employed as the basis of solving business problems.

Design and write macros to be used in Excel spreadsheets.

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**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Microsoft Access**

**CIS108:**

3.0 Units

Relational Database Management using Microsoft Access. Includes design, creation and maintenance of a Relational Database Management System (RDBMS), reports and form generation, queries, importing and exporting data, macros and modules using Access.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0
General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Design, create, and manipulate a Relational Database Management System (RDBMS) using Microsoft Access.
Design, create, and modify table structures, default values, validation rules, input masks, and indices.
Design, create, and modify simple MS Access queries
Design, create, and modify complex MS Access queries
Create forms for viewing, entering, and editing data
Present data from tables by creating reports that summarize and group information
Utilize macros created with Visual Basic for Access (VBA) to generate customized queries, reports, and operations.

Student Learning Outcomes:
Design, execute queries, create forms and reports for a Relational Database Management System (RDBMS)
Automate database applications with macros and modules using ACCESS.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Microsoft Project
CIS110:

3.0 Units
Provides basic knowledge of how to plan a project, identify and create tasks, estimate workloads and duration, setup project schedules, maintain the schedule, assign resources, connect resources to tasks, setup a project budget, track progress utilize reports and close a project using Microsoft Project software.

Requisites
Requisites:

Anti-Requisite
PBLC110 - Introduction to Microsoft Project

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes

Course Objectives:
- Define the concept of project management software
- Determine the path in planning a project
- Present a project schedule
- Provide project information in various ways.
- Designate resources and calculate related project costs
- Report project progress and determine completion
- Dovetail related projects using various software applications.
- Utilize MS Project to complete a project

Student Learning Outcomes:
- Create a project using Microsoft Project.
- Analyze the critical path, resources used and progress of a project.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Python Programming

CIS111:

3.0 Units

This course is an introduction to fundamental concepts and techniques for writing software in the Python programming language. This course covers the syntax and semantics of data types, expressions, exceptions, control structures, input/output, methods, classes, and pragmatics of Python programming.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area E2: Communication/Analytical Thinking
Learning Outcomes

Course Objectives:
Describe the basics of writing a Python program.
Illustrate algorithm creation and use to create a Python program.
Create working Python programs that use variables, print, calculations, and Turtle Graphics.
Create working Python programs that use the decision concepts presented in the chapter.
Create working Python programs that use the various loop structures.
Create working Python programs that use functions.
Create working Python programs that use and process lists and tuples.

Student Learning Outcomes:
Critically assess a problem, design an algorithm, and create a working computer program that solves the problem.
Design, code, and run programs that utilize the various attributes of the Python language.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Introduction to iOS/iPhone Mobile App Development
CIS159:

3.0 Units

Introduction to mobile application development for iPhones and other iOS devices using beginning programming concepts and skills.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Develop a working foundational knowledge for the development environment and become a developer using the iDUP (Apple iOS Developer University Program).
Use Xcode, Interface Builder and iOS simulator to design and test apps with single and dual scenes and a variety of UI (User Interface) features
Install and test apps on devices
Use Xcode, Interface Builder and iOS simulator to extend knowledge and capabilities for mobile app development using advanced features

Install and test apps on devices

**Student Learning Outcomes:**

- Demonstrate an understanding of the various application development concepts, themes and issues.
- Design, develop, debug and test basic iOS mobile applications.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Advanced iOS/iPhone Mobile App Development**

CIS259:

3.0 Units

Advanced techniques for mobile application development for iPhones and other iOS devices using Objective-C programming.

**Requisites**

**Requisites:**

**Advisory**

CIS159 – Introduction to iOS/iPhone Mobile App Development

or similar programming experience

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Understand advanced application development using iOS tools and technologies

Use Xcode, Interface Builder and iOS simulator to extend knowledge and capabilities for mobile app development using advanced features

Install and test apps on devices

Use Xcode, Interface Builder and iOS simulator to extend knowledge and capabilities for mobile app development using advanced features

Install and test apps on devices

Use Xcode, Interface Builder and iOS simulator to extend knowledge and capabilities for mobile app development using advanced features

Install and test apps on devices
Student Learning Outcomes:

Utilize a variety of techniques for mobile application development and implementation.

Design, develop, debug and test iOS mobile applications with advanced features.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Criminal Justice

CJ101:

3.0 Units

This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces that have shaped those principles and approaches. Although justice structure and process are examined in a cross cultural context, emphasis is placed on the US justice system, particularly the structure and function of US police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, and sentencing and incarceration policies.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B

Area D: Social Sciences

IGETC - Plan C

Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

Administration of Justice

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes
Course Objectives:

Demonstrate an understanding of criminological theories used to explain crime and criminality

Explain the methods, theories, and concepts associated with the sources of crime data, the emerging patterns of criminal activity, and the costs of crime

Understand the history, development, and structure, and function of American police, courts, and corrections

Demonstrate an understanding of the history, structure, and function of the police

Convey an understanding of the process of adjudication

Show an understanding of corrections including the roles of probation, parole, and community corrections; as well as the functions of prisons and jails

Identify and describe special issues in the criminal justice system involving juvenile delinquency, drugs, and the future development

Critically analyze and discuss issues of crime and justice from varying perspectives

Utilize conclusions from scholarly research in creating informed positions on controversial issues in criminal justice

Demonstrate the ability to raise critically relevant questions based on independent reading of criminal justice literature

Effectively follow the appropriate writing style practiced in the social sciences

Explain the definitions of crime

Understand the extent of the crime problem in America

Student Learning Outcomes:

Students will be able to identify functions of US law enforcement, courts, probation, and corrections agencies.

Students will be able to examine, compare, and contrast crime and justice issues.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

The Computer and Society

CMPR100:

3.0 Units

An introduction to the area of computers and their relationship to today’s information society. Examines a broad overview of topics including: hardware, software, networking, information technology, and the internet. The student will explore the implication and effect of technology on society, careers and ethics.

Requisites

None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0
General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking

Learning Outcomes

Course Objectives:
Identify how people, data, software and hardware are an integral part of computer systems.

Use applications software productively.

Describe how Operating Systems play a role in increasing user productivity.

Identify the form and function of the computer processors.

Describe how ever-increasing speeds and versatility them to permeate virtually every aspect of daily life and society.

Identify and use the various types and functions of input and output devices.

Describe how they impact working, learning and living environments.

Identify the types of devices and techniques for storing data.

Describe how the use of these devices are enhancing productivity, education and entertainment.

Use the tools and techniques used in data communications.

Describe the capability for the world wide exchange of ideas, information and technologies that move society toward a world community.

Explain how to use the Internet and Intranets to increase user productivity.

Describe problems related to use and abuse of the Internet.

Create documents using word processing, spreadsheet and database software.

Identify problem-solving strategies as applied to programming but applicable to a multitude of areas.

Identify new and developing techniques which are making computers available to larger and more diverse segments of society.

Explain the structure of the operating system and its role in establishing the human-computer interface.

Recognize the techniques used by systems analysts to develop computer systems with emphasis placed on recognizing the pivotal role that people play within the system.

Describe how computers are changing the work place and the shift from an industrial society to the new diverse information society.

Explore information careers in the computer industry and certifications.

Identify the techniques and recent developments involved with the management of increasing volumes of information in an information oriented society.

Discuss the issues involved with security, privacy and ethics as they relate to computer uses in society.

Demonstrate understanding of the roles and responsibilities of the individual in regulating how much computers will be allowed to dominate individuals within society.

Student Learning Outcomes:
Identify and understand the uses of basic components of computers, computer systems, computer networks, and computer information systems.

Use appropriate vocabulary pertaining to computers.

Develop a high degree of awareness of the implications of technology in today’s society.

Units & Hours
Minimum Units: 3.0
Maximum Units
3.0

Total Hours
54.0

Visual BASIC Programming
CMPR105:

3.0 Units

Introduction to programming and Visual BASIC. Emphasis on programming fundamentals and the creation of applications with Visual BASIC. No previous programming experience required.

Requisites
Requisites:

None

Transferability & General Education Options
Transferable:
 Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking

Learning Outcomes
Course Objectives:
Create relational and boolean operators and expressions, conditional and selection control structures.

Demonstrate knowledge of data and control arrays, lists, statement loops, loop invariants and design issues, debugging, runtime control creation and configuration in building computer programs.

Identify and demonstrate use of the computer and basic programming concepts.

Explain and demonstrate problem solving strategies to common programming problems.

Identify language elements and use Visual BASIC.

Write basic programs.

Student Learning Outcomes:
Use the basic concepts of computers, programming languages, information processing procedures and their interrelationships.

Properly program and document a spectrum of programming problems.

Use a computer to gather data and solve problems.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0
Java Programming
CMPR112:

3.0 Units

Introduction to object-oriented program design. Overview of the Java programming language, including developing applications for web pages and stand-alone applications.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Develop three primary control structures
Place string constructors and string methods in a program
Declare and allocate arrays, references and reference parameters, passing arrays to methods, sorting and searching arrays
Use programming terminology
Demonstrate knowledge of performance tips, portability and software engineering
Recognize common programming errors and good programming practices
Develop program modules in Java, method definitions and Java API packages
Identify and use common components utilized in basic graphical user interface
Create class scopes, controlling access, utility methods, constructors, get and set methods, finalizers and static class members
Place superclasses and subclasses in a program
Construct if and if/else control structure and the while loop
Develop algorithms and pseudocode
Add graphics objects, color control and drawings to a program

Student Learning Outcomes:
Write Java programs for real life business situations.
Learn about syntax, debugging and documentation.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0
Total Hours
54.0

Introduction to Programming
CMPR120:

3.0 Units
Introduction to programming concepts including data types, mathematical operations, elementary input/output, and the basic control structures of sequence, selection, iteration and functions. Program design techniques utilizing structured and object-oriented methodologies will be emphasized.

Requisites

Requisites:

Prerequisite

MATH080 - Intermediate Algebra

Outcomes:
Identify different types of equations and solve them by applying the appropriate algebraic methods.
Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite

MATH085 - Intermediate Algebra with Integrated Support

Outcomes:
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite

Qualifying profile from the mathematics placement process.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify and apply editors, compilers, and debugging techniques
Identify and describe basic development and design techniques and strategies
Explain the concepts of program design
Identify the various types of data
Identify the various types of input and output
Describe the importance of sequence and structure
Identify, and apply the use of functions
Use If-Then syntax in programming
Use control structures to implement selection
Use iteration syntax to control the repeated execution of a selected sequence to implement more complex program algorithms
Use classes as a program design methodology
Create and edit programs, applying the material learned during laboratory sessions

Student Learning Outcomes:
- Develop the skills to create solutions (algorithms) to programming problems.
- Evaluate which solutions are most efficient, given multiple solutions (algorithms) to a programming problem.
- Demonstrate an awareness of the implications of software privacy and the ethics of generating their own solutions to programming projects.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
72.0

Programming Concepts
CMPR121:
3.0 Units
Continuing introduction to programming concepts, development of algorithms utilizing functions, classes and the primary control structures. Program I/O; strings and arrays; data types: classes and objects. Documentation techniques.

Requisites
Requisites:
Prerequisite
CMPR120 - Introduction to Programming

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:
- Identify basic functions and function parameters.
- Develop algorithm.
- Stream and file I/O.
- Create strings, vectors and arrays.
- Design classes.
- Work with abstract data types.
- Create container classes.
- Work with container classes.
- Design classes with file I/O.
- Complete recursion activities.
- Create multidimensional arrays.

Student Learning Outcomes:
- Develop the skills to create solutions (algorithms) to programming problems.
- Evaluate which solutions are most efficient, given multiple solutions (algorithms) to a programming problem.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
72.0

Programming Concepts and Methodology I

CMPR122:

3.0 Units

Introduces the discipline of computer science using a high-level language, utilizing programming and practical hands-on problem solving. This is the first course in a sequence of courses that is compliant with the standards of the Association for Computing Machinery (ACM).

Requisites

Requisites:

Advisory

CMPR120 - Introduction to Programming

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**
**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**
Computer Science

**Learning Outcomes**

**Course Objectives:**
Summarize the evolution of programming languages illustrating how this history has led to the paradigms available today.

Identify at least one distinguishing characteristic for each of the programming paradigms covered in this unit.

Explain the value of declaration models, especially with respect to programming-in-the-large.

Identify and describe the properties of a variable, such as its associated address, value, scope, persistence and size.

Discuss type incompatibility.

Demonstrate different forms of binding, visibility, scoping, and lifetime management.

Defend the importance of types and type-checking in providing abstraction and safety.

Discuss the importance of algorithms in the problem solving process.

Identify the necessary properties of good algorithms.

Create algorithms for solving simple problems.

Use flow charts, pseudocode, or a programming language to implement, test, and debug algorithms for solving simple problems.

Describe strategies that are useful in debugging.

Analyze and explain the behavior of simple programs involving the fundamental programming constructs covered by this unit.

Modify and expand short programs that use standard conditional and iterative control structures and functions.

Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and functions.

Choose appropriate conditional and iteration constructs for a given programming task.

Apply the techniques of structured (functional) decomposition to break a program into smaller pieces.

Describe the mechanics of parameter passing.

**Student Learning Outcomes:**
Create algorithms and develop computer programs that implement these algorithms.

Use pseudocode or a programming language to implement, test, and debug algorithms for solving simple problems.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0
Introduction to Computer Organization
CMPR129:

4.0 Units

Presents the organization and structure of computers at hardware and software levels: analysis and synthesis of combinatorial and sequential logic, data representation and manipulation, language structures and translation, and process administration and management.

Requisites

Requisites:
Advisory

CMPR120 - Introduction to Programming

or equivalent

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

4.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Differentiate between program and processSummarize process attributes and statesExplain code switching and mode switching

Define and explain the purpose of sequential circuitsCompare and contrast synchronous and asynchronous circuits

Describe and discuss assembly language

Recognize, illustrate, and evaluate storage management tools used by operating systems

Identify and illustrate various physical data formats

Describe compiler construction Compare and contrast compilers typesDifferentiate between compilers and interpreters

Summarize and define machine language

Recognize and identify levels of abstractionDescribe programming language semanticsDistinguish between programming language semantics and syntax

Define and explain the purpose of combinational circuitsDiscuss the different types of combination circuits

Student Learning Outcomes:
Analyze and apply the basic concepts of computer architecture, arithmetic and logic design.
Discriminate between the functional design of the CPU and integrated circuit detail.
Apply their understanding of low-level programming languages to the solution of real world problems

Units & Hours

Minimum Units:

4.0

Maximum Units

4.0
Total Hours
72.0

Data Structures Concepts
CMPR131:

3.0 Units
Application of simple Data Structures Concepts (ADT’s) including linked structures, stacks, queues and trees. Use of pointers, recursion, sorting algorithms, classes and object-oriented programming to implement Data Structures.

Requisites
Prerequisite

Requisites:
CMPR121 - Programming Concepts

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes
Course Objectives:
Design, implement, and manage queues.

Explain object oriented design techniques. Evaluate the efficiency of algorithms. Distinguish between testing and modeling.

Describe and discuss fundamental concepts behind object oriented programming: efficiency, interfaces, mathematical background.

Create object oriented design for both specialized and distributed objects.

Describe and identify sorted and unsorted lists. Construct, organize, and manage sorted and unsorted lists.

Describe and identify different types of stacks. Construct, organize, and manage various types of stacks.

Describe and distinguish between data types and data structures. Explain abstraction. Identify and illustrate abstract data types.

Use binary search trees to find a values in a sorted sequence.

Compare and contrast sorting techniques. Apply sorting techniques to arrange the records of a table or list in some order according to some specific ordering criterion.

Create operations to link various types of lists.

Describe and discuss using recursion. Construct recursive applications.

Student Learning Outcomes:
Assimilate and integrate the major components in modern object-oriented programming languages. This includes an understanding of classes, objects, properties, methods, and events.

Conceive of new software solutions using inheritance, polymorphism, and shared functions.

Extrapolate their knowledge of linked lists, stacks, queues, trees, and arrays to develop innovative software solutions.
Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
54.0

Programming Concepts and Methodology II
CMPR132:

3.0 Units
Application of software engineering techniques to the design and development of large programs: data abstraction and structures and associated algorithms. This is the second course in a sequence of courses that is compliant with the standards of the Association of Computing Machinery (ACM).

Requisites
Requisites:
Prerequisite
CMPR122 - Programming Concepts and Methodology I

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Course Identifier (C-ID)
Computer Science

Learning Outcomes
Course Objectives:
Discuss the representation and use of primitive data types and built-in data structures.
Describe how the data structures in the topic list are allocated and used in memory.
Describe common applications for each data structure in the topic list.
Implement the user-defined data structures in a high-level language.
Compare alternative implementations of data structures with respect to performance.
Write programs that use each of the following data structures: arrays, records, strings, linked lists, stacks, queues, and hash tables.
Compare and contrast the costs and benefits of dynamic and static data structure implementations
Choose the appropriate data structure for modeling a given problem.
Describe the concept of recursion and give examples of its use.
Identify the base case and general case of a recursively defined problem.

Compare iterative and recursive solutions for elementary problems, such as those with factorials.

Describe the divide-and-conquer approach.

Implement, test, and debug simple recursive functions and procedures.

Describe how recursion can be implemented using a stack.

Discuss problems for which backtracking is an appropriate solution.

Determine when a recursive solution is appropriate for a problem.

Explain the value of declaration models, especially with respect to programming-in-the-large.

Identify and describe the properties of a variable, such as its associated address, value, scope, persistence, and size.

Discuss type incompatibility.

Demonstrate different forms of binding, visibility, scoping, and lifetime management.

Defend the importance of types and type-checking in providing abstraction and safety.

Evaluate tradeoffs in lifetime management (reference counting vs. garbage collection).

Explain how abstraction mechanisms support the creation of reusable software components.

Demonstrate the difference between call-by-value and call-by-reference parameter passing.

Defend the importance of abstractions, especially with respect to programming-in-the-large.

Describe how the computer system uses activation records to manage program modules and their data.

Justify the philosophy of object-oriented design and the concepts of encapsulation, abstraction, inheritance, and polymorphism.

Design, implement, test, and debug simple programs in an object-oriented programming language.

Describe how the class mechanism supports encapsulation and information hiding.

Design, implement and test the implementation of “is-a” relationships among objects using a class hierarchy and inheritance.

Compare and contrast the notions of overloading and overriding methods in an object-oriented language.

Explain the relationship between the static structure of the class and the dynamic structure of the instances of the class.

Describe how iterators access the elements of a container.

Discuss the properties of good software design.

Compare and contrast object-oriented analysis and design with structured analysis and design.

**Student Learning Outcomes:**

- Design and develop large programs by utilizing software engineering techniques.
- Implement, test, and debug programs in an object-oriented language, using simple recursive functions and procedures.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Discrete Structures for Computer Science**

CMPR149:
3.0 Units

This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: Functions; Relations and Sets; Basic Logic; Proof Techniques; Basics of Counting; Graphs and Trees; and Discrete Probability. This course is compliant with the standards of the Association for Computing Machinery (ACM).

Requisites

Prerequisite

**CMPR122 - Programming Concepts and Methodology I**

AND

Advisory

**MATH105 - Mathematics for Liberal Arts Students**

OR

Advisory

**MATH140 - College Algebra**

OR

Advisory

**MATH219 - Statistics and Probability**

OR

Advisory

**MATH219H - Honors Statistics and Probability**

OR

Advisory

**MATH220 - Statistics and Probability with Integrated Review**

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

Computer Science
Learning Outcomes
Course Objectives:
Construct truth tables using propositional logic and logical connectives.
Solve counting problems using Inclusion-Exclusion.
Apply the properties of matrices and matrix arithmetic including Boolean operations on zero-one matrices.
Demonstrate different traversal methods for trees
Explain sets, functions, and sequences and summations.
Solve recurrence relations.
Solve counting problems using the Pigeonhole Principle, permutations, and combinations.
Demonstrate different traversal methods for graphs
Apply sets, functions, and sequences and summations to applications.
Apply the binomial theorem to independent events and Bayes’ theorem to dependent events.
Analyze the computational and complexity of algorithms.
Describe how formal tools of symbolic logic are used to model real-life situations, including those arising in computing contexts, such as program correctness, database queries, and algorithms.
Calculate discrete probabilities for conditional probability, Bayes’ Theorem, and mathematical expectation problems.
Relate the ideas of mathematical induction to recursion and recursively defined structures
Apply existential and universal quantification in predicate logic.
Analyze a problem to create relevant recurrence equations.
Identify and solve recurrence relations including equivalence relations and partial orderings.
Calculate values of integers in different bases and calculate greatest common divisors of integers using the Euclidean algorithm.
Construct recursive definitions and recursive algorithms.
Construct valid proofs using mathematical induction, proof by contradiction, direct proofs, and indirect proofs

Student Learning Outcomes:
Apply the concepts of discrete structures to problem solving.
Model real-life situations arising in computing contexts, such as program correctness, database queries, and algorithms.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Computer Architecture and Organization
CMPR154:

3.0 Units
The organization and behavior of real computer systems at the assembly language level. Topics include number systems and data representation, addressing techniques, memory management, interrupt handling, recursion, subroutines, arrays, and the implementation of high-level language constructs at the machine-language level. This course is compliant with the standards of the Association for
Computing Machinery (ACM).

Requisites
Requisites:
Advisory

CMPR122 - Programming Concepts and Methodology I

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Computer Science

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Describe how bits, bytes, nibbles, and words are used to organize the computer’s random access memory.

Describe how binary, octal, and hexadecimal number systems are used in assembly language programming.

Convert a decimal number into its binary, octal, and hexadecimal equivalent

Describe how fixed- and floating-point numbers are represented in memory and used in assembly language programming.

Perform basic mathematical operations (add, subtract, multiply and divide) on binary numbers using two’s complement representation.

Explain the various ways that nonnumeric data is represented in the computer’s memory.

Describe the differences and similarities of the record and array data structures.

Describe how a record and an array are represented in the computer’s memory.

Describe the basic architecture of the von Neumann “stored program” computer and how it relates to modern computer systems.

Explain the Central Processing Unit instructions that fit in each of the following classes: load and save, computational, jump and branch, coprocessor, and special.

Use Central Processing Unit instructions that implement the programming structures of iteration and choice in an assembly language program,

Describe how the Instruction Cycle is implemented by the Central Processing Unit to process software instructions.

List and describe all steps involved in the assembly language programming process by writing/editing, assembling, compiling, linking, and loading a simple assembly language program.

Describe the layout of bits in a Central Processing Unit instruction.

Write a Central Processing Unit instruction correctly that includes the opcode and implicit or explicit operands.

Create and assemble an assembly language program that uses Central Processing Unit instructions correctly to solve a given problem.

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbb-bed7-dd32f9a6eb18
Explain the basic function of an addressing mode.

Apply the correct addressing mode for a particular Central Processing Unit in an assembly language program.

Describe why and how assembly language subroutines are used with a high-level programming language.

Develop an assembly language subroutine and call the subroutine from a high-level language program.

Student Learning Outcomes:
- Write simple assembly language program segments.
- Demonstrate how fundamental high-level programming constructs are implemented at the machine-language level.

Units & Hours
Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Introduction to Robotics
CMPR157:

3.0 Units

Introduction to Robotics Programming using the LEGO Mindstorms platform. Basic mechanical, electronics, and control issues in Robotics are discussed, including the design and implementation of robotic systems. Students program a robot using several programming languages including the LEGO “NXT-G” programming language, as well as Robot C. Previous Title: Introduction to Robotics Programming (2016)

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
- Employ a robot to perform a series of tasks from software.
- Program a robot to perform and compete with other machines.
- Use Bluetooth and C type languages to control a robot.
- Incorporate sensor feedback into a software application.
- Identify mechanical design and electrical issues.
- Create basic programming functions that allow a robot to move.
- Program a robot to anticipate actions necessary to avoid collisions and respond to unanticipated obstacles.
- Incorporate light, sound, touch, ultrasonic and rotations sensors into a robot.
Demonstrate how components are connected.


Demonstrate control of motor direction and speed, route calculation, and movements in a robot.

**Student Learning Outcomes:**
- Demonstrate knowledge and understanding of how to create a machine to perform specific tasks.
- Develop entry-level robotics programs using the NXT-G language and Arduino C++.
- Install and configure the Lego Mindstorm software development system and create original software applications.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**C# Programming**

**CMPR213:**

3.0 Units

Study of C# programming. Topics covered include the .NET environment, object-oriented programming, relational databases, and creation of graphical user interfaces.

**Requisites**

**Requisites:**
Advisory

**CMPR121 - Programming Concepts**

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Private Institution Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**

Write basic programs.

Demonstrate knowledge of data and control arrays, lists, statement loops, loop invariants and design issues, debugging, runtime control creation and configuration in building computer programs.

Identify language elements and use C#.

Explain and demonstrate problem solving strategies to common programming problems.

Create relational and boolean operators and expressions, conditional and selection control structures.
Identify and demonstrate use of the computer and basic programming concepts.

**Student Learning Outcomes:**
- Assimilate and integrate the major components in modern Object Oriented Programming (OOP) languages which includes an understanding of classes, objects, properties, methods, and events.
- Conceive of new software solutions using inheritance, polymorphism, and shared functions.
- Extrapolate their knowledge of C# and .NET framework to develop innovative software solutions for both Windows and Web platforms.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Education and Career Assessment**

**CNG303:**
3.0 Hours
Assists students with appropriate educational placement and/or an overview of student services, career and academic guidance information that is available in Continuing Education as a result of individual and group testing. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Understand test scores with help from a counselor
- Identify academic strengths and weaknesses in English
- Develop an educational plan with a counselor's guidance
- Enroll for ESL courses
- Identify various student services and educational programs available at the Orange Education Center.
- Identify paths available beyond ESL courses in Continuing Education
- Make a follow-up appointment with a counselor
- Learn academic strengths and weaknesses in English, math, and reading
- Determine level of English as a Second Language course
- Identify reasons for returning to school
- Determine courses(s) to register based on test scores and other multiple measures
- Understand the role of the Counseling Department in High School Subjects, Adult Basic Education, and ESL.

**Student Learning Outcomes:**
- Demonstrate knowledge of requirements needed to earn an ESL or Business Skills certificate.
- Demonstrate knowledge of requirements needed to earn their high school diploma.
- Demonstrated knowledge of Educational Plan options for Adult High School Diploma, ESL or Career Technical Education certificates.
Hours
Total Hours
3.0

Educational, Personal, Cultural, and Career Exploration
CNSL101:

3.0 Units

Designed to promote academic and career success by exploring student development from an educational, sociological, psychological and physiological perspective. Exploration of higher education opportunities, potential career interests and a focus on educational planning. Recommended for students planning to complete an associate degree and/or transfer to a university. Field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Learning Outcomes
Course Objectives:
Review transfer program opportunities correlating to major and career interests.

Recognize how socioeconomic and cultural factors impact decision-making and life choices, including college major, choice of university and career.

Recognize instructional and student services resources.

Locate the Career Success Center to further obtain personal and individualized support to research career and majors.

Describe, explain, identify, write and apply academic success skills directly related to their educational objectives.

Evaluate the criteria for effective one-to-one and small group communication including basic principles of assertive behavior, verbal and non-verbal communication, group problem solving and use of constructive feedback techniques.

Recognize the effects of diversity and equity on a campus and in the workplace.

Identify and discuss obstacles commonly faced by students and analyze personal and external resources available to overcome such obstacles.

Define and compare their own culture and others.

Choose, demonstrate and interpret the process of educational planning.

Interpret the results of the following career assessments: Myers-Briggs, Strong Interest Inventory, Eureka, and Values assessment.

Recognize and employ financial education resources.

Evaluate their career assessment instrument findings.
Locate the SCC Transfer Success Center and evaluate the services and opportunities afforded through the center.

Discuss, explain and recognize the California Higher Educational Process and the newly implemented Student Success and Support Program as it directly affects their educational completion and registration process.

Discuss and describe an overview of academic terminology.

Utilization of real life examples and case studies on how to solve problems via proper communication channels.

Correlate personality profiles with career interests and major choices.

Develop a career /life plan to achieve individual goals which includes designing a comprehensive educational plan to complete academic goals and objectives.

Prepare for a successful transfer experience or degree completion program through comparison of programs of interest, research on GPA, GE and Major requirements at SCC and the intended transfer university, and research on application timelines and require

Identify instructional support services such as the Academic Success Center, Math Study Hall, STEM, SI, Library, Tutoring, Writing Center as well as student services resources such as Counseling, Transfer Success Center, Career Resource Center, Financial

Interpret, discover, modify and prepare a comprehensive educational plan on a chosen major through the interpretation of career assessments.

Identify similarities and differences among various cultural groups.

Discuss, explain, identify and locate pertinent information in the SCC Catalog as it pertains to their stated educational goals and objectives.

Explain and identify Santiago Canyon College (SCC) policies and procedures in terms of their academic standards of success.

Identify and recognize the decision-making process model and learn to develop short and long-term goals.

Set goals related to major and potential careers and visualize realistic timelines for completion of goals.

Explore and be able to illustrate and interpret equity in culture and education.

Recognize how healthful living and wellness concepts are directly related to their academic, personal and successful developmental process to complete their stated educational goals.

Utilize resources available in College Career Service Center to investigate occupations of interest and related career findings related to their educational, personal and career development process.

Compare, contrast and differentiate among the SCC, CSU, UC and private institution educational opportunities and requirements for attaining an educational goal ranging from a certificate, associate degree, associate degree for transfer, bachelor degree, m

Develop time management skills by understanding stress management techniques and how it relates to their academic success.

Describe and identify their personal assessment which will include self-assessment to determine personal needs, personal values, time management.

Identify, state and explain RSCCD policies and procedures.

Recognize the importance of choosing a major and developing a comprehensive educational plan.

**Student Learning Outcomes:**
- Define higher education options, academic policies and procedures, and support services.
- Apply the role, function and structure of the educational system as they pertain to their educational goals.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0
Inquiries Into Higher Education
CNSL106:

1.0 Units

A comprehensive and advanced study of selecting and completing an academic plan, developing goals and objectives and choosing a college major. Topics include: study techniques, assessing interests and skills and planning a major.

Requisites
Requisites:

None

Transferability & General Education Options
Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Learning Outcomes
Course Objectives:

Identify and differentiate higher education systems and pertinent pathways.

Distinguish how changing the content of one's consciousness through interest and skill exploration changes the quality of one's educational experience.

Employ critical thinking skills and a growth mindset to extract valuable lessons from daily and college life experiences, thus developing into an effective learner.

Choose a college major based on personal goals.

Construct an education plan.

Student Learning Outcomes:

Construct an academic plan based on educational goals and objectives.

Demonstrate knowledge of critical thinking techniques by assessing personal interests and skills toward selecting and planning for a major.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

University Transfer Research
CNSL110:

2.0 Units

Development and enhancement of decision-making strategies for transfer students. Identification of education/career goals. Analysis, comparison, and evaluation of university admission, major, and post-graduate requirements and student services. On-site research/field study at universities. Field trips required.
Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes

Course Objectives:
Identify and contrast the major differences between the three higher educational university systems.

Identify and analyze the major differences between selected colleges and universities.

Establish long and short-term goals in the university application process, identify timelines, and establish measurable outcomes related to chosen major.

Identify and evaluate each university system resources and services required for successful transfer.

Compare university support services of two universities that best serve individual student’s needs.

Access student resources and services at specific universities.

Identify the financial aid needed to transfer to selected universities.

Participate in a financial aid workshop and identify the resources for which student qualifies.

Research and identify appropriate scholarships that are available to transfer students.

Make an informed decision on which university to transfer to.

Identify relevant facts from university admission presentations.

Develop insight and understanding of university life through student panel discussions and dialogues with university student services personnel.

Identify university personnel who will facilitate the student transfer effort.

Evaluate the uniqueness of each campus and explain how it meets the individual student’s needs.

Student Learning Outcomes:

Interpret differences of universities along with the ability to compare and evaluate major requirements for admissions purposes.

Learn the educational requirements of CSU and UC systems as it relates to their educational/career goals and be able to identify, analyze, and compare course requirements, along with lower division transferable courses required in order to prepare a compr

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
36.0

Learning Skills Development
CNSL111:
1.0 Units

Application of educational/psychological principles in the development of effective learning skills for college courses. Topics also include identifying diversities of cultural influence, learning style, time management, textbook study/comprehension, note-taking, research preparation, and testing.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Examine how changing the content on one's consciousness changes the quality of one's experience.

Distinguish ways of learning effectively when preferred way(s) of learning is not being exhibited in any given learning environment.

Recognize all aspects of college diversity.

Identify qualities that enhance social development and self-awareness.

Employ specific strategies for effective time management.

Analyze new and appealing study strategies for effective reading comprehension.

Employ effective note-taking techniques.

Develop the foundation to write an effective research paper.

Apply test taking strategies for multiple choice, short answer and essay test questions.

Evaluate the changes created in their lives during the course and justify how to incorporate changes into everyday life.

**Student Learning Outcomes:**

- Identify, assess, analyze and process their particular learning style to utilize for the effective academic success in their college courses.
- Identify their learning style to develop time management skills, text book study and comprehension, note-taking, research preparation and testing skills.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units:**

1.0

**Total Hours**

18.0

**Learning Strategies for College Success**

CNSL113:
This comprehensive course is designed to promote academic success by exploring the students’ development from an educational, sociological, psychological and physiological perspective. Students will learn critical thinking strategies and communication techniques for their educational, professional, and interpersonal achievement. Students will also cultivate effective learning strategies that will assist them in developing study habits for college academic success. Students will be introduced to lifestyle techniques that will promote a healthy work/life balance as it pertains to their current lives as college students and to their future working adult lives.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area F1: Lifelong Understanding and Self-Development

**CSU GE - Plan B**

Area E1: Lifelong Learning

**Learning Outcomes**

**Course Objectives:**

Classify and understand which sensory learning style (visual, auditory, and kinesthetic) works best for the individual

Overcome obstacles in comprehension and learning when opposite learning styles are utilized in the classroom or in a work environment

Explore strategies to increase efficiency for the mind and body.

Develop short-term and long-term educational and career goals.

Identify sources of low self-esteem and techniques for overcoming possible barriers to academic success

Develop critical thinking skills in preparation for various working environment

Identify communication styles to improve relationships

Improve listening by identifying obstacles and applying effective techniques

Develop emotional intelligence to reflect and resolve conflicts

Improve cultural diversity awareness by reflection on topics including privilege, prejudice, and understand the difference between individualist and collectivist cultures.

Recognize the value of diversity through the lens of students from different cultures.

Develop strategies to increase healthy habits and learn how to avoid making unhealthy choices.

Identify and apply learning strategies for academic success.

Identify and apply techniques for reducing stress.

Apply principles of time management: a) when to study, b) where to study, c) how to avoid distractions.

Identify support services to cope with educational and personal stressors

**Student Learning Outcomes:**

Acquire study techniques and concepts to improve and/or enhance learning skills.

Recognize their individual learning styles and learn how to apply it for academic success.
Identify strategies to overcome barriers to their educational goals.
Gain an awareness of personal barriers that may impede academic success.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Career/Life Planning and Personal Exploration
CNSL116:

3.0 Units

The course is designed to assist students in successfully establishing and achieving education, career and life goals. Students are guided through a reflective process that focuses on values, interests, personality, skills and learning styles. Career and education options are researched, and students are exposed to college resources and support services. Decision making models and goal setting techniques are examined and will be used to develop short and long term education, career and life plans. Materials fee required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Learning Outcomes

Course Objectives:
Identify college support services and related resources
Demonstrate an understanding of policies and procedures
Identify potential successful personal study habits
Identify and discuss Career Development theory and key concepts related to successful career and life planning strategies
Identify how needs are connected to the workplace
Identify current personal needs and clarify personal motivations
Analyze how personal values have been developed and how personal values influence and determine life choices
Identify skills and interests through career assessment instruments, administered through the College Career and Testing Center
Evaluate career assessment instrument findings
Identify and investigate occupations of interest

Identify the impact of diversity in the global workplace

Analyze how socioeconomic and cultural factors impact decision-making and life choices, including college major, choice of university and career

Identify requirements for attaining educational goals

Discuss from the psychological perspective the characteristics of successful college students

Conduct a self-analysis of individual personality traits that reflect or reject traits needed for academic and career success

Identify transfer program opportunities correlating to major and career interests

Obtain information through web-based resources as a comprehensive resource for transfer or career technical education planning

Prepare for a successful transfer experience

Identify individual learning styles and analyze educational and work situations that are conducive to identified learning style

Apply methods to overcome obstacles in comprehension and learning when opposite learning styles are utilized in the classroom or in a work environment

Evaluate past decisions by analyzing decision-making styles

Identify future key decisions (examples career choice, educational choices) and apply the concepts of critical thinking to the steps needed in the decision-making process

Develop short and long-term goals with an emphasis on setting goals related to major and potential careers

Identify obstacles along with resources available to overcome such obstacles

Identify and utilize job search strategies

Create a quality resume

Describe and demonstrate appropriate interview techniques

Create an Education/Career/Life plan based on academic and career goals that incorporates needs, values, skills and interests

**Student Learning Outcomes:**

- Identify the relationship between career/education choices and values, interests, skills, and personality traits.
- Integrate career research, educational research, and individual personality research to develop a career/life plan.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Self Exploration and the Teaching Profession**

**CNSL118:**

2.0 Units

An exploration of “self” through a reflective process that focuses on values, interests, skills and personality as applied to the teaching profession and alternate professional choices. Topics include personal effectiveness, increasing cultural sensitivity, psychological and sociological forces within the workplace, career ladders and options, and academic preparation required for employment. Decision making models and goal setting techniques are examined and will be used to develop short and long term education, career and life plans. Materials fee required.
Requisites
Requisites:
None
Transferability & General Education Options
Transferable:
Transferable to CSU only
Weekly Lecture Hours:
2.0
General Education Plan:
Local - Plan A
   Area F1: Lifelong Understanding and Self-Development
CSU GE - Plan B
   Area E1: Lifelong Learning
Learning Outcomes
Course Objectives:
Complete "mini" research reports for discussion on current trends in the teaching profession and/or alternate professions
Create an academic/educational plan for achieving goals
Understand the need to become "culturally competent" to be effective as an educational professional or in the world of work in general
Present information gleaned from investigating a professional possibility
Demonstrate an understanding of the professional options in the field of education
Use available sources to investigate career options and preferences
Apply personal assessment and interpretation results to decision-making processes
Develop short- and long-term career goals
Apply a decision-making model to develop short- and long-term goals
Identify and describe the rewards and challenges of cultural diversity
Student Learning Outcomes:
   Recognize how their personal values, personality characteristics and interests affect their career choice and apply the information to what is required for the teaching profession or other career choice in order to set career goals.
   Analyze the function, value, rewards and challenges related to the teaching profession and its contribution to the lives of young people and to society in general.
Units & Hours
Minimum Units:
2.0
Maximum Units
2.0
Total Hours
36.0
Introduction to Human Services
CNSL150:
3.0 Units
The history and philosophy of human services including theoretical frameworks, the function and orientation of human services organizations and the roles and qualifications of human services workers. A study of the target populations served by the human services and the professional, ethical and cultural issues facing the human services field.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

Learning Outcomes
Course Objectives:
Identify and define common terms used in human services.
Trace the history of helping.
Analyze the roles and functions of human service workers.
Distinguish between professional, indigenous and paraprofessional helpers.
Identify professional associations, credentialing and ethical guidelines.
Define problem behavior, optimum psychological state, personal discomfort, statistical norms and cultural/societal norms.
Compare and contrast the theoretical causes of problems.
Define poverty and identify America’s poor.
Analyze the dismantling of the welfare system.
Identify children in need, runaways and chronic juvenile offenders.
Discuss abused and neglected children and reporting requirements.
Define domestic violence.
Discuss myths and cycles of violence and identify the role of shelters.
Identify the elderly and discuss pertinent issues.
Examine the mentally ill and service providers.
Discuss deinstitutionalization and the “revolving door” effect.
Identify substance abusers and contrast various treatment regimes.
Evaluate managed care and case management.
Analyze the medical/psychiatric approach to treatment.
Define organic and functional disorders.
Identify human service issues related to physical diseases including HIV/AIDS.
Assess the behavioral approaches to treatment.
Examine psychoanalytic theory.

Assess prevention strategies and social intervention.

Understand the role of social advocacy, levels of prevention, limited social intervention and comprehensive intervention.

Define prevention and its targets.

Discuss the ethical issues in human services.

Define empathy, genuineness, objective/subjective balance and basic helping skills.

Understand how to work with difficult behaviors.

Demonstrate knowledge of the intake/interview process and understand information gathering, assessment and referral.

Assess crisis intervention strategies.

Discuss suicide assessment including risk factors and intervention strategies.

**Student Learning Outcomes:**

- Explain the history and philosophy of the human services profession and assess its role in contemporary society.
- Compare and contrast the orientation and function of human services organizations within their field of potential specialization.
- Identify target populations requiring assistance and make recommendations regarding the appropriate human services organization.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Philosophy of Helping**

**CNSL152:**

3.0 Units

This course engages foundational concerns of the helping professions such as educators, social workers and other human services from individual, communal, and societal perspectives. Explore ways society provides help that are empowering and authentic for those being helped, and tensions that inevitably arise when we try to formalize the helping relationship. In addition to exploring the skills that lead to caring, competent, and effective practice, students will develop a personal philosophy of helping that is critical and reflective.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

CSU GE - Plan B

Area D: Social Sciences
Private Institution Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Identify the ethical issues surrounding the helping professions
Differentiate the similarities and differences in helping professions and attribute rewards and challenges
Clarify the differences in giving service versus being of service
Apply personal assessment and interpretation in context of one being a helper
Identify the circle of compassion in the helping relationship
Recognize cultural and age level aspects of death and dying and how to be a positive support in such situations
Demonstrate an understanding that kindness to self and others can increase feelings of time affluence
Demonstrate an understanding of the history, strengths and weaknesses of “helping” in society
Recognize the effective characteristics of helpers
Utilize person-first language and terminology when referring to individuals
Identify the effectual concepts of harmlessness and humility in the role of being an effective helper
Demonstrate an understanding of community capacities vs community necessities in helping
Demonstrate an understanding the motivations of people and helping
Demonstrate an understanding of mindsets leading to learned helplessness
Demonstrate an understanding of the skills and characteristics necessary for helping professionals
Clarify meaning of “help” and identify societal levels of helping
Recognize cultural needs/differences in others and in relation to self as helper

Student Learning Outcomes:

Analyze the function, value, rewards and challenges related to the helping characteristics of professional educators and contribute to the lives of young people and society in general.
Recognize ways personal values and personality characteristics affect the philosophy of helping.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Fieldwork Experience for the Helping Professions

CNSL160:

3.0 Units

Fieldwork experience provides the opportunity for students to incorporate academic knowledge learned in Counseling 150 and gain life-long skills through supervised training hours in a helping professions setting. Integration of problem solving, reflection and self-evaluations with instructor, supervisor and peers will help students gain insight on their future role as helping professions practitioners. With the approval of instructor, students will select their fieldwork placement that supports their career goals.

Requisites
Requisites:
Prerequisite
CNSL150 - Introduction to Human Services

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Demonstrate working knowledge in legal/ethical rules and guidelines as it relates to student's scope of practice
Demonstrate working knowledge in the appropriate use of referral agencies and other community/state resources based on client needs
Recognize the role as it relates to legal and ethical situations
Create self-care plan to combat burn-out
Recognize personal symptoms of stress and coping mechanisms.
Incorporate cultural awareness and empathy when working with diverse client populations
Communicate effectively with treatment staff on client symptoms and needs to develop a treatment plan
Utilize proper paperwork provided by fieldwork site
Work collaboratively with worksite team to develop appropriate services for client
Recognize the importance of cultural, racial, sexual, socioeconomic, educational, etc. as it relates to the helping professions
Identify three measurable goals that student wants to accomplish in fieldwork site
Identify professional development material that promotes stress management
Establish a positive working relationship site supervisor and staff
Examine personal expectations toward working with clients in need
Examine areas of improvement through supervisor/instructor feedback that help student's personal and professional growth
Find fieldwork placement that correlates with student's educational and professional goals
Demonstrate compassion, active listening, rapport building, and diversity awareness when working with clients
Ability to describe and document client's symptoms for proper treatment
Demonstrate knowledge of appropriate resources for target client population
Recognize and identify major components/roles of helping professions workers in community, schools and other social behavioral settings

Student Learning Outcomes:
Evaluate, observe and record client's needs within student's scope of practice in their fieldwork site.
Explain the importance of self-awareness, cultural sensitivity and professional development as a helping professions professional.
Demonstrate knowledge and apply legal and ethical standards in a helping professions setting.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0

Total Hours
126.0

The Helping Professions Seminar
CNSL160A:

1.0 Units

The Helping Professions Seminar affords students the opportunity to incorporate the academic knowledge learned in the prerequisite and co-requisite courses while acquiring work experience in a social work/human services setting. Weekly supervision will be provided to foster problem solving, cultural competency, reflection, and self-evaluation as students gain insight into their future role as helping professions practitioners.

Requisites

Prerequisites:

CNSL150 - Introduction to Human Services

AND

Co-Requisite

CNSL 1608

AND

Prerequisite

PSYC100 - Introduction to Psychology

OR

Prerequisite

PSYC100H - Honors Introduction to Psychology

OR

Prerequisite

SOC100 - Introduction to Sociology

OR

Prerequisite

SOC100H - Honors Introduction to Sociology

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0
General Education Plan:
Course Identifier (C-ID)
Social Work and Human Services

Learning Outcomes

Course Objectives:
Demonstrate knowledge of appropriate resources for target client population.

Demonstrate and apply basic knowledge of Code of Ethics rules and guidelines as it relates to the helping profession.

Demonstrate a fundamental understanding of legal guidelines, client privacy, and information management in a helping professions setting.

Demonstrate and incorporate empathy, non-judgemental assessments, self and cultural awareness when working with diverse client populations.

Recognize the importance of cultural, racial, sexual, socioeconomic, educational, etc. as it relates to clients in the helping professions.

Examine personal expectations toward working with clients in need.

Recognize personal symptoms of stress and coping mechanisms.

Create self-care plan to combat burn-out.

Demonstrate compassion, active listening, rapport building, and social justice awareness when working with clients.

Define the purpose of cultural engagement and recognize the importance of ongoing professional development.

Demonstrate self-understanding for personal growth as it relates to student's career goals.

Evaluate the application of legal and ethical standards as it relates to self in a helping professions setting.

Identify major components/roles of helping professions workers in community, schools and other social behavioral settings.

Develop an awareness of the journey of becoming a helping professions professional and the nature of the work in the field of practice.

Student Learning Outcomes:
- Define the importance of self-awareness, cultural sensitivity, social justice, and professional development as a helping professions professional.
- Apply ethical and legal standards in a helping professions setting.
- Outline the developmental journey of becoming a helping professions professional.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Fieldwork Experience for the Helping Professions
CNSL160B:

2.0 Units

Fieldwork experience provides the opportunity for students to incorporate academic knowledge learned in the prerequisite/corequisite courses and gain life-long skills through supervised training hours in a helping professions setting. This course is designed to assist students with an opportunity to examine, apply, and develop skills that would enable them to gain employment in the human services field. With the approval of the instructor, students will select their fieldwork placement that supports their career goals.

Requisites
Requisites:

Prerequisite

CNSL150 - Introduction to Human Services

AND

Co-Requisite

CNSL160A

AND

Prerequisite

PSYC100 - Introduction to Psychology

OR

Prerequisite

PSYC100H - Honors Introduction to Psychology

OR

Prerequisite

SOC100 - Introduction to Sociology

OR

Prerequisite

SOC100H - Honors Introduction to Sociology

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

Course Identifier (C-ID)
Social Work and Human Services

Learning Outcomes

Course Objectives:
Recognize and identify major components/roles of helping professions workers in community, schools and other social behavioral settings.

Apply knowledge learned in the prerequisite and corequisite courses as it relates to student's fieldwork site.

Demonstrate working knowledge in the appropriate use of referral agencies and other community/state resources based on client needs.

Examine areas of improvement through supervisor/instructor feedback that help student's personal and professional growth.

Establish a positive working relationship site supervisor and staff.

Recognize the role of the helping professions professional as it relates to legal and ethical situations.
Describe the connection between coursework and real life situations.

Find fieldwork placement that correlates with student's educational and professional goals.

Gain work experience in community, schools and other social behavioral settings.

Recognize the importance of cultural, racial, sexual, socioeconomic, educational, etc. as it relates to the helping professions.

Demonstrate compassion, active listening, rapport building, tolerance, and diversity awareness when working with clients.

Explore career choices in a helping professions setting.

Communicate effectively with treatment staff on client symptoms and needs to develop a treatment plan

Demonstrate writing and reporting skills as it pertains to fieldwork site.

Evaluate, observe and record client's needs within student's scope of practice in their fieldwork site.

**Student Learning Outcomes:**

- Explain the importance of self-awareness, cultural sensitivity and professional development as a helping professions professional.
- Demonstrate working knowledge in legal, Code of Ethics, and guidelines as they relate to student's scope of practice.
- Demonstrate competency in crisis intervention, intake, and treatment planning as it relates to scope of practice.

**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units**

2.0

**Total Hours**

108.0

**Introduction to Interpersonal Communication**

**COMM100:**

3.0 Units

Introduction to communication skills of listening, perception, language usage, non-verbal communication, and conflict management; emphasizing methods of overcoming barriers to effective communication in interpersonal relationships.

**Requisites**

**Requisites:**

**Advisory**

ENGL100 - Freshman Composition with Integrated Support

OR

**Advisory**

ENGL101 - Freshman Composition

OR

**Advisory**

ENGL101H - Honors Freshman Composition

**Transferability & General Education Options**
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area G3: Oral Communication Proficiency

CSU GE - Plan B
   Area A1: Oral Communication

IGETC - Plan C
   Area 1C: Oral Communication

Course Identifier (C-ID)
Communication Studies

Learning Outcomes

Course Objectives:
- Recognize common communication barriers.
- Identify the needs communication meets in life.
- Promote ethical ways of living through interpersonal communication.
- Demonstrate how one's perception of the world affects their ability to communicate.
- Examine the concept of roles shape one's frame of reference.
- Identify strategies to overcome barriers to effective listening.
- Demonstrate active and empathetic listening behaviors.
- Explain the nature and function of non verbal communication and its relationship to the communication process.
- Recognize the symbolic nature of language and its influence on communication acts.
- Identify the distinction between facts/observation and inference/interpretation.
- Identify the effect interpersonal communication has on the development of one's personal identity and how the self-concept then impacts the communication process.
- Demonstrate an understanding of the role of self-disclosure in developing and maintaining interpersonal relationships.
- Explain the motivations for disclosure, its risks and benefits and the guidelines for appropriate disclosure.
- Recognize positive/negative climates and their influence upon relationships.
- Identify the advantages/disadvantages of common approaches to conflict resolution.
- Explain and apply methods for managing defensiveness in conflict.
- Demonstrate methods of assertive communication.

Student Learning Outcomes:

Use theories of interpersonal communication to explain and evaluate their own behavior in interpersonal relationships.
Reduce their level of communication apprehension in interpersonal communication contexts.

Units & Hours

Minimum Units:
3.0

Maximum Units
Total Hours

54.0

Honors Introduction to Interpersonal Communication

COMM100H:

3.0 Units

Enriched approach for honors students. Highly interactive seminar mode of instruction. Stresses the development of analytical thinking, writing, and speaking skills. An introduction to communication skills of listening, perception, language usage, non-verbal communication, and conflict management, emphasizing methods of overcoming barriers to effective communication in interpersonal relationships.

Requisites

Requisites:

Advisory

ENGL100 - Freshman Composition with Integrated Support

OR

Advisory

ENGL101 - Freshman Composition

OR

Advisory

ENGL101H - Honors Freshman Composition

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area G3: Oral Communication Proficiency

CSU GE - Plan B

Area A1: Oral Communication

IGETC - Plan C

Area 1C: Oral Communication

Course Identifier (C-ID)

Communication Studies

Learning Outcomes

Course Objectives:

Demonstrate understanding of the communication process
Examine and demonstrate the perception process
Recognize, describe and demonstrate listening theory and skills
Explain and recognize non-verbal communication
Understand and identify language theory and practice
Understand self-concept and the connection with interpersonal communication
Understand and explain self-disclosure
Recognize and understand communication climates
Identify, recognize, and explain interpersonal conflict
Demonstrate interpersonal competency

**Student Learning Outcomes:**
- Use theories of interpersonal communication to explain and evaluate their own communication behavior in interpersonal relationships.
- Reduce their level of communication apprehension in interpersonal communication contexts.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Group Dynamics**

**COMM101:**

3.0 Units

Principles and methods of communication as applied in the small group setting. Emphasis on communication skills, processes, and operations in the small group. Includes understanding group dynamics and cooperative problem solving.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area E2: Communication/Analytical Thinking
- Area G3: Oral Communication Proficiency

**CSU GE - Plan B**
- Area A1: Oral Communication
IGETC - Plan C
Area 1C: Oral Communication

Course Identifier (C-ID)
Communication Studies

Learning Outcomes

Course Objectives:
Understand the fundamentals of group dynamics.
Demonstrate understanding of group theory and practice.
Improve group decision making and critical thinking skills.
Illustrate the importance of language and nonverbal communication in group settings.
Analyze profiles of effective group members.
Demonstrate understanding of leadership and managing effectively.
Advise how to make presentations in groups.
Build understanding of how to use technology for group communication.
Improve skills for managing conflict, group problem-solving, and improving group climate.
Improve listening in groups.

Student Learning Outcomes:
Identify, evaluate and suggest solutions to problems encountered in a large group communication context.
Reduce their level of communication apprehension in small group communication contexts.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Public Speaking
COMM110:

3.0 Units
Teaches critical thinking skills in relation to public speaking. Emphasis on the process, principles and major facets of critical thinking with practice through oral presentations.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0
General Education Plan:
Local - Plan A
  Area E2: Communication/Analytical Thinking
  Area G3: Oral Communication Proficiency

CSU GE - Plan B
  Area A1: Oral Communication

IGETC - Plan C
  Area 1C: Oral Communication

Course Identifier (C-ID)
Communication Studies

Learning Outcomes
Course Objectives:

Identify the fundamental elements of the communication process.

Explain the difference between the linear and transactive communication process.

Explain the importance of ethos and coping with communication apprehension.

Demonstrate an understanding of why communication apprehension occurs.

Provide practical suggestions for coping with communication apprehension.

Demonstrate the basic skill of prioritizing.

Analyze the communication situation, audience, occasion, and purpose of subsequent speeches.

Demonstrate an understanding of their own speaking problems.

Discuss ethical concerns that arise in public speaking situations.

Perform basic skills of ordering and sequencing.

Identify perception skills relating to understanding the audience.

Execute a speech in a public forum.

Demonstrate an understanding of the relationship between listening and critical thinking.

Discuss poor listening and strategies for becoming a more effective listener.

Discuss fundamentals of topic selection, audience analysis, gathering support material, outlining, practice, evaluation of communication effectiveness, and delivery methodologies.

Demonstrate an understanding of the various nonverbal codes that influence messages in a public speaking environment.

Avoid ethical problems when delivering a speech to a diverse audience

Classify the different types of visual aids.

Demonstrate the preferred way to incorporate visual aids into a speech.

Demonstrate skills for classifying and categorizing.

Identify reliable and unreliable sources relating to supporting materials.

Demonstrate analytical skills while organizing thoughts “on one’s feet.”

Discuss forms of proof and claims.

Differentiate between inductive and deductive logic.

Identify various types of fallacies that one ought to avoid while speaking in public.

Explain the ethical responsibilities one has to others involved in the communication process.
Include cause/effect relationships, generalizations, and logical reasoning to support clear policy statements.

Recognize the necessity and process of creating need.

Conduct audience analysis.

**Student Learning Outcomes:**

Research and utilize evidence so as to logically construct a speech appropriate for the occasion.

Identify and control anxiety when delivering a speech.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Argumentation and Debate**

COMM111:

3.0 Units

Principles of debate techniques with emphasis on methods of logical analysis and reflective thinking. Practical application through adaptation of material to forms of debate on current issues.

**Requisites**

**Requisites:**

Advisory

ENGL100 - Freshman Composition with Integrated Support

OR

Advisory

ENGL101 - Freshman Composition

OR

Advisory

ENGL101H - Honors Freshman Composition

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**
Local - Plan A
Area E2: Communication/Analytical Thinking
Area G3: Oral Communication Proficiency

CSU GE - Plan B
Area A1: Oral Communication
Area A3: Critical Thinking

IGETC - Plan C
Area 1C: Oral Communication

Course Identifier (C-ID)
Communication Studies

Learning Outcomes
Course Objectives:
Adapt to the complexities of communication.
Explain the components of arguments.
Explain the usefulness, and limits of language.
Develop the ability to identify quality information.
Explain how arguments are held together by logic.
Apply case construction strategies to various topics of debate.
Build listening skills.
Develop the ability to identify poor uses of logic.
Strategically ask and/or answer questions of an argumentative opponent.
Explain the many nonverbal influences to messages.
Develop the ability to respond to a claim with an argument.
Apply argumentation and debate concepts and strategies to an opponent.

Student Learning Outcomes:
Critically analyze and evaluate evidence and arguments made on various subjects in everyday life.
Identify and control anxiety when presenting in front of an audience.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Intercultural Communication
COMM120:
3.0 Units
A general view of the sociological, psychological, and communication patterns of major cultural groups. Special emphasis on the methods, skills, and techniques necessary for effective intercultural and crosscultural communication.
Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

Course Identifier (C-ID)
Communication Studies

Learning Outcomes
Course Objectives:
Identify and explain the varying definitions of culture
Identify skills necessary for effective listening
Explain the components of intercultural communication
Present models of communication
Differentiate culture, race and ethnicity
Analyze elements of power
Differentiate types of context
Distinguish how beliefs and values manifest behavior
Explore Hofstede’s power dimensions
Examine Kluckhohn/Strodtbeck’s value orientations
Define multiple types of histories and explain the impact history has on culture
Explore the relationship between recorded history and power
Explain how history allows primacy for some voices over others
Examine the cultural impacts of history at the macro and micro level
Evaluate how identity is a construction of culture
Differentiate self, self-concept and self-esteem
Explain the perception process
Explore theories of self-development
Contrast identity formation across and within cultures
Differentiate barriers to intercultural communication
Define racism, ethnocentrism and prejudice
Identify process of stereotyping
Explain tools for overcoming barriers
Identify reasons for studying intercultural communication
Define components of language
Identify language rules
Describe Sapir-Whorf Hypothesis
Discuss how to navigate between languages
Explain how values manifest in different cultural nonverbal behavior
Define oculesics, haptics, kinesics, proxemics, chronemics, paralinguistics
Discuss nonverbal codes
Analyze cultural differences in nonverbal
Analyze cultural space/context
Explain listening styles across cultures
Employ strategies to resolve intercultural conflict
Identify conflict styles
Discuss cultural differences in conflict resolution
Describe how cultures define various relationships differently
Identify the challenges in forming intercultural relationships
Describe the benefits to forming intercultural relationships
Explain the roles involved in tourism
Describe challenges in intercultural business settings
Illustrate cultural variations in health care
Describe the power dynamics of education
Reinforce lessons on self-reflexivity
Identify skills necessary for effective intercultural communication
Explain how language constructs and reinforces culture

Student Learning Outcomes:
- Recognize and analyze different communication styles across cultures and the various values that structure different communication styles across cultures.
- Recognize elements of communication apprehension that may be present during intercultural encounters and identify the skills necessary to reduce this discomfort.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors Introduction to Intercultural Communication
COMM120H:
3.0 Units

Enriched for honors students. In-depth, seminar format examination of sociological, psychological, and communication patterns of major cultural groups. Methods, skills, and techniques for effective intercultural communication. Stresses analytical thinking skills.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**
- Area D: Cultural Breadth

**CSU GE - Plan B**
- Area D: Social Sciences

**Course Identifier (C-ID)**
- Communication Studies

**Learning Outcomes**

**Course Objectives:**
- Identify and explain the varying definitions of culture
- Identify reasons for studying intercultural communication
- Explain the components of intercultural communication
- Present models of communication
- Differentiate culture, race and ethnicity
- Analyze elements of power
- Differentiate types of context
- Distinguish how beliefs and values manifest behavior
- Explore Hofstede's power dimensions
- Examine Kluckhohn/Strodtbeck's value orientations
- Define multiple types of histories and explain the impact history has on culture
- Explore the relationship between recorded history and power
- Explain how history allows primacy for some voices over others
- Examine the cultural impacts of history at the macro and micro level
- Discuss Walter Fisher and Homo narrans
- Evaluate how identity is a construction of culture
- Differentiate self, self-concept and self-esteem
- Explain the perception process
- Explore theories of self-development
Contrast identity formation across and within cultures
Differentiate barriers to intercultural communication
Define racism, ethnocentrism and prejudice
Identify process of stereotyping
Explain tools for overcoming barriers
Explain how language constructs and reinforces culture
Define components of language
Identify language rules
Describe Sapir-Whorf Hypothesis
Discuss how to navigate between languages
Explain how values manifest in different cultural nonverbal behavior
Define oculesics, haptics, kinesics, proxemics, chronemics, paralinguistics
Discuss nonverbal codes
Analyze cultural differences in nonverbal
Analyze cultural space/context
Explain listening styles across cultures
Employ strategies to resolve intercultural conflict
Identify conflict styles
Discuss cultural differences in conflict resolution
Describe how cultures define various relationships differently
Identify the challenges in forming intercultural relationships
Describe the benefits to forming intercultural relationships
Explain the roles involved in tourism
Describe challenges in intercultural business settings
Illustrate cultural variations in health care
Describe the power dynamics of education
Discuss value conflict between religion
Analyze the values that drive political systems
Reinforce lessons on self-reflexivity
Identify skills necessary for effective intercultural communication
Identify skills necessary for effective listening

**Student Learning Outcomes:**

- Recognize and analyze different communication styles across cultures and the various values that structure different communication styles across cultures.
- Recognize elements of communication apprehension that may be present during intercultural encounters and identify the skills necessary to reduce this discomfort.

**Units & Hours**

**Minimum Units:**

3.0
Maximum Units
3.0

Total Hours
54.0

Forensics Team

COMM130:

4.0 - 6.0 Units

This course is designed to prepare students to participate in intercollegiate speech competition. Instruction and direction for the preparation, creation and performance of interpretation of literature programs, limited preparation speeches, readers’ theater, public debate, and general public address. Students are required to participate in off-campus forensics events.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

6.0

General Education Plan:

Learning Outcomes

Course Objectives:

Decide which event(s) appeals to the particular student.

Explore quality information to prepare events.

Explain what to expect at the first tournament.

Understand the diversity of audiences found at tournaments.

Explain appropriate behavior when being an audience member.

Apply appropriate strategies to contemporary speech and debate topics.

Explain appropriate behavior when at a tournament.

Develop a foundation to practice competitive speech.

Build research skills.

Explain methods for improving delivery.

Explore delivery choices.

Analyze which strategies are most successful when delivering speeches.

Apply the techniques and strategies of delivering speeches.

Analyze performance.

Student Learning Outcomes:

Create speeches and/or interpretive performances that are suitable for collegiate competition.

Demonstrate an ability to be productive with others in a competitive environment.

Units & Hours
Minimum Units:
6.0

Maximum Units
6.0

Total Hours
216.0

Oral Interpretation
COMM134:

3.0 Units
Performance of prose, poetry, and drama; practice in speaking, interpretation, and analysis of literature, with training in the principles of effective delivery.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area G3: Oral Communication Proficiency

Course Identifier (C-ID)
Communication Studies

Learning Outcomes
Course Objectives:
Explain the value of literary performance
Select and edit a compilation program for performance
Discuss Walter Fisher and Homo narrans
Differentiate the different types of literature.
Define various performative art forms
Explain evolution of various forms of performance art
Contrast acting and oral interpretation
Explain physiological factors of anxiety
Discuss reasons for stage fright
Identify anxiety when performing and employ skills for controlling it
Demonstrate various vocal qualities to create emotional impact and differences in character
Identify and describe all elements of a story arc
Explain the qualities of impactful prose
Identify ways to find meaningful literature
Discuss time constraints
Construct arguments to support programs
Select and edit a prose for performance
Explain oculesics, haptics, proxemics, chronemics, kinesics
Demonstrate preferred bookwork
Discuss stage entrance and exit
Demonstrate effective nonverbal behavior to establish different characters
Demonstrate how to historically situate literature to better character development
Illustrate how narrative voice establishes theme
Analyze literature to identify narrative point of view
Present various forms of oral interpretation of literature
Demonstrate pacing, rhythm, patterns, and beats
Construct a script in accordance with ethical guidelines
Differentiate poetry from other forms of literature
Recognize types of poetry
Identify sources to discover poetry
Select and edit a poetry program for performance
Identify characteristics of demographics
List elements of performance sites
Analyze demographics and situation to prepare for effective performance
Differentiate drama from other forms of literature
Identify resources to research scripts
Demonstrate multiple characters speaking from one performer
Select and edit a dramatic program for delivery
Present theoretical frameworks used to evaluate performances
Apply theory to performance
Differentiate visceral and cerebral reactions
Analyze and critique performances of literature
Differentiate hearing from listening
Explore problems with hearing and poor listening behaviors
Demonstrate appropriate audience behavior
Explain active listening skills
Identify and explain models for script construction
Discuss honoring author’s intent

**Student Learning Outcomes:**

Research and edit literature to create a performance with a unified theme, context, character and mood.
Explain and utilize the basic elements of a story arc in the creation of a script for public performance.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Readers' Theatre
COMM135:

3.0 Units

Research, construct, rehearse, and perform interpretation of literature in an ensemble theatrical setting. Learn basic elements of choral reading, singing, and movement.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Present the history, theory, and contemporary situation of readers' theatre
Construct and direct a readers' theatre
Identify the written and unwritten rules of the activity
Differentiate the types of literature
Identify research methodologies and library resources
Distinguish interpretation as different from performance
Identify and select specific literature for performance
Identify all elements of a story arc
Discuss weaving various texts into a unified whole
Demonstrate how to edit and rearrange scripts
Illustrate the use of non-fiction to augment theme
Construct a script for performance.
Describe various points of view
Demonstrate how to historically situate literature to better character development
Illustrate how narrative voice establishes theme
Analyze literature to identify narrative point of view
Create a fictional biography
Analyze literature for historical context
Explain staying true to author’s intent
Develop multi-dimensional characters for performance
Differentiate readers’ theatre from other dramatic performances
Demonstrate effective nonverbal behavior to establish different characters and minimal staging
Explain physiological factors of anxiety
Discuss reasons for stage fright
Identify anxiety when performing and employ skills for controlling it
Differentiate hearing from listening
Explore problems with hearing and poor listening behaviors
Explain active listening skills
Analyze scripts to ensure listening to author’s intent and readers’ ensemble
Illustrate blocking notation
Effectively utilize blocking techniques
Demonstrate effective readers’ theatre ensemble techniques
Present theoretical frameworks used to evaluate performances
Apply theory to performance
Differentiate visceral and cerebral reactions
Analyze and critique performances of literature
Script literature for performance based on an appropriate theme
Write stage direction to correspond with script
Analyze audience perspective
Demonstrate various vocal qualities to create emotional impact and differences in character

Student Learning Outcomes:
Articulate the basic elements of direction in the creation of a reader’s theater for public performance.
Create a script for performance in accordance with the basic standards of reader’s theater.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Gender Communication
COMM225:
3.0 Units

Practical application, techniques and in-depth analysis of sex and gender communication regarding language usage, biological and social influences, mass media, power abuses, long-term relationships, the workplace, friendships, and education.

Requisites

Requisites:
Advisory

COMM100 - Introduction to Interpersonal Communication

OR

Advisory

COMM100H - Honors Introduction to Interpersonal Communication

OR

Advisory

COMM101 - Group Dynamics

OR

Advisory

COMM110 - Public Speaking

OR

Advisory

COMM111 - Argumentation and Debate

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

Learning Outcomes

Course Objectives:
Describe the Communication Process and utilize appropriate gender related terminology.
Identify characteristics and issues with gender communication in education.

Explain the significance of language in gender communication.

Identify the role media has on gender identity and communication.

Describe the power of nonverbal messages in gender communication.

Recognize the biological, social, and cultural influences on sex and gender.

Identify issues, attitudes, and patterns in relationships/friendships.

Apply appropriate gender communication skills.

Identify power abuses in human relationships.

Identify and apply appropriate gender communication in the workplace.

Utilize appropriate gender communication in key relationships.

**Student Learning Outcomes:**

- Explain a variety of practical communication skills appropriate for successful cross-gendered/cross-sexed communication to maintain healthy relationships.
- Reduce their level of communication apprehension when discussing gender issues.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Honors Gender Communication**

**COMM225H :**

3.0 Units

Enriched approach in application, techniques and in-depth analysis of male and female communication regarding language usage, biological and social influences, mass media, marriage, organizations, same-sex/cross-sex friendships and education. Students will be required to do individual/group professor-guided research.

**Requisites**

**Requisites:**

**Advisory**

COMM100 - Introduction to Interpersonal Communication

**OR**

COMM100H - Honors Introduction to Interpersonal Communication

**OR**

**Advisory**

COMM100 - Introduction to Interpersonal Communication
COMM101 - Group Dynamics

OR

Advisory

COMM110 - Public Speaking

OR

Advisory

COMM111 - Argumentation and Debate

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
  Area D: Cultural Breadth

CSU GE - Plan B
  Area D: Social Sciences

IGETC - Plan C
  Area 4: Social and Behavioral Sciences

Learning Outcomes

Course Objectives:
Describe the Communication Process and utilize appropriate gender related terminology.

Recognize the biological, social, and cultural influences on sex and gender.

Explain the significance of language in gender communication.

Identify the role media has on gender identity and communication.

Describe the power of nonverbal messages in gender communication.

Utilize appropriate gender communication in key relationships.

Identify issues, attitudes, and patterns in relationships/friendships.

Apply appropriate gender communication skills.

Identify power abuses in human relationships.

Identify and apply appropriate gender communication in the workplace.

Identify characteristics and issues with gender communication in education.

Develop an understanding for academic research in the study of gender communication.

Student Learning Outcomes:

  Explain a variety of practical communication skills appropriate for successful cross-gendered/cross-sexed communication to maintain healthy relationships.
  Reduce their level of communication apprehension when discussing gender issues.
Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 54.0

Advanced Forensics Team
COMM230:

4.0 - 6.0 Units

This course is designed to prepare students to participate at an advanced level in intercollegiate speech competition. Includes instruction and direction for the junior competition of interpretation of literature programs, limited preparation speeches, readers' theater, public debate, and general public address. Focuses on mentoring and coaching novice members. Students are required to participate in off-campus forensics events.

Requisites
Requisites:
Advisory
COMM130 - Forensics Team

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
6.0

General Education Plan:
Learning Outcomes
Course Objectives:
Explain the expectations of a returning competitor.

Develop a plan for student competition.

Explore events that the student can add to their repertoire.

Predict what strategies will work with judges in competition at the junior level.

Explain more advanced ways to prepare visual aids.

Explain appropriate behavior of student judges.

Explain the unique burdens of preparing debate events.

Explain the unique burdens of preparing and performing limited preparation events.

Evaluate competitive strengths and weaknesses.

Explain the unique burdens of preparing and performing platform speeches.

Explain the unique burdens of preparing and performing oral interpretation events.

Explain the unique burdens of administering a tournament.

Produce a speech that would be competitive at tournaments.
Build delivery skills.

Apply the techniques of good audience membership.

**Student Learning Outcomes:**
- Assist in the creation and coaching of speeches and/or interpretive performances that are suitable for collegiate competition.
- Demonstrate an ability to be productive with others in a competitive environment at a more advanced level.

**Units & Hours**

**Minimum Units:**
6.0

**Maximum Units:**
6.0

**Total Hours:**
216.0

**Health and Safety**

**COSM005:**

0.5 - 7.0 Units

Instruction in the theory and practical applications of health and safety practices for Cosmetology and Esthetician as required by Section 7316 of the Barbering and Cosmetology Act. Must be enrolled in the Cosmetology or Esthetician program. Students are required to purchase a basic supply kit as part of the program. Open Entry/Open Exit

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
7.0

**Learning Outcomes**

**Course Objectives:**
- Comprehend and apply the Barbering and Cosmetology Act as well as Board's Rules and Regulations
- Identify hazardous substances and take precautions when working with them/clients to prevent injuries and the spread of disease
- Disinfect and sanitize equipment protecting themselves and their clients

**Student Learning Outcomes:**
- Pass the California State Board Cosmetology/Barbering/Esthetician written and manipulative exams and score at least an 80% on a mock exam given at the training site.
- Provide services to clients, in a clinical setting, in a safe, professional and ethical manner that is satisfactory to the clients surveyed with a minimum of 90% satisfaction on an evaluation of their experience.

**Units & Hours**

**Minimum Units:**
7.0

**Maximum Units:**
7.0
Cosmetology
COSM040:

0.5 - 35.5 Units

Principles and practices in cosmetology. Preparation for Board Examination for licensing by the State of California Board of Barbering and Cosmetology. Laboratory participation includes student demonstration that all performance objectives have been met. Students are required to purchase a basic cosmetology kit. Open Entry/Open Exit

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
35.5

Learning Outcomes

Course Objectives:
Describe and perform hair analysis, shampooing and hairstyling
Describe and mix solutions and use solutions to permanently wave and chemically straighten hair
Safely mix and use chemicals to color and bleach hair
Identify hair cutting techniques and use various tools to cut hair
Remove only the non-living, uppermost layers of facial skin, known as the epidermis for the purpose of beautification
Perform all procedures and techniques in accordance with Section 992 regarding skin peeling
Use wax, tweezers, electric or manual, and depilatories for the removal of superfluous hair
Describe and perform nail analysis and various massage techniques
Explain the various acrylic types and wraps and repair artificial nails

Student Learning Outcomes:
Pass the California State Board Cosmetology/Barbering/Esthetician written and manipulative exams and score at least an 80% on a mock exam given at the training site.
Provide services to clients, in a clinical setting, in a safe, professional and ethical manner that is satisfactory to the clients surveyed with a minimum of 90% satisfaction on an evaluation of their experience.

Units & Hours

Minimum Units:
35.5

Maximum Units
35.5

Total Hours
1400.0

Manicuring
COSM050:

0.5 - 13.5 Units
Complete instruction of nail care as required by the State Board of Barbering and Cosmetology for licensure preparation. Open Entry/Open Exit

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
13.5

Learning Outcomes
Course Objectives:
inspect and perform complete nail analysis on hands and feet
describe and perform the steps of water and oil manicures
massage hands, arms, feet and ankles using appropriate techniques
describe and perform the steps of pedicures
to apply artificial nails including liquid gel, powder brush-ons, nail tips, nail wraps and repairs
understand salon management and employ spa skills and business in the workplace
comprehend and apply the Barbering and Cosmetology Act as well as Board's Rules and Regulations
identify hazardous substances and take precautions when working with them/clients prevent injuries and the spread of disease
disinfect and sanitize equipment protecting themselves and their clients

Student Learning Outcomes:
Pass the California State Board Cosmetology/Barbering/Esthetician written and manipulative exams and score at least an 80% on a mock exam given at the training site.
Provide services to clients, in a clinical setting, in a safe, professional and ethical manner that is satisfactory to the clients surveyed with a minimum of 90% satisfaction on an evaluation of their experience.

Units & Hours
Minimum Units:
13.5

Maximum Units
13.5

Total Hours
400.0

Barbering
COSM070:

4.0 - 48.0 Units
Principles and practices in barbering. Preparation for Board Examination for licensing by the State of California Board of Barbering and Cosmetology. Laboratory participation includes student demonstration that all performance objectives have been met. Basic cosmetology kit at student’s expense. Open Entry/Open Exit

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
48.0

Learning Outcomes
Course Objectives:
describe and perform hair analysis, shampooing and hairstyling
describe and mix solutions use solutions to permanently wave and chemically straighten hair
safely mix and use chemicals to color and bleach hair
identify hair cutting techniques and use various tools to cut hair
comprehend and apply the Barbering and Cosmetology Act as well as Board’s Rules and Regulations
identify hazardous substances and take precautions when working with prevent injuries and the spread of disease
disinfect and sanitize equipment protecting themselves and their clients
describe and perform skin analysis and various massage techniques
identify shaving techniques and perform shaves
apply proper post shave services and techniques

Student Learning Outcomes:
Pass the California State Board Cosmetology/Barbering/Esthetician written and manipulative exams and score at least an 80% on a mock exam given at the training site.
Provide services to clients, in a clinical setting, in a safe, professional and ethical manner that is satisfactory to the clients surveyed with a minimum of 90% satisfaction on an evaluation of their experience.

Units & Hours
Minimum Units:
48.0

Maximum Units
48.0

Total Hours
1500.0

Esthetician
COSM080:
0.5 - 9.0 Units

Instruction in the theory and practical applications of all practices of an esthetician as required by Section 7316 of the Barbering and Cosmetology Act. Students are required to purchase a basic esthetician kit. Open Entry/Open Exit
Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

9.0

Learning Outcomes

Course Objectives:

Remove only the non-living, uppermost layers of facial skin, known as the epidermis for the purpose of beautification

Practice and perform all procedures and techniques in accordance with Section 992 regarding skin peeling

Use wax, tweezers, electric or manual, and depilatories for the removal of superfluous hair

Describe and understand client consultation, intake procedures, contraindications, professionalism, client record keeping, pre and post operative care, CPR/AED, salon and spa skills

Describe and perform hair (eyebrow) analysis

Use wax, tweezers, electric or manual, and depilatories for eyebrow shaping and the removal of superfluous hair

Describe and perform skin analysis

Perform basic and corrective make-up application

Apply false eyelashes

Student Learning Outcomes:

Pass the California State Board Cosmetology/Barbering/Esthetician written and manipulative exams and score at least an 80% on a mock exam given at the training site.

Provide services to clients, in a clinical setting, in a safe, professional and ethical manner that is satisfactory to the clients surveyed with a minimum of 90% satisfaction on an evaluation of their experience.

Units & Hours

Minimum Units:

9.0

Maximum Units

9.0

Total Hours

400.0

Citizenship

CTZN020:

72.0 Hours

Provides basic knowledge of local, state, and federal government in preparation for the United States citizenship examination including language usage within the context of history and government. Open Entry/Open Exit

Requisites

Requisites:

Advisory
ESL303 - Intermediate Low

ESL 303 or Higher.

Learning Outcomes

Course Objectives:
- Identify voter qualifications
- Pass the Comprehensive Adult Student Assessment System (CASAS) Oral Interview Test
- Read and interpret information about executive, legislative, and judicial activities
- Recognize privileges granted to United States citizens
- Describe the rights and responsibilities of citizens
- Complete an authentic application for naturalization for practice
- Describe the significance of patriotic holidays
- Describe the voting process
- Identify U.S. states, cities, geographical features, and landmarks
- Demonstrate an understanding of the Oath of Allegiance
- Read and answer comprehension questions about a sample N-400 using key naturalization terminology.
- Describe the significance of U.S. symbols
- Identify U.S. historical figures and current leaders
- Practice interview skills and participate in a simulated Immigration and Naturalization Services interview
- Recite the names of local, state, and federal government leaders
- Identify major U.S. historical events
- Read and interpret information about electoral politics and candidates
- Summarize the basic principles of the Constitution
- Demonstrate knowledge about eligibility requirements, application procedures, and the naturalization process
- Identify and understand important U.S. historical documents

Student Learning Outcomes:
- Demonstrate sufficient knowledge of U.S. History and Civics to pass the U.S. Citizenship and Immigration Services Citizenship Interview
- Demonstrate sufficient oral language skills to pass the U.S. Citizenship and Immigration Services Citizenship Interview

Hours

Total Hours

72.0

Continuing Education Programs

Adult Basic Education*
Adults with Special Needs*
Custodial Technician*

Credit Programs

Accounting*
American College English*
American Sign Language*
Anthropology*
Art*
Astronomy*
Biology*
Business*
Carpentry - Apprenticeship*
Chemistry*
Child Development*
Communication*
Computer Information Systems*
Computer Science*
Cosmetology*
Counseling*
Earth Science*
Economics*
Education*
Electrician*
Electrician - Apprenticeship*
English*
Ethnic Studies*
Gemology*
Gender Sexuality Women Studies*
Geography and the Environment*
Geology*
History*
Kinesiology - Health Education*
Maintenance Mechanic - Apprenticeship*
Operating Engineers - Apprenticeship*
Power Lineman - Apprenticeship*
Surveying - Apprenticeship*

Cultural Breadth

ANTH100 - Introduction to Cultural Anthropology
ANTH100H - Honors Introduction to Cultural Anthropology
ANTH104 - Language and Culture
ASL116 - Introduction to Deaf Studies
CDEV221 - Living and Teaching in a Diverse Society
COMM120 - Intercultural Communication
COMM120H - Honors Introduction to Intercultural Communication
COMM225 - Gender Communication
COMM225H - Honors Gender Communication
ENGL246 - Survey of Chicano Literature
ENGL271 - Survey of World Literature I
ENGL272 - Survey of World Literature II
ENGL278 - Survey of Literature by Women
ETHN101 - Introduction to Ethnic Studies
ETHN110 - Introduction to Asian Pacific American Studies
ETHN120 - Introduction to African American Studies
ETHN130 - Introduction to Chicano Studies
ETHN140 - Introduction to Native American Studies
GEOG100 - World Regional Geography
GEOG100H - Honors World Regional Geography
GEOG102 - Cultural Geography
GEOG102H - Honors Cultural Geography
GSWS101 - Introduction to Women's Studies
GSWS102 - Money, Sex, and Power
HIST124 - Mexican-American History in the United States
HIST127 - Women in U.S. History
HIST132 - Modern African History
HIST142 - History of the Modern Middle East
HIST152 - Latin American History
HIST162 - Asian Civilizations
KIN109 - Sport in US Society
KIN110 - Women's Health Issues
MUS102 - World Music
MUS103 - Jazz in America
PHIL112 - World Religions
D. Social, Political, and Economic Institutions and Behavior; Historical Background

ANTH100 - Introduction to Cultural Anthropology
ANTH100H - Honors Introduction to Cultural Anthropology
ANTH103 - Introduction to Archaeology
ANTH104 - Language and Culture
CDEV107 - Child Growth and Development (DS1)
CDEV110 - Child, Family and Community (DS2)
CINE105 - Mass Media and Society
CNSL150 - Introduction to Human Services
COMM120 - Intercultural Communication
COMM120H - Honors Introduction to Intercultural Communication
COMM225 - Gender Communication
COMM225H - Honors Gender Communication
ECON101 - Principles/Micro
ECON102 - Principles/Macro
EDUC101 - American Schools and Society
ENGL278 - Survey of Literature by Women
ETHN101 - Introduction to Ethnic Studies
ETHN110 - Introduction to Asian Pacific American Studies
ETHN120 - Introduction to African American Studies
ETHN130 - Introduction to Chicano Studies
GEOG100 - World Regional Geography
GEOG100H - Honors World Regional Geography
GEOG102 - Cultural Geography
GEOG102H - Honors Cultural Geography
GEOG140 - California Geography
GSWS101 - Introduction to Women's Studies
GSWS102 - Money, Sex, and Power
GSWS103 - Men and Masculinities
HIST101 - World Civilizations to the 16th Century
HIST101H - Honors World Civilizations to the 16th Century
HIST102 - World Civilizations Since the 16th Century
HIST102H - Honors World Civilizations Since the 16th Century
HIST118 - Social and Cultural History of the United States
HIST120 - The United States to 1877
HIST120H - Honors The United States to 1877
HIST121 - The United States Since 1865
HIST121H - Honors the United States Since 1865
HIST122 - American History-Dynamics of Change
HIST124 - Mexican-American History in the United States
HIST126 - United States since 1945
HIST127 - Women in U.S. History
HIST132 - Modern African History
HIST133 - History of California
HIST142 - History of the Modern Middle East
HIST152 - Latin American History
HIST162 - Asian Civilizations
HIST240 - Introduction to Peace and Conflict Studies
IDS155 - Human Sexuality
KIN109 - Sport in US Society
POLT101 - American Government and Politics
POLT101H - Honors American Government and Politics
POLT110 - Introduction to Political Science
POLT150 - Model United Nations
POLT200 - American Political Thought
POLT201 - Introduction to Comparative Politics
POLT220 - International Politics
Dance History and Appreciation
DNCE100:

3.0 Units

The development of dance in Western Europe and the U.S. from ancient times to the present. Explores dance as an emerging art form from the Renaissance to the 21st century. Emphasizes the contemporary dance heritage of the United States. Field trips may be required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3A: Arts

Learning Outcomes

Course Objectives:
Explain dance as a universal human phenomenon
Explain dance as ritual
Explain theatre development and dance in ancient Greece
Discuss significant historical events and their effect on dance
Discuss mystery, miracle and morality plays
Discuss Feast of Fools, Dance of Death
Discuss tournament and masques
Discuss significant historical events and their effect on dance
Discuss revival of dance; first notation of dance; Orchesography by Arbeau
Discuss Roman myths, legends in masques
Discuss Catherine de Medici's influence
Discuss and differentiate different dance forms: galliard, pavane, volta, courante, sarabande
Discuss significant historical events and their effect on dance (Baroque)
Switch from courtiers to professional dancers; proscenium arch stage
Identify Louis XIV/Lully and Rameau Romantic period: (1800's)
Discuss significant historical events and their effect on dance
Identify artists
Compare today's ballet: Balanchine, Robbins, Bejart
Discuss significant historical events and their effect on dance
Identify popular dance forms, ballroom dancing, marathon
Discuss significant historical events and their effect on dance.
Recognize cultural influences, quadroon balls, and early performers
Identify Katherine Dunham, Alvin Ailey, Gus Solomon, Arthur Mitchell, and Pearl Primus
Compare popular dance influences of African, Caribbean, and modern dance
Identify important musicals and choreographers
Discuss significant historical events and their effect on dance
Identify early pioneers
Explain early movement theories
Identify various choreographers
Discuss significant historical events and their effect on dance
Identify choreographers
Discuss multicultural influences in ballet, performance art and on concert dance
Explain how the viewer's aesthetic sense and critical eye are affected by a knowledge of history
Distinguish between critical appreciation or appraisal and simple preference or dislike

Student Learning Outcomes:
Assess the value of choreographic works based on their historical significance, originality and craftsmanship.
Correlate choreographic meaning to current personal, social, and political issues.
Justify personal aesthetic choices for evaluating dance works.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0

Total Hours
54.0

Modern Dance Fundamentals
DNCE106A :

1.0 Units

An introduction to modern dance emphasizing movement technique, dance vocabulary and creative individual expression. Includes an introduction to choreographic principles and the historical/cultural context of American modern dance. For the student with little or no dance experience. Previous Title: Dance 106A, Introduction to Modern Dance (2017)

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Demonstrate knowledge of course requirements, goals, and major course segments
Identify and define styles of modern dance
Explain importance of individualized warm-up and how to develop it
Describe the basic understanding of the musculoskeletal system as applied to modern dance skills
Apply the use of floor work in modern dance as a means of developing the major muscles of the torso
Display contraction/release technique as a movement initiator in modern dance sequences
Execute the proper way to stretch muscles
Utilize fall and recovery to initiate movement in a variety of ways
Utilize the theory of 5 point stretch
Utilize the characteristics of Limon technique
Practice the use of momentum and swing in beginning modern dance choreography
Demonstrate the correct weight distribution and its relation to balance from two legs to one and flat foot to releve
Execute proper landings from jumps
Control use of body weight, spotting, correct takeoff for jumps, in beginning patterns
Practice dancing in different musical meters
Apply characteristics of different types of dynamics and their use in the phrasing of dance movement
Practice movement with directional designs: forward, side, back, diagonal and stage directions: upstage, downstage, right, left
Execute the correct alignment of hips and spin
Demonstrate contractions in varied positions and levels
Apply a range of flexibility and strength
Demonstrate the ability to control torso through stomach and back muscles
Demonstrate the ability to perform successional movement
Perform: walk, run, hop, leap, slide, gallop
Perform front, side and back falls
Demonstrate musically accurate beginning choreography
Apply a variety of dynamic phrasing in movement
Master "spotting" in turn techniques
Control movements in different directions in space
Memorize dance patterns
Improve strength and endurance to perform jumps and leaps
Define the elements of composition: time, space, energy
Apply steps learned in class for self expression
Conceptually utilize the fundamentals of composition: time, space and energy to design theme through choreography
Analyze and solve creative problems involving one or more elements of modern dance technique
Apply the skills learned in floor work to movement done standing up
Demonstrate parallel feet positions and the five positions of ballet
Display the proper use of feet in kicks and jumps
Incorporate the use of breath as an aid to initiating movement and timing
Demonstrate the proper placement of arms
Design the symmetry and asymmetry of modern dance, shapes and patterns
Apply alignment techniques necessary for balance and off balance movement

Student Learning Outcomes:
- Execute basic modern dance movements with improved flexibility, posture, strength, control, and coordination as exhibited in in-class practice and performance exams.
- Identify and describe modern dance terminology, movements and concepts on written and oral exams.
- Evaluate dance pieces in light of their socio-cultural background, choreographic intent, and personal interpretation as evidenced by a well-substantiated written critique of a professional dance performance.
- Experiment on movement possibilities and construct short dance sequences through the improvisation and composition studies developed in class.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0
Intermediate Modern Dance
DNCE106B:

1.0 Units

This course further explores the technical and expressive elements of modern dance. Students will practice floor exercises, axial/positional movements and locomotor patterns at an intermediate level. Deepening an understanding of historical significance, dance vocabulary and creative individual expression. Strengthening an understanding of choreographic principles and cultural context of American modern dance. Previous Title: Dance 106B, Introduction to Modern Dance (2017)

Requisites
Requisites:

Advisory

DNCE106A - Modern Dance Fundamentals

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:

Demonstrate posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Analyze and solve creative problems involving more than three elements of modern dance technique

Perform more complex combinations and sequences

Apply dance etiquette when traveling across the floor

Demonstrate posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Apply the rules for the use of the foot and hip as established by ballet and modern dance

Develop a progression training that is technically accurate by analyzing and correlating course concepts

Perform complex combinations and sequences

Demonstrate posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Evaluate and analyze a professional performance in light of movement motifs and modern dance concepts and techniques, space, time and energy

Use improvisation techniques to design choreography

Demonstrate proper alignment in axial and locomotor movement

Demonstrate proper alignment in axial and locomotor movement

Demonstrate correct placement for body twists and curves

Properly align hips when doing body curves and twists standing up

Compare technical characteristics of Graham, Hawkins and Nikolais

Adjust selected exercises to different musical phrasings

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
Demonstrate an awareness of other dancers when moving

Apply dance etiquette when traveling across the floor

Demonstrate an awareness of the sense of design: the symmetry and asymmetry of modern dance

Identify, define, and perform intermediate Modern Dance vocabulary and terminology

Identify personal movement preferences and strengths through the exploration of movement

Perform more complex combinations and sequences

Develop a progression training that is technically accurate by analyzing and correlating course concepts

Adapt and create innovative and safe transitions from selected exercises

Demonstrate an awareness of other dancers when moving

Demonstrate posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Evaluate and analyze a professional performance in light of movement motifs and modern dance concepts and techniques, space, time and energy

Demonstrate proper alignment in axial and locomotor movement

Demonstrate an awareness of the creative process

Expand fundamentals of composition: time, space, energy to design choreography

Demonstrate an awareness of where one is in space while turning and changing direction

Demonstrate posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Demonstrate an awareness of the creative process

Identify, evaluate and analyze areas needing personal improvement and revise movement sequences both physically and theoretically to address those areas

Demonstrate an awareness of where one is in space while turning and changing direction

Create concepts of themes which are practical in application

Apply alignment necessary for balance and off-balance movement

Identify personal movement preferences and strengths through the exploration of movement

Perform more complex combinations and sequences

Perform complex combinations and sequences

**Student Learning Outcomes:**

- Execute modern dance movements with improved flexibility, posture, strength, control, and coordination as exhibited in in-class practice and performance exams.
- Identify and describe modern dance terminology, movements and concepts on written and oral exams.
- Evaluate dance pieces in light of their socio-cultural background, choreographic intent, and personal interpretation as evidenced by a well-substantiated written critique of a professional dance performance.
- Assess suitability of movements and choreographic techniques in communicating their idea as they create short dance compositions that effectively use time, space and energy.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units:**

1.0

**Total Hours**

36.0
Ballet Fundamentals
DNCE108A :

1.0 Units

Introduction to basic ballet emphasizing movement technique, dance vocabulary, and creative individual expression. Student learns basic ballet barre exercises, center work, and short dance works. Includes an introduction to choreographic principles and cultural context of ballet. For the student with little or no dance experience. Previous Title: Dance 108A, Introduction to Ballet (2017)

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:

Lab note: Course material is introduced in order of increasing difficulty. An exercise or movement is introduced during one class period, reviewed at the next, and then incorporated into movement sequences during the laboratory portion of classes for the

Establish principle related to center work
Comprehend timing of feet, legs, body and arms to jump; beginning allegro work
Incorporate timing of feet, legs, body and arms to jump in beginning allegro work
Apply French pronunciation and spelling for each exercise; its literal meaning and use in ballet
Display correct weight distribution and its relation to balance from two legs to one; from flat to demi-pointe
Demonstrate skills and technique (Center practice)
Instill the principle of spotting during turns
Practice care and prevention of dance injuries
Physicalize beginning skills and technique
Use turnout of the legs from the hips as a standing position and in movement sequences
Acquire concepts of beginning skills and technique
Apply skills and technique learned at the barre to perform similar movements unaided in center floor
Demonstrate an understanding of theory and principles
Perform successfully and accurately not only the large steps, but the connecting steps as well
Recognize principle of spotting during turns
Identify vocabulary, French pronunciation, and spelling for each exercise; its literal meaning and use in ballet
Achieve the body mechanics of speed, elevation, and endurance for center work
Apply theory and principles to beginning choreographics
Ballet class etiquette

Apply correct body alignment to beginning technique

Utilize balancing skills

(Center practice) for beginning students

Inculcate principles of balance; alignment; muscle tension; oppositional tension

Develop technique in beginning locomotor patterns

Demonstrate correct weight distribution and its relation to balance from two legs to one; from flat to demi-pointe

Demonstrate a general understanding of the following concepts:

Course requirements, goals, major course segments

Apply ballet class etiquette

Display sense of design and symmetry of ballet

Develop strength and flexibility

Importance of individualized pre barre warm up and how to develop and expand it

Recognize relationship between proper alignment, placement, and ease of movement

Control timing and spotting while turning on the diagonal

Comprehend sense of design and symmetry of ballet

Demonstrate how classical principles of proportion and harmony influenced ballet development

Demonstrate structured beginning pre barre warm up and how to develop it on center floor

Execute proper alignment, placement, and ease of movement

Apply correct body alignment

Recognize principle of spotting during turns

Associate beginning skills and technique learned at the barre to perform similar movements unaided in center floor

Identify the elements of composition, ballet form, and structure

Improve balance

Develop strength and flexibility

Describe theory and principles related to center work (lecture and discussion)

Use turnout of the legs from the hips as a standing position

Coordinate simple arm and leg movements

Describe the basic outline of ballet history from 17th to early 20th century

Demonstrate proper care and prevention of dance injuries

Student Learning Outcomes:

Critically analyze the exercises with regard to physiological awareness in turns.

Reflectively apply concepts of erect posture and alignment at the barre and in the center of the ballet studio.

Reflectively apply the physiological concepts of spatial awareness, balance and breath to ballet technique.

Communicate knowledgeably the general order of exercises of the ballet technique class.

Units & Hours

Minimum Units:

1.0
Maximum Units
1.0

Total Hours
36.0

Intermediate Ballet
DNCE108B :

1.0 Units

This course further explores the technical and expressive elements of ballet technique, dance vocabulary, and creative individual expression. Students will practice ballet barre exercises, center work, and short dance works at an intermediate level. Strengthening an understanding of historical significance, choreographic principles and cultural context of ballet. Previous Title: Dance 108B, Introduction to Ballet (2017)

Requisites
Requisites:
Prerequisite
DNCE108A - Ballet Fundamentals

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Execute basic and intermediate ballet techniques
Learn principles and terminology with an emphasis on line and phrasing
Develop individualized pre barre warm up
Critique a ballet performance using the techniques of appraisal, academic criticism, and evaluation of ballet skill
Demonstrate skills at the intermediate level: ie: higher extensions, leaps, multiple turns, sustained strength, and complex direction changes
Execute a variety of intermediate-level ballet steps, turns, and jumps that demonstrate greater bodily strength, control, balance, coordination, agility, and endurance
Develop individualized pre barre warm up
Develop technique for more intermediate steps and combinations
Distinguish between different positions and movements of ballet
Compare and contrast the different schools of ballet both verbally and physically
Analyze technical elements of a ballet performance
Analyze technical elements of a ballet performance
Increase endurance

**Student Learning Outcomes:**
- Critically analyze the exercises with regard to physiological awareness in turns.
- Reflectively apply concepts of erect posture and alignment at the barre and in the center of the ballet studio.
- Reflectively apply the physiological concepts of spatial awareness, balance and breath to ballet technique.
- Communicate knowledgeably the general order of exercises of the ballet technique class.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
36.0

**Tap Dance Fundamentals**

**DNCE115A :**

1.0 Units

Introduction to basic tap dance technique. Focuses on the mastery of basic tap steps and simple dance combinations. Recommended for theatre and dance majors. For the student with little or no dance experience. Field trips may be required. Previous Title: Dance 115A, Introduction to Tap Dance (2017)

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**
- Analyze and demonstrate the use of body energy, facial expression, coordination of arm movements and clarity of style for a specific pattern.
- Apply musical timing to a variety of beginning tap dance forms with more complexity.
- Demonstrate comprehension of basic tap choreographic tools: 3 times and a break; 4 bar structures; 8 bars.
- Construct choreography utilizing technical components: i.e; preparations, weight changes, rhythms.
- Apply musical timing to a single time step(s) and a break.
- Depict technical components in beginning tap dance: preparations, weight changes, rhythms.
- Apply three tap choreographic tools: 3 times and a break; 4 bar structures; 8 bars.
- Demonstrate comprehension of musical timing and its application within the varied forms of tap dancing.
- Demonstrate the use of body energy, facial expression, coordination of arms for a specified pattern.
Apply musical timing and its application within the varied forms of tap dancing
Demonstrate an understanding of the historical awareness of tap dance
Execute musical timing to a single time step(s) and a break
Apply musical timing to specified tap dance patterns
Demonstrate comprehension of musical timing and its application within the varied forms of tap dancing
Analyze and demonstrate the use of body energy, facial expression, coordination of arm movements, and clarity of style in choreography
Apply musical timing to a variety of heel drop patterns
Analyze the use of body energy, facial expression, coordination of arm movements and clarity of style for a specific pattern
Apply musical timing to specified dance patterns
Analyze and demonstrate the use of body energy, facial expression, coordination of arm movements, and clarity of style in choreography
Apply musical timing to a variety of beginning tap dance forms with more complexity
Apply musical timing to varied forms of tap dancing
Demonstrate three tap choreographic tools: 3 times and a break; 4 bar structures; 8 bars
Apply musical timing to a waltz clog combination
Demonstrate three tap choreographic tools: 3 times and a break; 4 bar structures; 8 bars
Retain and demonstrate beginning tap steps in combination sequences
Identify and demonstrate proficiency in the execution of beginning tap steps presented in class during the semester
Apply musical timing to specified tap dance patterns
Analyze and demonstrate the use of body energy, facial expression, coordination of arm movements, and clarity of style for additional patterns and skill sets
Analyze and demonstrate the use of body energy, facial expression, coordination of arm movements, and clarity of style for a specified pattern
Analyze and demonstrate the use of body energy, facial expression, coordination of arms for a specified pattern
Analyze and demonstrate the use of body energy, facial expression, coordination of arm movements, and clarity of style for additional patterns and skill sets
Demonstrate body energy, facial expression, coordination of arm movements, and clarity of style for specified combinations
Define vocabulary and demonstrate the use of body energy, facial expression, coordination of arm movements, and clarity of style for a specified combination
Apply historical awareness of tap dance into dance movement/exercise
Distinguish through knowledge and demonstration, the use of body energy, facial expression, coordination of arm movements, and clarity of style for specified combinations

**Student Learning Outcomes:**
- Choreograph 8 counts of eight using at least six rudiments in a variety of ways.
- Incorporate choreography into different pieces of music.
- Arrange choreographies using Merce Cunningham’s method of “Chance choreography”

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0
Total Hours
36.0

Intermediate Tap Dance
DNCE115B :

1.0 Units

This course further explores the technical and expressive elements of tap dance. Students will practice skills necessary for execution of traditional tap dance steps and sequences at an intermediate level. Strengthening intermediate steps leading to combination work in complete dances. Previous Title: Dance 115B, Introduction to Tap Dance (2017)

Requisites
Requisites:
Advisory
DNCE115A - Tap Dance Fundamentals

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Learning Outcomes
Course Objectives:
Demonstrate an understanding of history and cultural context of tap dance in dance movement/exercise

Explain the history and cultural context of tap dance

Demonstrate proficiency in basic and intermediate tap skills

Demonstrate proficiency in the execution of intermediate steps presented

Demonstrate tap steps in combination sequences at intermediate level

Identify proficiency in basic and intermediate tap skills

Evaluate proficiency in the execution of intermediate steps presented

Identify tap steps in combination sequences at intermediate level

Understand musical timing and its application within the varied forms of tap dancing; ie, swinging, straighttime, stop time, 12 bar phrase, 4/4 and 3/4 meters, 32 bar structure.

Recognize the use of body energy, facial expression, coordination of arm movements and style clarity

Display musical timing and its application within the varied forms of tap dancing; ie, swinging, straighttime, stop time, 12 bar phrase, 4/4 and 3/4 meters, 32 bar structure.

Use body energy, facial expression, coordination of arm movements and style clarity

Demonstrate increased knowledge of tap dance principles regarding both Broadway and Rhythm styles

Demonstrate tap skills at the intermediate level

Understand three tap choreographic tools: 3 times and a break, 4 bar structures and 8 bars

Use body energy, facial expression, coordination of arm movements and style clarity

Use learned tap steps and timing in the creation of intermediate dances
Recognize three tap choreographic tools: 3 times and a break; 4 bar structures; 8 bars.

Recognize the knowledge and proficiency of the use of body energy, facial expression, coordination of arm movements and style clarity.

Demonstrate learned tap steps and timing in the creation of intermediate dances.

Demonstrate three tap choreographic tools: 3 times and a break; 4 bar structures; 8 bars.

Develop proficiency in the use of body energy, facial expression, coordination of arm movements and style clarity.

Utilize acquired tap steps in a complete tap routine.

Demonstrate proficiency in the musicality and use of body energy, facial expression, coordination of arm movements and style clarity.

**Student Learning Outcomes:**

- Choreograph 8 counts of eight using at least six rudiments in a variety of ways.
- Incorporate choreography into different pieces of music (all are 4/4 meter).
- Arrange choreographies using Merce Cunningham's method of "Chance choreography".

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**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units:**

1.0

**Total Hours:**

36.0

**Jazz Dance Fundamentals**

**DNCE119A:**

1.0 Units

Introduction to jazz dance technique emphasizing elementary movement technique, vocabulary and creative expression. Includes an introduction to composition and cultural context of jazz. For students with little or no dance experience. Previous Title: Dance 119A, Introduction to Jazz Dance (2017)

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Demonstrate understanding of goals and requirements
- Define flexibility, endurance and strength for beginning jazz technique
- Practice individualized pre-warmup to prime the body for more extensive exercises
- Physicalize basic terminology for the beginning jazz dancer
- Practice development of coordination through isolation exercises
Incorporate warmup exercises into dance techniques, postures and movement patterns
Demonstrate relationship between correct alignment and maximal efficient dance movement
Practice proper placement of major body parts
Apply terminology
Utilize major postural muscles and skeletal structures to affect placement
Execute principles of movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and in turning without dizziness (spotting)
Perform specific steps necessary for beginning dance combinations
Demonstrate prevention of dance injuries
Identify significant jazz dance choreographers and performers
Define style for the beginner
Demonstrate understanding of prevention and care of dance injuries
Perform steps and movements in extended, but basic choreographic sequences
Apply style to movements and sequences
Apply rhythm, skills in movement patterns
Practice spatial awareness for simple ensemble work
Practice ability to "picking up" movement sequences and retaining them for several class sessions
Develop flexibility, endurance and strength for beginning jazz technique
Describe importance of individualized pre-warmup to prime the body for more extensive exercises
Define basic terminology for the beginning jazz dancer
Practice development of coordination through isolation exercises
Define the relationship between warmup exercises and dance technique
Analyze relationship between correct alignment and maximal efficient beginning dance movement
Illustrate proper placement of major body parts
Memorize introductory terminology, major postural muscles and skeletal structures that affect placement
Define and practice principles of introductory movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and in turning without dizziness (spotting)
Practice specific steps necessary for beginning dance combinations
Identify strategies in prevention of dance injuries

**Student Learning Outcomes:**
- Execute jazz dance movements with improved flexibility, posture, strength, control and coordination.
- Experiment on movement possibilities and construct dance phrases.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours**
36.0
Intermediate Jazz Dance  
DNCE119B:

1.0 Units

This course further explores the technical and expressive elements of jazz dance. Students will practice body alignment, locomotor movements, hitch kicks and leaps. Deepening an understanding of jazz dance, movement technique, vocabulary and creative expression. Strengthening an understanding of composition and cultural context of traditional and contemporary jazz dance forms. Previous Title: Dance 119B, Introduction to Jazz Dance (2017)

Requisites

Requisites: None

Transferability & General Education Options

Transferable: Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

Learning Outcomes

Course Objectives:

Comprehend individual capacity for greater strength, higher extensions, and more sustainable endurance

Perform same steps in a variety of Jazz Dance Styles and Music

Understand posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Execute movement sequences to increase coordination, accuracy, and alacrity in movement sequences

Execute a variety of jazz dance steps, turns, jumps, and combinations with artistic expression and performance qualities

Memorize movement sequences to increase coordination, accuracy, and alacrity in movement sequences

Execute a variety of jazz dance steps, turns, jumps, and combinations with artistic expression and performance qualities

Memorize intermediate skill level of jazz dance with accurate musicality and clarity of rhythmical form

Memorize a variety of jazz dance steps, turns, jumps, and combinations with artistic expression and performance qualities

Memorize intermediate skills in a variety of Jazz Dance Styles

Demonstrate posture, strength, flexibility, muscular control, and coordination necessary for more complex movement combinations

Perform intermediate skills in a variety of Jazz Dance Styles

Distinguish complex exercises and warm up sequences

Demonstrate individual capacity for greater strength, higher extensions, and more sustainable endurance

Perform intermediate skills of jazz dance with accurate musicality and clarity of rhythmical form

Define and apply the terminology of Jazz Dance in terms of space, time, weight and force

Identify and define intermediate Jazz Dance vocabulary and terminology

Perform complex exercises and warm up sequences

Choreograph and perform dance sequences using Jazz Dance terminology that demonstrate a range of Jazz Styles

Explain and perform the different styles and genre in Jazz Dance

Student Learning Outcomes:
Choreograph 8 counts of eight using at least six skills, jazz walks, pirouettes, chene and pique turns, kicks, jumps and leaps, utilizing space and rhythm.
Incorporate choreography into different pieces of music
Arrange choreographies using Merce Cunningham's method of “Chance choreography”

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0

Dance Production
DNCE204A:

2.0 Units
Concert dance production experience culminating in public performances. Includes production basics, with an emphasis on performance techniques and working with faculty/student choreographers to create original dances. By audition only prior to enrollment.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes
Course Objectives:
Critique and evaluate their dance production experience.
Apply appropriate theatre and dance etiquette prior to, during, and after a dance production.
Observe and demonstrate the dancer’s role in the technical rehearsal process.
Analyze performance experience through self-assessed critique.
Develop performance skills, both physically and mentally, to capture the style and quality of different dance roles.
Apply the benefits of dance performance experience in personal career objectives.
Prepare for the audition process.

Student Learning Outcomes:
Listen, speak, use problem-solving skills and critical thinking skills to interpret, adapt, and analyze choreography.
Use cultural dance forms and work in social groups demonstrating their ability to compose, perform, and interact with community.

Units & Hours
Minimum Units:
Maximum Units
2.0

Total Hours
72.0

Dance Production
DNCE204B:

2.0 Units

Continued study in concert dance production culminating in public performances. Includes a range of production basics and advanced dance production methods, with an emphasis on choreography to create original dance work. Course differs from 204A.

Requisites

Prerequisite
DNCE204A - Dance Production

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes

Course Objectives:
Understand how theater design elements enhance the development of a dance.
Evaluate theater design elements to enhance the development of a dance.
Define and employ dance production assignments including schedules, marketing, budget, and costume management.
Develop and assign roles for dancers.
Direct and communicate to other dancers during the choreographic process.
Prepare for the audition process.
Define and employ dance production assignments including schedules, marketing, budget, and costume management.
Define and employ dance production assignments including schedules, marketing, budget, and costume management.
Self-assess choreographic process.
Direct and communicate to other dancers during the choreographic process.
Utilize various music genres, sounds, props, or digital images to support the choreographic process.
Utilize various music genres, sounds, props, or digital images to support the choreographic process.
Utilize various music genres, sounds, props, or digital images to support the choreographic process.
Create a solo, duet, or group composition expressing complex ideas and personal meaning-making through the choreographic process.
Self-assess choreographic processes.

Student Learning Outcomes:
Listen, speak, use problem-solving skills and critical thinking skills to interpret, adapt, and analyze choreography at an intermediate level. Use cultural dance forms and work in social groups demonstrating their ability to compose, perform, and interact with community.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Performance Ensemble
DNCE205:

2.0 Units
Pre-professional ensemble to provide performance experience for advanced students. Concert tour/performance field trips may be required. Repertoire and casting vary each semester.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
2.0

General Education Plan:
Learning Outcomes
Course Objectives:
Increased awareness of guest artist's performance technique and style.

Direct and perform with clarity and commitment.

Identify audience and venue in order to meet the needs of participants

Acknowledge the physical, emotional, and psychological toll that touring can have on a performer, in order to maintain a integrity during each performance.

Recognize the importance of peer and self-evaluation

Define a company's mission statement, goals, and objectives.

Perform in various conditions and environments.

Perform technique and style as demonstrated by the artist.

Recognize how community representation can successfully promote the arts and institution.

Create appropriate choreography and/or warm-up material

Develop the logistical aspects of touring, such as developing the touring schedule and building positive relationships.

Summarize and examine personal strengths and weaknesses
Communicate effectively with dancers and audience

Employ improvisational tools to assist in other choreographic endeavors.

Value the performer and his/her contribution to an ensemble.

Perform in front of an audience with confidence, poise, energy, and intent.

Distinguish between artist performance technique and style in comparison with other artists.

Implement corrections as an ensemble to improve performance.

Communicate effectively with intent in a variety of situations.

Improve technique and commitment to role/character.

Create choreography and perform while working with unexpected situations.

Provide an understanding of how the body can be used to communicate with emotion and other physical queues.

Apply knowledge from the rehearsal process in a performance setting.

**Student Learning Outcomes:**

- Demonstrate knowledge of the artistic, rehearsal, and performance practices commonly associated with a wide range of intermediate to advanced level of difficulty in multiple dance styles.
- Demonstrate the ability to assess and adapt the performance to various venues.
- Demonstrate an understanding of the expected performance ensemble goals and commitments.

**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units:**

2.0

**Total Hours:**

72.0

**Hip Hop Dance I**

**DNCE250A:**

2.0 Units

Introduction to hip-hop dance emphasizing movement technique, vocabulary, and creative expression. Includes an introduction to choreographic principles, improvisation, and cultural context of hip-hop.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

Transferable:

Transferable to both UC and CSU

**Weekly Lecture Hours:**

2.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Create specific steps and movement for choreographic sequences.
Employ safety protocols in dance
Recognize and use mental focus and its relation to kinetic performance.
Practice coordination through isolation exercises.
Choose a creative process.
Create elements of composition
Employ individualized pre-warmup exercises.
Identify and build skills expected in a performance ensemble
Distinguish relationships between warmup exercises and dance technique.
Apply principles of movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and turning.
Acquire movement patterns that will assist in memorizing choreography.
Develop movement style to comply with the quality of Hip-Hop dance.
Distinguish between personal space and general space as it relates to the performance space.
Maintain flexibility, endurance and strength for hip hop movements.
Implement dance etiquette and knowledge to career objectives
Adopt steps learned in class for self-expression.
Produce and interpret basic locomotor movements.
Use hip-hop dance as a tool for expressing one's own culture and ideas

Student Learning Outcomes:
- Execute basic hip-hop dance movements with improved flexibility, posture, strength, control, and coordination as exhibited in in-class practice and performance exams.
- Identify and describe hip-hop dance terminology, movements, and concepts on written and oral exams.
- Evaluate dance pieces in light of their socio-cultural background, choreographic intent, and personal interpretation as evidenced by a well-substantiated written critique of a professional dance performance.

Units & Hours
Minimum Units: 2.0
Maximum Units: 2.0
Total Hours: 72.0

Hip-Hop Dance II
DNCE250B:
2.0 Units
Continued study in hip-hop dance emphasizing movement technique, vocabulary, and creative expression. Includes improvisation, more difficult combinations, student compositions, and the cultural context of hip-hop. Movement repertoire differs from 250A.

Requisites
Requisites:
Advisory
DNCE250A - Hip Hop Dance I
successfully complete with a minimum grade of C

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
2.0

General Education Plan:
Learning Outcomes

Course Objectives:
Identify and build skills expected in a performance ensemble
Employ individualized pre-warmup exercises.
Implement dance etiquette and knowledge to career objectives
Assess and adapt performances to various venues.
Create specific steps necessary for Hip-Hop dance combinations.
Distinguish between warmup exercises and dance technique.
Use principles of movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and turning.
Recognize and use mental focus and its relation to kinetic performance.
Evaluate and critique ensemble performances.
Choose a creative process and explore choreographic options through improvisation.
Maintain flexibility, endurance, and strength for hip hop movements.
Apply principles of movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and turning.
Practice coordination through isolation exercises.
Identify steps learned in class for self-expression.
Employ safety protocols in dance
Create specific steps necessary for dance combinations.
Use elements of composition to develop dance movement.
Pursue Hip-Hop dance as a tool for expressing one's own culture and ideas.

Student Learning Outcomes:
Execute intermediate hip-hop dance movements with improved flexibility, posture, strength, control, and coordination as exhibited in in-class practice and performance exams.
Incorporate Hip-Hop choreography using various pieces of music.
Evaluate dance pieces with a more sophisticated lens in light of their socio-cultural background, choreographic intent, and personal interpretation as evidenced by a well-substantiated written critique of a professional dance performance.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0
Hip Hop Dance III
DNCE251:

2.0 Units

Instruction for the continuing dance student in advanced level hip-hop dance technique and further development of performance skills. Emphasis will be placed on combinations, choreography, performance style, and cultural context of hip-hop. Dance 250B is recommended prior to enrollment in this course.

Requisites

Requisites:

Advisory

DNCE250B - Hip-Hop Dance II

Successfully complete with a minimum grade of C

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

2.0

General Education Plan:

Learning Outcomes

Course Objectives:

Employ safety protocols in dance

Implement dance etiquette and knowledge to career objectives

Construct choreography using dance partner techniques.

Identify skill sets at an advanced level

Apply Hip-Hop dance as a tool for expressing one’s own culture, ideas, and inspiration.

Demonstrate improved dance technique.

Evaluate and critique ensemble performances.

Analyze principles of movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and turning.

Develop an individualized warmup exercise plan.

Assess and modify choreography for an audience.

Assemble steps learned in class for self-expression.

Experiment using various elements of composition to develop advanced movement.

Assess and adapt performances to various venues.

Select a creative process to construct choreography through improvisation.

Coordinate isolation exercises.

Practice mental focus to reach optimal physical performance.

Use mental focus for optimal physical performance.

Compare and contrast hip-hop trends

Select and create specific steps necessary for Hip-Hop dance combinations.
Use advanced principles of movement involved in maintaining balance, in achieving proper elevation and safe landings in jumps, and turning.

Increase and maintain flexibility, endurance, and strength for Hip-Hop movements at an advanced level.

Create specific steps necessary for advanced dance combinations.

**Student Learning Outcomes:**

- Execute hip-hop dance movements at an advanced level with improved flexibility, posture, strength, control, and coordination as exhibited in in-class practice and performance exams.
- Incorporate advanced Hip-Hop choreography using various pieces of music, movements, and styles. Explore a dance fusion approach using unconventional and traditional methods to produce Hip-Hop choreography for different environments.
- Evaluate dance pieces with a holistic approach in light of their socio-cultural background, choreographic intent, and personal interpretation as evidenced by a well-substantiated written critique of a professional dance performance.

**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units:**

2.0

**Total Hours:**

72.0

**Digital media**

**Academic Freedom**

The teacher should be free to think and to express ideas, free to select and employ materials and methods of instruction, free from undue pressures of authority, and free to act within his/her professional group. Such freedom should be used judiciously and prudently to the end that it promotes the free exercise of intelligence and student learning. Academic freedom is not an absolute. It must be exercised within the law and the basic ethical responsibilities of the teaching profession. Those responsibilities include:

- An understanding of our democratic tradition and its methods.
- A concern for the welfare, growth, maturity, and development of students.
- The method of scholarship.
- Application of good taste and judgment in selecting and employing materials and methods of instruction.

**Academic Honesty**

**Introduction**

Students at Santiago Canyon College are expected to be honest and forthright in their academic endeavors. To falsify the results of one’s research, to steal the words or ideas of another, or to cheat on an examination corrupts the essential process by which knowledge is advanced. Academic dishonesty is seen as an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization or uses unauthorized materials or fabricated information in any academic exercise. We, as an institution, also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, assisting other students in acts of dishonesty or coercing students into acts of dishonesty.

**Procedures**

In cases where a violation of academic honesty is discovered, the faculty member is encouraged to file an "Academic Honesty Incident Report" form and distribute the form as specified.

There are two categories of sanctions: Limited and College-wide. Limited sanctions include an academic action such as assigning a lower grade or a grade of "F or zero" for the test or project. College-wide sanctions include any sanction that will affect a student’s standing with the college-at-large, up to and including suspension or expulsion from the college.

In matters relating to academic honesty violations, the primary responsibility for employing the Limited Sanctions rests with the instructor and the academic division where the violation allegedly occurred. The Associate Dean of Student Development will assist in all College-wide disciplinary sanctions at Santiago Canyon College.

**Academic Honors**

**Academic Honors at Graduation**
SAcademic honors are awarded to students who do outstanding coursework leading to graduation from Santiago Canyon College. The graduate must have completed at least 30 units of coursework within the Rancho Santiago Community College District of which 18 units or more must be letter grades of "C" or better.

Rancho Santiago Community College District coursework and all transfer work will be computed in the Honors designated GPA. Graduation honors are awarded as follows:

**President's Scholar**
See Honors Program and Honors Courses.

**With Highest Honors**
The highest honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 4.0. Students with Academic Renewal Without Course Repetition are not eligible for Academic Honors With High Honors.

**With High Honors**
The high honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.8. Students with Academic Renewal Without Course Repetition are not eligible for Academic Honors With High Honors.

**With Honors**
The honors designation is placed on the transcript and diploma of the graduate who has achieved an overall grade point average (GPA) of 3.5. Students with Academic Renewal Without Course Repetition are not eligible for Academic Honors With High Honors.

**Departmental Honors**
Honors are awarded to students who do outstanding work in their majors. Eligibility is determined by inclusion in the academic honors categories listed above.

### E2. Communication and Analytical Thinking

- **CMPR100 - The Computer and Society**
- **CMPR105 - Visual BASIC Programming**
- **CMPR129 - Introduction to Computer Organization**
- **COMM101 - Group Dynamics**
- **COMM110 - Public Speaking**
- **MATH280 - Intermediate Calculus**
- **MATH287 - Introduction to Linear Algebra and Differential Equations**
- **READ102 - Academic Reading**

**Principles/Micro**

**ECON101:**

3.0 Units

Introduction to microeconomics, including basic economic concepts, analysis of markets, efficiency, consumer and firm behavior, industry structures, market failure, and resource markets. For economics, business, and certain engineering and computer science majors.

**Requisites**

**Requisites:**

**Prerequisite**

**MATH080 - Intermediate Algebra**

**Outcomes**

- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.
- Graph equations, functions, and conics by applying different graphing techniques and transformations.

**OR**

**Prerequisite**

**MATH085 - Intermediate Algebra with Integrated Support**

- Identify different types of equations and solve by applying appropriate algebraic methods.
- Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite
Qualifying profile from the Mathematics placement process.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)
Economics

Learning Outcomes

Course Objectives:
Distinguish between production possibilities and preferences and describe an efficient allocation of resources

Explain what a firm is and describe the economic problem that all firms face

Describe and distinguish between different types of markets in which firms operate

Explain the influences on demand

Explain why mixed goods with external benefits lead to inefficient underproduction and how public provision, subsidies, and vouchers can achieve allocative efficiency

Explain the connection between supply and marginal cost and define producer surplus

Use game theory to explain other strategic decisions

Explain the effects of a tax

Explain how markets cope when buyers and sellers have private information

Explain how economists go about their work as social scientists and policy advisers

Graph relationships among more than two variables

Define, calculate, and explain the factors that influence the cross elasticity of demand and the income elasticity of demand

Explain the connection between demand and marginal benefit and define consumer surplus

Describe economic institutions that coordinate decisions

Explain how capital and land rental rates and natural resource prices are determined

Explain how the value of the marginal product determines the demand for a factor of production
Explain why external costs bring market failure and too much pollution and how property rights, pollution taxes, emissions charges, and marketable permits might achieve an efficient outcome

Explain the two big questions of economics

Define economics and distinguish between microeconomics and macroeconomics

Describe antitrust laws that regulate oligopoly

Explain the main ideas about fairness and evaluate claims that markets result in unfair outcomes

Describe a competitive market and think about a price as an opportunity cost

Explain how rent ceilings create housing shortages and inefficiency

Define and identify monopolistic competition

Define and identify oligopoly

Define perfect competition

Distinguish between the short run and the long run

Compare the performance and efficiency of single price monopoly and competition

Define, calculate, and explain the factors that influence the price elasticity of supply

Describe alternative methods of allocating scarce resources

Use marginal utility theory to predict the effects of changes in prices and incomes and to explain the paradox of value

Explain how price and output are determined in a perfectly competitive market in the short run

Explain the relationship between a firm's output and costs in the short run and derive a firm's short run cost curves

Explain how the free rider problem arises and how the quantity of public goods is determined

Use the demand and supply model to make predictions about changes in prices and quantities

Explain the constraints on consumption choices and describe preferences using the concept of utility

Explain the influences on supply

Explain how demand and supply determine prices and quantities bought and sold

Use game theory to explain how price and output are determined in oligopoly

Explain the relationship between a firm's output and labor employed in the short run

Explain how price discrimination increases profit

Explain how monopoly arises and distinguish between single price monopoly and price discriminating monopoly

Define the production possibilities frontier and use it to calculate opportunity cost

Define, calculate, and explain the factors that influence the price elasticity of demand

Explain how a single price monopoly determines its output and price

Predict the effect of a change in demand and of a technological advance on a competitive industry

Explain the marginal utility theory of consumer choice

Explain why firms enter and leave a competitive market in the long run and the consequences of entry and exit

Explain how monopoly regulation influences output, price, economic profit, and efficiency

Explain how minimum wage laws create unemployment and inefficiency

Explain the key ideas that define the economic way of thinking

Explain why markets coordinate some economic activities and why firms coordinate others

Describe some new ways of explaining consumer choices
Explain how a firm makes its short run output decision and why it might shut down

Explain the conditions under which markets are efficient and fair

Explain the relationship between a firm’s output and costs in the long run and derive a firm’s long run average cost

Explain how wage rates and employment are determined and how labor unions influence labor markets

Explain how a firm in monopolistic competition determines its price and output in the short run and in the long run

Explain how specialization and trade expand production possibilities

Define and explain the principal–agent problem and describe how different types of business organizations cope with this problem

Explain why perfect competition is efficient

**Student Learning Outcomes:**

Analyze and explain economic behavior and formulate predictions at the individual consumer, firm, and industry levels.

Explain the processes through which a market system allocates scarce resources at the individual level and analyze the efficiency of and the effects of government policies on the resulting allocation.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Principles/Macro**

**ECON102:**

3.0 Units

Introduction to macroeconomics, including basic economic concepts, analysis of markets, national income accounting, employment, inflation, short-run business cycle fluctuations, long-run growth trends, monetary and fiscal policies, and international economic issues. Intended for economics, business, and certain engineering/computer science majors.

**Requisites**

**Requisites:**

**Prerequisite**

MATH080 - Intermediate Algebra

**Outcomes**

Identify different types of equations and solve them by applying the appropriate algebraic methods.

Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

**Prerequisite**

MATH085 - Intermediate Algebra with Integrated Support

**Outcomes**

Identify different types of equations and solve by applying appropriate algebraic methods.

Solve a variety of real-world applications using different types of functions and/or equations.

Graph equations, functions, and conics using a variety of graphing techniques, including transformations.
Prerequisite
Qualifying profile from the Mathematics placement process.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Economics

Learning Outcomes
Course Objectives:
Define economics and distinguish between microeconomics and macroeconomics

Explain the two big questions of economics

Explain the key ideas that define the economic way of thinking

Explain how economists go about their work as social scientists and policy advisers

Graph relationships among more than two variables

Define the production possibilities frontier and use it to calculate opportunity cost

Distinguish between production possibilities and preferences and describe an efficient allocation of resources

Explain how current production choices expand future production possibilities

Explain how specialization and trade expand production possibilities

Describe economic institutions that coordinate decisions

Describe a competitive market and think about a price as an opportunity cost

Explain the influences on demand

Explain the influences on supply

Explain how demand and supply determine prices and quantities bought and sold

Use the demand and supply model to make predictions about changes in prices and quantities

Define GDP and use the circular flow model to explain why GDP equals aggregate expenditure and aggregate income

Explain how the Bureau of Economic Analysis measures U.S. nominal and real GDP
Describe how real GDP is used to measure economic growth and fluctuations and explain the limitations of real GDP as a measure of economic well-being

Explain why unemployment is a problem, define the unemployment rate, the employment to population ratio, and the labor force participation rate, and describe the trends and cycles in these labor market indicators

Explain why unemployment is an imperfect measure of underutilized labor, why it is present even at full employment, and how unemployment and real GDP fluctuate together over the business cycle

Explain why inflation is a problem, how economists measure the price level and the inflation rate, and why the CPI measure of inflation might be biased

Define and calculate the economic growth rate and explain the implications of sustained growth

Describe the economic growth trends in the United States and other countries and regions

Explain how population growth and labor productivity make potential GDP grow

Explain the sources of labor productivity growth

Explain the theories of economic growth, the empirical evidence on its causes, and policies to increase its rate

Describe and define the flows of funds through financial markets and the financial institutions

Explain how investment and saving along with borrowing and lending decisions are made and how these decisions interact in the loanable funds market

Explain how a government deficit or surplus influences the real interest rate, saving, and investment in the loanable funds market

Explain how international borrowing or lending influences the real interest rate, saving and investment in the global loanable funds market

Define money and describe its functions

Explain the economic functions of banks and other depository institutions

Describe the structure and functions of the Federal Reserve System

Explain how the banking system creates money

Explain what determines the demand for money, the supply of money, and the nominal interest rate

Explain how the quantity of money influences the price level and the inflation rate in the long run

Describe the foreign exchange market and explain how the exchange rate is determined

Explain the trends and fluctuations in the exchange rate and explain interest rate parity and purchasing power parity

Describe the alternative exchange rate policies and explain their effects

Describe the balance of payments accounts and explain what causes an international deficit

Explain what determines aggregate supply in the long run and short run

Explain what determines aggregate demand

Explain how real GDP and the price level are determined and how changes in aggregate supply and aggregate demand bring economic growth, inflation, and the business cycle

Describe the main schools of thought in macroeconomics today

Explain how expenditure plans are determined when the price level is fixed

Explain how real GDP is determined when the price level is fixed

Explain the expenditure multiplier when the price level is fixed

Explain the relationship between aggregate expenditure and aggregate demand and explain the multiplier when the price level changes

Explain how demand pull and cost push forces bring cycles in inflation and output

Explain the short run and long run tradeoff between inflation and unemployment
Explain how the mainstream business cycle theory and real business cycle theory account for fluctuations in output and employment

Describe the federal budget process and the recent history of outlays, tax revenues, deficits, and debt

Explain the supply side effects of fiscal policy

Explain how fiscal policy choices redistribute benefits and costs across generations

Explain how fiscal stimulus is used to fight a recession

Describe the objectives of US monetary policy and the framework for setting and achieving them

Explain how the federal reserve makes its interest rate decision and achieves its interest rate target

Explain the transmission channels through which the Federal Reserve influences real GDP, jobs, and inflation

Explain how markets work with international trade

Identify the gains from international trade and its winners and losers

Explain the effects of international trade barriers

Explain and evaluate arguments used to justify restricting international trade

**Student Learning Outcomes:**

- Analyze and explain economic behavior and formulate predictions at the aggregate economic level.
- Explain the processes through which a market system allocates scarce resources at the aggregate level and analyze the efficiency of and the effects of government policies on the resulting allocation.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**American Schools and Society**

**EDUC101:**

3.0 Units

Introduction to the historical, sociological and psychological goals of American schools as a social/political institution. Topics include equality of educational opportunity; student diversity and multicultural education; economic, societal and political influences; teacher roles and responsibilities; curriculum standards; and the globalization of education.

**Requisites**

**Requisites:**

**Advisory**

[ENGL100 - Freshman Composition with Integrated Support](#)

OR

**Advisory**

[ENGL101 - Freshman Composition](#)


Advisory

ENGL101H - Honors Freshman Composition

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Identify key legal, constitutional and political issues that impact educational opportunities.

Describe current issues related to academic performance and curriculum standards.

Identify and describe the ethical and legal influences on the education system.

Demonstrate an understanding and appreciation of the diversity of today’s student population.

Analyze our education system and various reform initiatives.

Describe the role of the teacher as a catalyst to change schooling and improve society.

Compare and contrast the American education system with education systems in other countries.

Describe the evolution of schooling from the Colonial period to modern times, including the education of cultural minorities, women and people with disadvantages.

Identify, analyze and report on current issues that relate to educational topics covered in the course.

Present and defend personal priorities for school reform.

Describe the traditional schools of philosophy and educational philosophy as well as their impact on school success.

Identify the demands and complexities of teaching.

Demonstrate an awareness of changes in society and how they impact student learning.

Identify the political goals of American schooling.

Describe and evaluate the social goals of schooling.

Explain the global standardization of subjects and the global education business.

Demonstrate an understanding of the federal, state and district structure for regulation and funding of schools.

Identify reasons for how schools are organized and governed and analyze the characteristics of effective schools.

Identify the influences of local and national agencies for selection of curriculum.

Student Learning Outcomes:
Identify the historical societal influences of American schooling, compare and contrast to today’s schooling and the impact on the future of American education in a global context.
Demonstrate knowledge of the elements of diversity in student populations and identify how teachers and schools can promote learning for all students.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

The Teaching Experience: Exploration
EDUC110:

3.0 Units
An exploration of the teaching profession both from academic understanding and from experience gained through 20 hours of classroom observations, assisting in schools and educational centers and designing, preparing and teaching standards based lessons in grades K-12. Topics will include instructional techniques and skills for the teaching profession, exploration of diversity and student learning and roles and responsibilities of teachers. Career and life plans for the teaching profession will be developed.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
identify the multiple pathways to becoming a teacher
report on the academic preparation and credential requirements
employ technology and mediated instruction
reflect and self evaluate their organizational and time management skills, effectiveness as a team member and success at presenting the lessons
clarify their goals for types of teaching (elementary/secondary/special education/CTE)
identify course requirements
clarify purpose for taking the course
recall the duties and responsibilities of teachers
identify standards based instruction in the K-12 classroom
discuss procedures and student responsibilities for observations in the K-12 classroom
illustrate knowledge of course guide and readings
design three standards based lessons
analyze and interpret one's own personal characteristics
discuss inquiry based instruction and questioning techniques
research grade level appropriate lessons which cover concepts addressed in the standards
recognize the need for new instructional strategies
teach those student designed lessons in a classroom setting
recognize the characteristics of highly effective teachers
assist the teacher in the classroom
utilize tools to assess one's own set of skills, abilities, values, interests and personality
identify how specific demographics impact school success
compare and contrast changing school demographics
design lesson plans
identify characteristics of high efficacy teaching
arrange for working with a certified mentor teachers to observe instructional techniques
apply concepts of career/personality theory
identify and report school artifacts
illustrate an understanding of instructional techniques through the creation of a teaching portfolio that includes documentation of observations, samples of their work and reflections on their experiences
compare and contrast personal characteristics to those of highly effective teachers
discover how gender plays a role in math and science education
review the California Common Core Curriculum and NGSS standards for a specific grade level
demonstrate classroom management and positive discipline

Student Learning Outcomes:
Identify elements of diversity in student populations and discover how teacher and schools can promote learning or all students and will demonstrate integrity and regard for the options, feelings and values of others in the classroom field experience.
Through pre and post assessments, recognize the characteristics of successful teachers who promote learning for all students and assess/identify their own characteristics that are a match for the same.

Units & Hours
Minimum Units: 3.0

Maximum Units 3.0

Total Hours 54.0

Educational Strategies for Tutors and Instructional Aides EDUC113:

1.0 Units

An examination of effective educational support strategies for tutors and instructional paraprofessionals with a focus on the reading, math and writing skills of school-age children. Students are placed in local K-8 classrooms, tutoring centers, and/or after school programs to apply strategies and gain experience tutoring and working with school-age children.
Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Become acquainted with the course focus of the development of what skilled readers do in elementary schools.

Develop an understanding of concepts of interaction such as body language and confrontation.

Become familiar with the early fluency skills in reading (i.e.: learning to decode and self correct, prediction skills).

Become familiar with specific reading pre-production and emergent skills (i.e.: oral expression, letter recognition, phonemic awareness.)

Become familiar with the writing process and oral applications, including aspects of tutoring ESL students.

Become familiar with spelling and decoding support, syllables and other skills required to be a fluent reader.

Gain understanding of how to respond with empathy and objectivity to student needs.

Become familiar with, and further enhance, appreciation of diverse cultures and bilingualism.

Demonstrate an understanding of how a tutorial plan helps tutors and students pace their work.

Become familiar with management techniques (i.e.: seating arrangements, controlling dominant students)

Become familiar with how bilingual students learn to read.

Discover the role and strategies of a tutor in building positive relationships with students and staff.

Student Learning Outcomes:

Analyze and identify student reading and learning challenges in a K-8 classroom setting.

Identify and practice tutoring strategies to promote successful reading skill development for K-8 students from varying cultural and linguistic backgrounds.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Introduction to Elementary Classroom Teaching
EDUC200:

3.0 Units
Introduction to educational theory and practice, assessing issues and standards for teaching in California’s culturally and linguistically diverse K-12 school settings; explores instructional methods for teaching, historical and philosophical foundations of the American education system, contemporary educational issues, California’s curriculum standards and teacher performance standards. Students participate in 45 hours of structured observation in an elementary classroom in cooperation with a certificated classroom teacher.

**Requisites**

**Requisites:**

Advisory

**EDUC101 - American Schools and Society**

AND

Advisory

**ENGL100 - Freshman Composition with Integrated Support**

OR

Advisory

**ENGL101 - Freshman Composition**

OR

Advisory

**ENGL101H - Honors Freshman Composition**

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

Course Identifier (C-ID)

Education

**Learning Outcomes**

**Course Objectives:**

Identify educational philosophy in the context of evolution of American education.

Identify and describe key aspects of the various standards impacting elementary teaching.

Develop a personal and professional view of teaching through examination of one’s beliefs, assumptions, and experiences related to teachers and teaching.

Develop a personal perspective of the joys and challenges of teaching.

Explain the role of “systematic & explicit phonics” in reading development.

Demonstrate an understanding of the role of these reading development components.

Describe the role of “concepts about print” in reading development.

Create presentations in Power Point of observations in the classroom and personal perspectives on the teaching profession.

Identify effective components of classroom management and grouping for instruction.
Apply and review the TPEs.
Successfully conduct classroom observations.
Describe and analyze standardized testing uses and purposes.
Identify groups of students with special needs.
Identify and describe contemporary school issues in urban, suburban, and rural contexts.
Explain the meaning of access to equal education.
Demonstrate an understanding of the role of these reading development components.
Describe laws and funding related to these populations.
Identify the cultural and ethnic diversity in public schools.
Develop a technology mediated presentation and personal reflection on awareness and knowledge gained through the elementary classroom field experience.
Identify and evaluate various learning and teaching styles.
Demonstrate an understanding of what is involved in planning for instruction.

Student Learning Outcomes:
Recall, apply, analyze and integrate concepts and information from lectures, printed materials and field experience to draw conclusions or critique the point of view or thinking of others and formulate original ideas and concepts integrating information.
Identify elements of diversity in student populations and discover how teachers and schools can promote learning for all students through high efficacy teaching learned in the class and field experience setting.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Proficiency in Educational Technologies for Teachers
EDUC204:

3.0 Units

Development of proficiency in educational technologies to facilitate the teaching process. Training in computer hardware and software terminology; spreadsheets, word processing, publication, and presentation applications; internet search and retrieval; information literacy; electronic communication and awareness of legal and ethical issues.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes

Course Objectives:
Create Portfolio folders
Identify results of research on unit planning and a project-approach to learning
Create a publication to explain projects to others
Reflect on their learning
Begin planning technology-enhanced units that target higher-order thinking and 21st century skills
Identify standards for units
Create objectives for units
Discuss and develop Curriculum-Framing Questions
Discuss and brainstorm assessment methods and strategies
Create assessments that gauge student needs
Discuss how to meet standards with projects
Create Unit Portfolio Presentations
Reflect on their learning
Refine standards, objectives, and Curriculum-framing questions for units
Share Unit Portfolio Presentations and gauging student needs assessments
Examine and discuss copyright laws and Fair Use guidelines as they pertain to education
Create Works Cited documents
Explore and evaluate internet resources
Identify ways to ensure students use the Internet safely and responsibly
Use Internet collaboration and communication tools in units
Share ideas for incorporating the Internet into units
Create and assess student sample presentations, publications, wikis, or blogs
Describe how to help students in a project-based, student-centered classroom
Reflect on current assessment practices
Refine assessment plans
Create assessments for student samples
Revise and assess student samples
Discuss ideas for involving students in the assessment process
Identify methods to differentiate instruction for all students
Describe challenges of differentiating instruction
Create assessments for student self-direction
Create support materials to scaffold student learning
Create ADA accessible materials
Self-assess their current facilitation practices
Plan facilitation materials needed for units
Utilize various questioning techniques
Create a "closed-caption" video presentation
Create presentations, documents, spreadsheets, or web-based resources to support a student-centered classroom
Identify and apply unit implementation ideas
Create management resources
Utilize professional development and technology resources for educators
Prepare, showcase, and evaluate Unit Portfolios

**Student Learning Outcomes:**
Analyze and complete performance assignments using technology tools, such as desktop publishing, databases, spreadsheets, web pages, word processing, tablets with apps, and multimedia as applied in an elementary or secondary school setting.
Create appropriate assessment tools to use in an elementary or secondary school setting and develop rubrics to assess student mastery of content.

**Units & Hours**
**Minimum Units:**
3.0
**Maximum Units**
3.0
**Total Hours**
54.0

**Roles and Responsibilities of the Special Education Paraprofessional**
**EDUC209:**
3.0 Units
This course is designed to train persons who work as classroom paraprofessional/teaching assistants in the public schools. The course provides an overview of paraprofessional roles and responsibilities including legal, instruction, evaluation and behavioral issues. Supports current legislation for paraprofessionals.

**Requisites**
**Requisites:**
None

**Transferability & General Education Options**
**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**
**Learning Outcomes**
**Course Objectives:**
Describe Deno’s cascade of services
Identify and apply effective communication and problem solving strategies
Identify and describe aspects of a positive school environment
Describe what research shows about effective classroom environments
Identify and apply techniques for working with small groups
Identify supervisory roles
Analyze job descriptions
Conduct and evaluate observations
Assess team performance
Identify and describe aspects of being a paraprofessional
Identify and describe issues involving families of children with special needs
Plan effective lessons
Delineate between certificated and classified
Describe standards for paraprofessionals
Describe and apply the code of ethics for paraprofessionals
Identify and apply effective techniques of communication
Identify and apply effective communication strategies
Describe characteristics of an effective team
Describe Education Specialist Credential authorizations
Identify and describe legal issues in special education
Utilize reinforcement techniques

**Student Learning Outcomes:**

- Demonstrate an understanding of the issues associated with labeling students with special needs and be able to compare and contrast the professional ethics related to State and Federal laws and regulations.
- Identify strategies for implementation of the Least Restrictive Environment in special education and be able to critically evaluate practices of mainstreaming, integration, inclusive education and free and appropriate public education for special needs st

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**The Teaching Experience: Secondary Education**

**EDUC210:**

3.0 Units

Introduction to the history, philosophy, and sociology of secondary education. This course will cover the California Teaching Performance Expectation and Assessment; needs of special populations, English learners, and struggling readers; content standards; and major curriculum reform documents. Students participate in 40 hours of structured observation and internship in a local secondary classroom.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
identify what it means to be a professional teacher
identify characteristics of effective schools
explain the role of schools in today's society
identify the Teacher education admission/credential requirements
describe the California standards for the teaching profession (TPEs)
identify problems and concerns of beginning teachers
identify solutions for problems and concerns of beginning teachers
analyze classroom practices through observation and writing
locate practical classroom experience opportunities and participate in them
recognize the characteristics of a teacher-leader
identify and demonstrate the components of a quality teaching portfolio
recognize the importance of on-going professional development
describe one's developing educational philosophy
compare and contrast branches of philosophy
recognize the five modern philosophical orientations to teaching
distinguish between the psychological orientation that have influences teaching philosophies
compare and contrast schools during the colonial and revolutionary periods
distinguish between the common schools and previous education systems
describe schools during the progressive era
illustrate the significance of postwar era schools and the impact on U.S. society
identify the priorities of education in the new century
explain reasons for understanding educational politics
distinguish between the individual roles of local, state, and federal government in educational policy
report on school finance systems
compare and contrast initiatives in the school choice movement and the impact on equity
identify ethical teaching attitudes and practices
describe rights and responsibilities of teachers
give examples of student/parent rights
recognize rights of schools districts
define the difference between culture, ethnicity and race
explain equal opportunity and benefits to society
explain equal opportunity and benefits to society
demonstrate understanding of social problems and tension points
compare and contrast bilingual education and multicultural education
describe issues of gender in education
compare and contrast purpose and/or success in gender schools
identify ways to assess learner needs
explain varying intelligence of students
compare and contrast needs of students who learn differently
recognize laws and practices that support/don’t support equal opportunity for exceptional learners
identify contracts of AVID/IB/AP that support students who learn differently
discuss Ca Common Core Standards
compare and contrast support/concerns of raising standards
explain the unintentional consequence of high-stakes testing
identify emerging trends in student standardized assessment
identify how effective teachers accommodate English learners, special populations and struggling readers
give examples of high-quality classroom assessments
illustrate steps to setting the classroom climate
identify the aspects of the “caring classroom”
provide examples of cooperative learning and cross-cultural interaction
identify the keys to successful classroom management
identify methods and strategies of effective teachers
compare and contrast student-centered versus subject-centered curricula
identify how technology is transforming teaching and learning
prepare a report on technology integration and student learning
compare and contrast available digital resources for teaching and learning
utilize and demonstrate iPad technology for student learning
explain the challenges of access to technology for teachers and students
identify funding sources for technology and technical support
demonstrate growth in knowledge of the profession through fieldwork report
construct a pre-professional teaching portfolio with all required components
write an analysis of self including: 1) pre/post assessment of readiness to pursue educational goal of becoming a teacher, 2) one’s evolving educational philosophy, 3) understanding the rewards and challenges of the profession for them, and 4) ability to

Student Learning Outcomes:
Demonstrate understanding of California Teaching Performance Expectation and Assessment (TPE); needs of special population, English learners, and struggling readers; content standards through documentation of practices and procedures observed in the second
Identify elements of diversity in student populations and discover how teachers and schools can promote learning for all students and will demonstrate integrity and regard for the opinions, feelings and values of others in the classroom field experience.
Utilize print material and electronic resources to access information related to standards for the teaching profession, state and federal education legislation, school curriculum and develop portfolios via Power Point presentations.

Units & Hours
Minimum Units:
3.0

Maximum Units

3.0

Total Hours

54.0

Classroom Practices for Diverse Learners
EDUC211:

3.0 Units

Prepares individuals to assist teachers in various settings to support diverse learners (individuals who have disabilities, are second language learners, are gifted, etc.). Topics will include lesson planning, adapting academics: reading, mathematics, science, art, job coaching, behavioral support, etc.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Identify when grouping strategies are appropriate
Identify strategies for individual transition plans
Describe strategies for aligning with the general education curriculum
Describe techniques of scaffolding instruction
Describe modifications and adaptations for general education
Identify and describe ways to apply behavioral analysis and behavioral support
Identify and describe research-based practices in reading
Identify and describe elements of a task analysis
Identify and describe aspects of instructional methodology and theories of instruction
Describe possible assessment issues
Identify and describe strategies for teaching culturally and linguistically diverse students
Identify and describe strategies for teaching language and communication skills
Identify and describe strategies for teaching gifted students with physical, communication, and learning disabilities
Identify and describe possible health care duties
Identify and describe essential elements of a good lesson
Describe strategies for planning for diverse learners
Identify strategies for building independence and self-efficacy
Identify and describe essential elements of a good lesson plan
Identify and describe research-based practices in mathematics

Student Learning Outcomes:
Identify and design meaningful, functional curriculum that is appropriate for individuals with diverse needs/learning abilities and identify the various instructional theories of special education.
Implement the appropriate techniques when interacting with an individual with diverse needs or abilities, including using “people first” language, and will demonstrate knowledge of appropriate treatment of those individuals based on positive behavior supp

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
54.0

General Electrician 1
ELCT041:

3.0 Units
First semester of a five-year program for certified electrical trainees. Covers tools and fasteners, knot tying, math and materials, building materials and safety, and residential blueprints. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites
Requisites:
None
Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Identify how to achieve goals
Discuss the attributes and history of the IBEW/NECA (International Brotherhood of Electrical Workers / National Electrical Contractors Association)
Demonstrate knowledge of proper safety procedures
Recognize Whole Numbers
Apply methods to solve Fractions
Apply methods to solve Decimals
Demonstrate and Illustrate Prefixes and Powers of 10
Demonstrate Algebra Essentials
Demonstrate tool identification
Demonstrate care and use of ladders

Identify fasteners

**Student Learning Outcomes:**
- Evaluate and perform basic math and algebraic operations for Electrical Theory calculations.
- Identify the proper use of ladders and installation of fastening devices.
- Discuss and explain the labor history of the IBEW/NECA (International Brotherhood of Electrical Workers/National Electrical Contractors Association) and achieve their personal goals from the courses.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
80.0

**General Electrician 2**

**ELCT042:**
3.0 Units

Second semester of a five-year program for certified electrical trainees. Covers DC theory, series circuits, parallel circuits and combination circuits. Meets the requirement as a state-certified training course. Open Entry/Open Exit

**Requisites**

**Requisites:**

**Prerequisite**

**ELCT041 - General Electrician 1**

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Interpret what electricity is
- Explain Ohm's Law
- Calculate power in DC circuits
- Distinguish electrical and electronic devices
- Describe potential hazards of electrical circuit
- Illustrate electrical circuits
- Calculate and solve power in series circuits
- Calculate and solve resistance in series circuits
- Calculate and solve currents in series circuits
Calculate and solve voltage in series circuits
Calculate and solve power in parallel circuits
Calculate and solve resistance in parallel circuits
Calculate and solve currents and voltage in parallel circuits
Calculate Power in Combination DC (Direct Current) Circuits
Calculate Resistance in Combination DC (Direct Current) Circuits
Calculate Currents in Combination DC (Direct Current) Circuits
Calculate Voltage in Combination DC (Direct Current) Circuits

**Student Learning Outcomes:**

- Solve power, resistance, currents and voltage in series circuits, parallel circuits, and combination circuits.
- Demonstrate and perform basic circuit wiring.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
80.0

**General Electrician 3**

**ELCT043:**

3.0 Units

Third semester of a five year program for certified electrical trainees. Covers codeology, test instruments and sine waves, three-phase systems, residential and commercial blueprints, mechanical bending. Meets the requirement as a state-certified training course. Open Entry/Open Exit

**Requisites**

**Prerequisite**

ELCT042 - General Electrician 2

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

- Discuss and Interpret Local Union by-laws
- Discuss and Interpret the IBEW Constitution
- Discuss and Interpret Parliamentary Procedures
- Discuss and Interpret the COMET program
Discuss the Hazards of drug use

Analyze the layout, language and structure of the NEC Codebook

Demonstrate the system used to search and understand the NEC Electrical Codebook

Recognize keywords in the NEC Codebook

Review of DC theory

Discuss and operate test instruments

Comparing direct current to alternating current

Differentiate between DC and AC waves

Analyzing sine waves

Testing and verifying circuit performance

Practice Circuit calculations for basic systems

Discuss the design and function of DC generators and AC generators

Illustrate and recognize AC resistive circuits

Analyze and demonstrate working safely with capacitors

Analyze and review the basic fundamentals of blueprints and how they are drawn;

Analyzing and laying-out residential circuits

Estimating job costs

Discuss and practice interpreting specifications

Discuss and identify mechanical benders

Discuss and identify electric benders

Discuss and identify hydraulic benders

Review types of conduit

Demonstrate threading conduit

Demonstrate segment and concentric bending

**Student Learning Outcomes:**

- Read, interpret, and articulate blueprints, drawings, and specifications to calculate the cost of a job.
- Use testing equipment to test and verify circuit performance.
- Perform circuit calculations for basic systems, and explain the design and function of DC and AC generators.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

80.0

**General Electrician 4**

**ELCT044:**

3.0 Units
Fourth semester of a five-year program for certified electrical trainees. Covers electrical theory, transformers, and National Electrical Code application. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites
Requisites:

Prerequisite
ELCT043 - General Electrician 3

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Explain Inductance in series and parallel circuits
Explain Inductive reactance
Calculate Capacitance in series and parallel
Explain Capacitive reactance
Explain RC time constant
Describe Characteristics of AC circuits
Analyze and calculate Series and parallel RL circuits
Analyze and calculate Series and parallel RC circuits
Analyze and calculate Series and parallel LC circuits
Analyze and calculate Series and parallel LCR circuits
Analyze and calculate combination LCR circuits
Explain the design and function of transformers
Demonstrate single-phase transformer connections
Identify buck-boost transformers
Describe step-up/step-down and primary/secondary windings
Demonstrate proper transformer installation
Explain and demonstrate three-phase transformer connections
Demonstrate delta/delta and delta/wye connections
Demonstrate three-phase buck-boost transformer connections
Calculate the sizing of building wire
Identify conductor ampacity
Identifying branch circuits
Distinguish outside branch circuits and feeders
Identify lighting and receptacle circuits
Demonstrate conduit wiring methods
Identify cable assemblies
Identify boxes and fitting
Describe general wiring methods requirements
Describe specific wiring methods

Student Learning Outcomes:
    Identify, install, and connect transformers.
    Read, interpret, and apply the NEC to calculate ampacity, circuits, wiring, and conduits for wiring installations.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
80.0

General Electrician 5
ELCT045:

3.0 Units
Fifth semester of a five-year program for certified electrical trainees. Covers the National Electrical Code, grounding, industrial blueprints, and earth testing. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites
Requisites:
Prerequisite
ELCT044 - General Electrician 4

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Discuss American Labor History
Show pride in your Industry
Interpret Local Union Bylaws
Discuss how Parliamentary Procedures are used
Review Industrial Specifications
Review and Analyze Industrial Prints I
Review and Analyze Industrial Prints II
Review and Analyze Industrial Prints II
Discuss grounding and bonding fundamentals
Describe and illustrate system grounding

Demonstrate grounding AC systems

Illustrate and discuss grounding services

Identify service equipment and main bonding jumper

Describe grounding electrode system

Discuss bonding enclosures and equipment

Discuss equipment grounding conductors

Demonstrate enclosure and equipment grounding

Discuss and demonstrate the principles and methods of Earth testing

Review Three Phase Transformers

Discuss and debate working on energized circuits

Describe and discuss overcurrents

Describe and discuss overloads

Illustrate short circuits and ground faults

Discuss OCPD(Overcurrent Protective Devices) ratings

Discuss branch circuits, feeders and services

Discuss and Illustrate motor branch circuits

Discuss conductor tap rule and supervised industrial installations

Compute calculation of fault currents

Discuss component protection NEC 110-10

Identify phase and equipment grounding conductor protection

Discuss motor and group motor protection

Describe motor overload and single phasing protection

**Student Learning Outcomes:**

Ground an AC system, electrode system, equipment, and conductors.

Find the corresponding references and information in the NEC, given grounding-related questions.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

80.0

**General Electrician 6**

**ELCT046:**

3.0 Units

Sixth semester of a five-year program for certified electrical trainees. Covers advanced motor control and code as applied to motor protection. Meets the requirement as a state-certified training course. Open Entry/Open Exit
Requisites

Requisites:

Prerequisite

ELCT045 - General Electrician 5

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Discuss motor construction and motor nameplate specifications
Describe AC fractional horsepower motors
Discuss Repulsion, DC and universal motors
Discuss polyphase motors
Demonstrate motor installations
Illustrate general principles of motor control
Discuss and Illustrate manual starters and magnetic coils
Describe overcurrent and phase failure relays
Identify push buttons, selector switches and mechanical pilot devices
Identify control relays and timers
Identify electronic relays and pilot devices
Discuss and illustrate control transformers
Review motor control drawings
Distinguish between two-wire and three-wire control
Discuss and illustrate reversing and sequential motor control
Discuss electrical and mechanical interlocks
Illustrate hand-off-auto with start/stop control
Discuss DC motors and control
Discuss solid state DC motor control
Discuss and review AC motors
Discuss AC motor starters
Discuss, identify and choose motor branch circuits and protection
Calculate and choose motor overload protection
Calculating sizing motor disconnects

Student Learning Outcomes:

Plan, design and implement advanced motor control circuits.
Read, interpret and apply the National Electrical Code to motor control protection exercises.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
80.0

General Electrician 7
ELCT047:

3.0 Units
Seventh semester of a five-year program for certified electrical trainees. Covers electronics and programmable logic controllers. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites

Requisites:
Prerequisite
ELCT046 - General Electrician 6

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Review the fundamentals of programmable logic controllers
Examine PLC software, types, installation and security techniques
Discuss modular versus fixed PLC hardware, advantages and limitations
Review modular PLC design and configuration
Demonstrate PLC installation, wiring and protection
Practice numbering systems
Practice ladder programming
Demonstrate advanced programming instructions with real world applications
Discuss timers and counters
Demonstrate the use of electronics, electronic flow through solid state components
Discuss and demonstrate the functions, operation and characteristics of solid state components and related devices

Student Learning Outcomes:
Install, wire, protect, and program programmable logic controllers.
Install and troubleshoot basic hard-wire and programmable fire alarm systems.

Units & Hours
Minimum Units:
Maximum Units
3.0

Total Hours
80.0

General Electrician 8
ELCT048:
3.0 Units

Eighth semester of a five-year program. Provides related and supplemental instruction in code calculations and electrical grounding and bonding. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites

Requisites:
Prerequisite
ELCT047 - General Electrician 7

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Recognize special occupancies
Choose electrical equipment
Choose special equipment
Distinguish cable tray systems
Recognize surface metallic raceways
Calculate ampacity of conductors in cable trays
Identify grounding at separate buildings or structures
Practice grounding electrical systems
Interpret grounding requirements for separately derived systems
Identify special occupancies
Select Ground-Fault Circuit Interrupters (GFCI) and Ground-Fault Protection of Equipment (GFPE)
Analyze and demonstrate grounding systems and earth ground test instruments

Student Learning Outcomes:

Compute electrical calculations for electrical equipment, special occupancies, special equipment and ampacity of conductors in cable trays.
Understand bonding and grounding requirements for separate buildings, separately derived systems, Ground-Fault Circuit Interrupters (GFCI) and Ground-Fault Protection of Equipment (GFPE) and use earth ground test instruments

Units & Hours
Minimum Units: 3.0

Maximum Units 3.0

Total Hours 80.0

General Electrician 9 ELCT049:

3.0 Units

Ninth semester of a five-year program for certified electrical trainees. A cover-to-cover study of the National Electrical Codebook to prepare for the California State Electrical Examination. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites

Requisites:

Prerequisite

ELCT048 - General Electrician 8

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours: 3.0

Learning Outcomes

Course Objectives:
Examine the language of NEC, Article 100

Review chapter 1 to 4 of the NEC

Review chapter 5 to 9 of the NEC

Review building wire properties and the NEC

Discuss requirements related to installing Wiring Devices

Calculate sizing of Building Wire

Identify Branch Circuits

Identify Feeders and Outside Branch Circuits

Identify and discuss Switches, Receptacles, and Luminaires Installation Requirements

Identify and discuss Boxes and Fittings as Defined by the NEC

Classify Overcurrent Protective Device Categories

Discuss and illustrate Ground-Fault Protection of Equipment

Discuss and demonstrate Special Occupancies

Student Learning Outcomes:

Find the corresponding section in the NEC, given a set of Electrical Code problems.
Pass mock versions of the California State Electrical Examination.
Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
80.0

General Electrician 10
ELCT050:

3.0 Units
Final semester of a five-year program. Provides related and supplemental instruction in jobsite management and photovoltaic systems. Meets the requirement as a state-certified training course. Open Entry/Open Exit

Requisites
Requisites:
Prerequisite
ELCT049 - General Electrician 9

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Demonstrate Managing Employees
Setup Managing the Job
Categorize Documents Required by Job Foreman
Relate Safety Updates
Explain Solar radiation
Appraise Site surveys and preplanning
Identify System components and configuration
Recognize Modules, and Arrays
Describe Inverters

Student Learning Outcomes:
Determine how to handle the jobsite in the most successful and profitable way, given a series of employee and job site situations. Demonstrate competence, proper safety techniques, and teamwork to install both residential and commercial solar installations, including the determination of the type and size of solar systems to comply with customer needs.
Maximum Units
3.0

Total Hours
80.0

Quality Safety Program and First Aid
ELCT051:

1.5 Units

OSHA workplace requirements, the identification and use of safe work practices, coping with accidents and emergency situations, and one person CPR for inside wireman apprentices. American Red Cross certificate available upon successful completion. Open Entry/Open Exit

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.5

Learning Outcomes
Course Objectives:
Review and discuss school requirements
Calculating and reporting of OJT hours
Review and discuss policies and procedures
Review and discuss OSHA workplace requirements
Identify and use safe work practices
Discuss OSHA policies, procedures and responsibilities
Discuss and demonstrate Electrical safety
Discuss and practice Fall protection
Practice Confined space entry
Review excavation and trenching
Discuss scaffold and lift safety
Discuss ladder and stairway safety
Demonstrate personal protective equipment
Demonstrate hand and power tool safety
Review and discuss the good Samaritan Law
Discuss and demonstrate rescue breathing and cardio-pulmonary resuscitation
Discuss and recognize fractures, dislocation, and sprains
Discuss and classify burns
Identify Heat victims

Distinguish heart attacks, stroke, and convulsions

**Student Learning Outcomes:**

- Safely and properly interpret and follow OSHA requirements in workplace settings.
- Identify and perform the proper treatment for various sudden illnesses and injuries, given a set of emergency workplace situations.
- Interpret policies and procedures, study skills and record keeping required in the certified electrical trainee program.

**Units & Hours**

**Minimum Units:**

1.5

**Maximum Units:**

1.5

**Total Hours:**

30.0

**Introduction to Composition with Integrated Support**

**ENGL099:**

4.5 Units

Prepares students for academic reading, critical reasoning, and the expository and argumentative writing expected in transfer and associate degree classes. Additional hours in the Writing Center required for an advanced review of the principles of standard English grammar, sentence and paragraph structure as well as strategies to approach, develop, and refine various writing assignments.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

4.5

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an understanding of pre-reading techniques to facilitate comprehension of texts.
- Take charge of reading by applying strategies to unlock meaning from texts.
- Employ strategies to work through and make meaning of difficult passages.
- Identify and discuss abstract concepts found in readings.
- Form and explain legitimate inferences from passages.
- Read critically by making connections, exploring significance, and evaluating evidence.
- Construct a single main idea with a limited topic and attitude/slant.
- Develop ideas using details and specific support, including facts, reasons, testimonies, statistics.
- Demonstrate an understanding of various rhetorical strategies, such as illustrations/exemplification, definition, narrative, description, division and classification, cause and effect, and comparison and contrast.
Establish coherence with clear ordering strategies, especially time organization, spatial organization, and emphatic organization/order of importance.

Organize paragraphs and essays with transitional devices expressing sequence, addition, illustration, contrast, and comparison.

Synthesize ideas and information from multiple sources, including readings, personal observation, and reflection

Form a controlling idea in writing.

Evaluate and integrate specific data to support general ideas.

Demonstrate an understanding of the role of audience awareness in writing.

Develop well-structured and well-supported paragraphs and essays.

Leave readers with a clear impression of purpose and attitude.

Prepare a manuscript with proper MLA format, including one inch margins, proper placement of heading, pagination, and typing.

Place commas in essays and assignments in accordance with the rules involving coordinate modifiers; nonrestrictive modifiers; parenthetic elements; absolute phrases; comparative and contrastive constructions; interjections, direct address and tag question

Incorporate quotation marks for direct quotations and titles.

Construct sentences using a variety of punctuation marks, including colons, dashes, parentheses, and semicolons.

Identify the elements of a sentence: subject and predicate, modifiers, and complements.

Demonstrate an understanding of differences among prepositional, verbal, absolute, and appositive phrases.

Demonstrate an understanding of differences among independent, dependent, noun, adverb, and adjective clauses.

Develop sentences using a variety of structures, including complex, compound, and compound-complex sentences.

Construct sentences and essays with a clear and effective style, being mindful of passive voice, choppy writing, wordiness, cliches, dangling or misplaced modifiers, expletives, and sexist language.

Construct sentences and essays with proper grammar usage, being mindful of pronoun case, linking, action, and helping verbs, infinitives, gerund, voice, and mood.

Demonstrate an advanced understanding of the essential part of a sentence: subject, verb, and a complete thought.

Practice correct sentence structure using advanced forms.

Locate and correct complex sentence errors involving fragments and run-ons.

Evaluate sentences for standard grammar and usage.

Recognize where punctuation marks belong within complex sentences.

Demonstrate an advanced understanding of the differences between commonly confused punctuation marks, such as hyphens and dashes, colons and semicolons, and brackets and ellipses.

Edit their own sentences for more complex punctuation errors.

Distinguish between formal and informal vocabulary and voice in complex writing.

Adapt word choice to an advanced academic reader.

Apply an appropriate tone given a particular purpose and audience.

Develop effective questions for increased understanding of course content

Interpret reading selections to gain understanding and create meaning

Develop original thinking through writing in a clear and coherent way

Identify an issue, make a point about that issue, and maintain a focused connection to that point throughout the writing

Construct clear paragraphs in an order that serves a thesis or topic sentence with increasing sophistication

Use observations, inferences, sources, and arguments to make strong and convincing points

Integrate readings and data that strengthen the scope and depth of an essay
Strengthen study skills and strategies
Practice time management
Employ effective reading strategies
Avoid procrastination
Gain confidence in writing
Develop a Growth Mindset

Student Learning Outcomes:
Use the writing process to compose sentences, paragraphs, and short essays that contain unity, development, coherence, logic, and grammatical precision.
Analyze written texts for content, essay and paragraph structure, rhetorical strategies, and grammatical precision.

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
108.0

Freshman Composition with Integrated Support
ENGL100:

4.5 Units
This course is designed for students who want to develop competence in college-level composition through extended instruction and practice. Students read, analyze, discuss, and think critically using various sources in order to compose in a variety of academic, professional, and civic contexts, including digital environments. Additional hours in the Writing Center are required for practice in refining sentence skills, grammar, research, study habits, and reading strategies.

Requisites

Requisites:
Prerequisite
ACE116 - Introduction to Academic Composition

OR

Prerequisite
ENGL099 - Introduction to Composition with Integrated Support

OR

Prerequisite
Qualifying profile from the English placement process.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU
Weekly Lecture Hours:

4.5

General Education Plan:

Local - Plan A
Area E1: English Composition

CSU GE - Plan B
Area A2: Written Communication

IGETC - Plan C
Area 1A: English Composition

Course Identifier (C-ID)
English

Learning Outcomes

Course Objectives:
Identify special needs of different audiences by focusing on cultural background, level of education, and professional concerns

Analyze rhetorical situations to create strong, audience-focused, and organized writing

Comprehend and analyze literature and essays beyond literal, superficial characteristics and inferential interpretations

Establish one’s own informed and reasonable opinions and consider purpose, position, genre, and medium when constructing arguments

Apply certain processes, models, questions, and theories that result in enhanced clarity and comprehension

Generate ideas through prewriting techniques, such as freewriting, questioning, listing, and clustering

Prepare drafts with strategic planning and outlining; revise, edit, proofread final drafts

Focus on a topic with an appropriately limited scope; express a clear and effective purpose or position within the thesis statement; produce significant, clearly defined thesis statements

Analyze thesis statements for clarity, precision, and provability, and apply certain sentence patterns to frame effective thesis statements

Construct unified and coherent developmental paragraphs and employ the major rhetorical tools that ensure unity and coherence

Arrange supporting points according to effective organizational strategies, such as chronological, spatial, and emphatic order

Develop supporting body paragraphs by use of facts, illustrations/examples, definitions, analysis comparisons and other techniques

Use simple, compound, complex, and compound-complex sentences effectively

Work toward the “right” word, fresh and idiomatic

Improve the essay by observing customary rules of grammar, punctuation, and spelling

Use the library: computer cataloging, online databases, ebooks, and other reference works

Pose an effective research question and choose an appropriate research topic

Organize an outline, take notes on sources, maintain a working bibliography, assess the credibility of research materials

Construct a properly documented argumentative research essay with MLA formatting, including in-text parentheticals and a Works Cited page.

Develop effective questions for increased understanding of English content

Interpret reading selections to gain understanding and create meaning; integrate readings and data that enhance the scope and depth of an essay

Construct effective topic sentences

Develop introductory and concluding paragraphs
Create unified, coherent, well-developed paragraphs and essays that use appropriately-referenced sources to support arguments

Collaborate with peers in the development and revision of English essays

Develop original thinking through writing in a creative and coherent way

Identify an issue, make an assertion regarding that issue, and maintain a focused connection to that assertion throughout the essay

Construct clear paragraphs in an order that serves a thesis with increasing complexity

Use observations, inferences, sources, and arguments to make assertions strong and convincing

Sharpen sentence skills, refine personal style, and eliminate errors; identify and correct sentence errors

Use clear and correct language with the ability to express oneself clearly, using the appropriate tone, diction, sentence structure and mechanics

Strengthen study skills and strategies, learn to avoid procrastination, gain confidence in writing

Identify errors in individual essay assignments; revise, edit, and proofread essays with more precision and accuracy

Write timed essays in class exhibition acceptable college-level control of mechanics, organization, development, and coherence

**Student Learning Outcomes:**

- Use the writing process to compose essays—including research papers in MLA format— that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**Units & Hours**

**Minimum Units:**

4.5

**Maximum Units**

4.5

**Total Hours**

108.0

**Freshman Composition**

**ENGL101:**

4.0 Units

This course emphasizes expository and argumentative essays and the research paper, allowing students to gain familiarity with learning approaches connected to successful writing and to compose in a variety of academic, professional, and civic contexts, including digital environments.

**Requisites**

**Prerequisite**

ACE116 - Introduction to Academic Composition

OR

**Prerequisite**

ENGL099 - Introduction to Composition with Integrated Support

OR
Prerequisite
Qualifying profile from the English placement process.

OR

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area E1: English Composition

CSU GE - Plan B
Area A2: Written Communication

IGETC - Plan C
Area 1A: English Composition

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Learning Outcomes
Course Objectives:
Demonstrate an understanding of special needs of different audiences by focusing on cultural background, level of education, and professional concerns

Analyze rhetorical situations to create strong, audience-focused, and organized writing

Establish one's own informed and reasonable opinions and consider purpose, position, genre, and medium when constructing arguments

Demonstrate an understanding of literature and essays beyond literal, superficial characteristics and inferential interpretations

Apply certain processes, models, questions, and theories that result in enhanced clarity and comprehension.

Generate ideas through prewriting techniques, such as freewriting, questioning, listing, and clustering

Prepare drafts with strategic planning and outlining; revise, edit, and proofread final drafts

Focus on a topic with an appropriately limited scope; express a clear and effective purpose or position within the thesis statement; produce significant, clearly defined thesis statements

Analyze thesis statements for clarity, precision, and provability and apply certain sentence patterns to frame effective thesis statements

Construct unified and coherent developmental paragraphs and use the major rhetorical tools that ensure unity and coherence

Arrange supporting points according to effective organizational strategies, such as chronological, spatial, and emphatic order

Develop supporting body paragraphs by use of facts, illustrations/examples, definitions, analysis comparisons and other techniques

Use simple, compound, complex, and compound-complex sentences effectively

Work toward the "right" word, fresh and idiomatic

Improve the essay by observing customary rules of grammar, punctuation, and spelling
Use the library: computer cataloging, online databases, ebooks, and other reference works

Pose an effective research question and choose an appropriate research topic

Organize an outline, take notes on sources, maintain a working bibliography, assess the credibility of research materials

Construct a properly documented argumentative research essay with MLA formatting, including in-text parentheticals and a Works Cited page.

**Student Learning Outcomes:**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

72.0

**Honors Freshman Composition**

ENGL101H :

4.0 Units

This course provides an enriched exposure to expository and argumentative essays and the research paper, requiring in-depth analysis of issues and substantive treatment of student-selected topics.

**Requisites**

**Requisites:**

**Prerequisite**

ACE116 - Introduction to Academic Composition

**OR**

**Prerequisite**

ENGL099 - Introduction to Composition with Integrated Support

**OR**

**Prerequisite**

Qualifying profile from English placement process.

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0
General Education Plan:

Local - Plan A
Area E1: English Composition

CSU GE - Plan B
Area A2: Written Communication

IGETC - Plan C
Area 1A: English Composition

UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Learning Outcomes

Course Objectives:
Demonstrate an understanding of special needs of different audiences by focusing on cultural background, level of education, and professional concerns

Consider setting or time, place, environment surrounding a moment of communication

Anlayze rhetorical situations to create strong, audience-focused, and organized writing

Establish one's own informed and reasonable opinions and consider purpose, position, genre, and medium when constructing arguments

Demonstrate an understanding of literature and essays beyond literal, superficial characteristics and inferential interpretations

Apply certain processes, models, questions, and theories that result in enhanced clarity and comprehension

Generate ideas through prewriting techniques, such as freewriting, questioning, listing, and clustering

Prepare drafts with strategic planning and outlining; revise, edit, and proofread final drafts

Focus on a topic with an appropriately limited scope; express a clear and effective purpose or position within the thesis statement; produce significant, clearly defined thesis statements

Analyze thesis statements for clarity, precision, and provability and apply certain sentence patterns to frame effective thesis statements

Construct unified and coherent developmental paragraphs and use the major rhetorical tools to ensure unity and coherence

Arrange supporting points according to effective organizational strategies, such as chronological, spatial, and emphatic order

Develop supporting body paragraphs by use of facts, illustrations/examples, definitions, analysis comparisons, and other techniques.

Use simple, compound, complex, and compound-complex sentences effectively

Work toward the "right" word, fresh and idiomatic

Improve the essay by observing customary rules of grammar, punctuation, and spelling.

Use the library: computer cataloging, online databases, ebooks, and other reference works

Pose an effective research question and choose an appropriate research topic

Organize an outline, take notes on sources, maintain a working bibliography, assess the credibility of research materials

Construct a properly documented argumentative research essay with MLA formatting, including in-text parentheticals and a Works Cited page

Student Learning Outcomes:

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.
Units & Hours
Minimum Units: 4.0
Maximum Units: 4.0
Total Hours: 72.0

Literature and Composition
ENGL102:

4.0 Units
A second semester course in composition and literature that uses literature to develop critical thinking skills with extensive readings selected from the four major genres.

Requisites
Requisites:

Prerequisite
ENGL100 - Freshman Composition with Integrated Support

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101 - Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101H - Honors Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU
Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
  Area C: Humanities
  Area C2: Communication/Analytical Thinking
CSU GE - Plan B
  Area A3: Critical Thinking
  Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
IGETC - Plan C
  Area 1B: Critical Thinking/Composition
  Area 3B: Humanities
UC Comparable Transfer Courses
  UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Santa Ana College - Shared Course
  Shared Course with SAC

Learning Outcomes

Course Objectives:
Employ critical reading strategies to understand literary works at both the literal and symbolic level.

Distinguish between inferences, opinion, fact, prejudice, and belief.

Apply induction and deduction to make conclusions about the text by drawing inference and recognizing premises.

Identify questionable assumptions and fallacious reasoning.

Identify syllogisms, sound inferences.

Assess authoritative testimony.

Distinguish rhetorical devices, such as sarcasm, irony, and satire.

Demonstrate an understanding of schools of literary criticism.

Develop argumentative and persuasive essays addressing critical positions and logical deductions while evaluating the elements of drama, poetry, short stories, and novels.

Analyze timeless and universal questions that are reflected in literary themes of major dramas, poems, short stories, and novels.

Analyze various works, such as novels; poetry; drama; short stories; as well as essays, treatises, and literature from the genre, for fallacious reasoning, rhetorical strategies, compelling language, and universal themes.

Apply the Toulmin method to various works of drama and thereby construct sound arguments about dramatic elements and themes; avoid fallacies such as false analogies, post hoc, and hasty generalizations; evaluate supporting evidence within the plays and the critical reviews/analyses; supply sufficient support for claims from secondary sources.

Apply the Toulmin method to select poetic works and thereby construct sound arguments related to poetic movements and themes; avoid fallacies such as glittering generalities, begging the question, and card stacking; evaluate supporting evidence within poems and critical reviews/analyses; supply sufficient support for claims by referencing literary criticism and other secondary sources.

Apply the Toulmin method to various short stories and thereby construct sound arguments about poetic devices, movements, and themes; avoid fallacies such as slippery slope, false analogies, and tu quoque; evaluate supporting evidence within the stories and the critical analyses/interpretations; supply sufficient support for claims from the stories, primary, and secondary sources.
Apply the Toulmin method to selected novels and thereby develop a claim; construct sound arguments about specific texts; avoid fallacies such as card stacking, begging the question, and post hoc; evaluate supporting evidence within the texts and literary criticism/analyses; supply sufficient support for claims by referencing primary and secondary sources.

Student Learning Outcomes:

- Use the writing process to compose essays—including research papers in the Modern Language Association (MLA) format—that critically analyze fiction, poetry, and drama and that contain unity, coherence, development, logic, grammatical precision, and select.
- Critically analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques and grammatical precision.

Units & Hours

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
72.0

**Honors Literature and Composition**

**ENGL102H**:

4.0 Units

An enriched approach designed for honors students. A second semester course in composition and literature that uses literature to develop critical thinking skills with extensive readings selected from the four major genres.

**Requisites**

**Requisites:**

**Prerequisite**

ENGL100 - Freshman Composition with Integrated Support

- Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

ENGL101 - Freshman Composition

**Outcomes**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

ENGL101H - Honors Freshman Composition
Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area C: Humanities
Area E2: Communication/Analytical Thinking

CSU GE - Plan B
Area A3: Critical Thinking
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 1B: Critical Thinking/Composition
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Employ critical reading strategies to understand literary works at both the literal and symbolic level.

Distinguish between inferences, opinion, fact, prejudice, and belief.

Apply induction and deduction to make conclusions about the text by drawing inference and recognizing premises.

Identify questionable assumptions and fallacious reasoning.

Identify syllogisms, sound inferences.

Assess authoritative testimony.

Distinguish rhetorical devices, such as sarcasm, irony, and satire.

Demonstrate an understanding of schools of literary criticism.

Develop argumentative and persuasive essays addressing critical positions and logical deductions while evaluating the elements of drama.

Analyze timeless and universal questions that are reflected in literary themes of major dramas, poems, short stories, and novels.

Analyze various works, such as novels; poetry; drama; short stories; as well as essays, treatises, and literature from the genre, for fallacious reasoning, rhetorical strategies, compelling language, and universal themes.
Apply the Toulmin method to various works of drama and thereby construct sound arguments about dramatic elements and themes; avoid fallacies such as false analogies, post hoc, and hasty generalizations; evaluate supporting evidence within the plays and the critical reviews/analyses; supply sufficient support for claims from secondary sources.

Apply the Toulmin method to select poetic works and thereby construct sound arguments related to poetic movements and themes; avoid fallacies such as glittering generalities, begging the question, and card stacking; evaluate supporting evidence within poems and critical reviews/analyses; supply sufficient support for claims by referencing literary criticism and other secondary sources.

Apply the Toulmin method to various short stories and thereby construct sound arguments about literary fiction devices, movements, and themes; avoid fallacies such as slippery slope, false analogies, and tu quoque; evaluate supporting evidence within the stories and the critical analyses/interpretations; supply sufficient support for claims from stories, primary, and secondary sources.

Apply the Toulmin method to select novels and thereby develop a claim; construct sound arguments about specific texts; avoid fallacies such as card stacking, begging the question, and post hoc; evaluate supporting evidence within the texts and literary criticism/analyses; supply sufficient support for claims by referencing primary and secondary sources.

**Student Learning Outcomes:**

Use the writing process to compose essays—including research papers in the Modern Language Association (MLA) format—that critically analyze fiction, poetry, and drama and that contain unity, coherence, development, logic, grammatical precision, and select

Critically analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques and grammatical precision.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
72.0

**Critical Thinking and Writing**

**ENGL103:**

4.0 Units

This course focuses on developing critical thinking, reading, and writing skills by studying established argumentative methods and models and applying them to contemporary issues. Emphasis will be on logical reasoning and analytical and argumentative skills necessary for critical writing.

**Requisites**

**Requisites:**

**Prerequisite**

**ENGL100 - Freshman Composition with Integrated Support**

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**OR**

**Prerequisite**

**ENGL101 - Freshman Composition**

**Outcomes**

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18

1457/2244
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:

Local - Plan A
Area E2: Communication/Analytical Thinking

CSU GE - Plan B
Area A3: Critical Thinking

IGETC - Plan C
Area 1B: Critical Thinking/Composition

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Education

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Define terms clearly to fit the context of the argument.
Identify premises and syllogisms within arguments.
Identify and distinguish between inductive and deductive reasoning.
evaluate evidence, examples, and arguments for soundness.
Assess authoritative testimony within arguments.
Draw inferences from statistics to produce valid conclusions.
Recognize rhetorical devices, such as sarcasm, irony, and satire and understanding their effectiveness within arguments.
Develop an effective claim statement.
Construct sound arguments with valid form and sufficient and true content.
Avoid fallacies in one's own writings and recognize fallacies in others' writings.

Supply sufficient support for claims and recognize weaknesses in logic.

Create strong argumentative and persuasive essays on critical positions and problems.

Write a comprehensive analysis and summary of someone else's argument.

Choose an argumentative topic that can be adequately supported with outside evidence.

Use research skills to effectively identify and synthesize material.

Avoid plagiarism by correctly paraphrasing and summarizing ideas from research materials.

Document sources using proper citation methods.

Identify and explore contemporary issues, such as women's rights, gun control, English as the official language, euthanasia, universal health care, free speech limitations, legalization of drugs, immigration, and national security.

Evaluate and share opposing viewpoints in composition and oral debate.

Identify and assess logical fallacies and rhetorical strategies in text and media.

Analyze timeless and universal questions, such as inalienable rights, social order, free speech, the value of art, the nature of man.

Consider various cross cultural and historical perspectives of enduring questions with emphasis on cultural diversity.

Student Learning Outcomes:

Use the writing process to compose argumentative and persuasive essays—including research papers in the Modern Language Association (MLA) format—that contain unity, coherence, development, logic, sound reasoning, meaningful structure, counter argument, gr

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques and grammatical precision.

Units & Hours

Minimum Units:

4.0

Maximum Units

4.0

Total Hours

72.0

Honors Critical Thinking and Writing

ENGL103H :

4.0 Units

This course will emphasize an enriched and intensive exploration of historical and contemporary issues as well as encourage an application of critical thinking, writing and reading skills to established argumentative methods and models through student-initiated discussion and problem-solving in a seminar setting.

Requisites

Requisites:

Prerequisite

ENGL100 – Freshman Composition with Integrated Support

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101 - Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101H - Honors Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking

CSU GE - Plan B
Area A3: Critical Thinking

IGETC - Plan C
Area 1B: Critical Thinking/Composition

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Define terms

*Identify premises and syllogisms, in more depth, including complex syllogistic structures
Identify deduction and induction
Evaluate evidence, examples, and arguments for soundness
Assess authoritative testimony
Draw inferences from statistics
Recognize rhetorical devices, such as sarcasm, irony, and satire
Develop an effective claim statement.
Construct sound arguments with valid form and sufficient and true content.
Avoid fallacies in one's own writings and recognize fallacies in others' writings.
Supply sufficient support for claims and recognize weaknesses in logic.
Create strong argumentative and persuasive essays on critical positions and problems.
Write a comprehensive analysis and summary of someone else's argument.
Choose an argumentative topic that can be adequately supported with outside evidence.
Use research skills to effectively identify and synthesize material.
Avoid plagiarism by correctly paraphrasing and summarizing ideas from research materials.

Document sources using proper citation methods.
Identify and explore contemporary issues, such as women's rights, gun control, English as the official language, euthanasia, universal health care, free speech limitations, legalization of drugs, immigration, and national security.
Evaluate and share opposing viewpoints in composition and oral debate.
Identify and assess logical fallacies and rhetorical strategies in text and media.
Analyze timeless and universal questions, such as inalienable rights, social order, free speech, the value of art, the nature of man
Consider various cross cultural and historical perspectives of enduring questions with emphasis on cultural diversity
Develop an understanding for, and a sensitivity toward, differing cultural and philosophical viewpoints

*Relate enduring questions to local historical, social and aesthetic issues. *Indicates enhanced activities for the Honors course

**Student Learning Outcomes:**
Use the writing process to compose argumentative and persuasive essays—including research papers in the Modern Language Association (MLA) format—that contain unity, coherence, development, logic, sound reasoning, meaningful structure, counter argument, gr
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques and grammatical precision.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
72.0

**Creative Writing**
**ENGL213:**
3.0 Units
This course offers an introduction to writing techniques focusing on the four literary genres: poetry, drama, short story, and personal memoir. Class will be conducted in a workshop format with an emphasis on writing and critiquing.

**Requisites**

**Requisites:**

**Prerequisite**

ENGL100 - Freshman Composition with Integrated Support

**Outcomes**

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

ENGL101 - Freshman Composition

**Outcomes**

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

ENGL101H - Honors Freshman Composition

**Outcomes**

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

Santa Ana College - Shared Course

Shared Course with SAC

**Course Identifier (C-ID)**

English

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**
Understand the four literary genres generated by students and professional writers

Understand various literary purposes

Recognize the interests of various audiences

Use both traditional and experimental strategies to develop a text for a specific purpose and to appeal to a universal audience

Build upon the knowledge gained in English 101 or English 101H or English 100 and continue to generate creative ideas for a draft through prewriting techniques

Plan and organize those ideas for ideal dramatic effect

Write a first draft

Revise it for content, form and appropriateness of expression, and edit it for correctness

Find and limit topics

Develop methods of writing in the four literary genres

Build upon the knowledge gained in English 101 or English 101H or English 100 while integrating newly developed skills of dramatic analysis to produce effective works in the four literary genres

Develop style, sentence variety, and correctness by observing, analyzing, and imitating written models and by applying customary rules of grammar, punctuation, and spelling

Use the library and other sources such as the Internet to gather information for their literary works

Name, define, identify, and apply the selected literary terminology to the critical content and analysis of the four literary genres

Student Learning Outcomes:

Create original works in different genres using a variety of literary techniques.

Analyze and evaluate literary works of fellow students and writers based upon literary techniques used in various genres.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Survey of the Bible As Literature

ENGL220:

3.0 Units

A study of the literary history, influence, and craftsmanship of the Bible and an exploration of related stories, poems, plays, essays and other diverse materials.

Requisites

Requisites:

Prerequisite

ENGL100 - Freshman Composition with Integrated Support

Use the writing process to compose essays--including research papers in MLA format--that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.
Prerequisite

ENGL101 - Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify archetypal motifs and patterns: creation, cycles, heroes, heroines, immorality, covenant, redemption, etc.
Identify archetypal interpretation of recurring images: colors, wind/air, water, etc.
Identify plot patterns such as quest and rebirth patterns.
Identify developmental concepts in character study such as the shadow, trickster, temptress, wise man/woman, good mother/father, holy fool, etc.

Explore literature through the writing process by explicating poems and narrative passages, literary analysis, and other writing assignments so as to better understand contemporary counterparts of assigned literature.

Analyze and appreciate a variety of other stories, poems, art, music and plays directly influenced by the Bible or which have similar theme or situation.

Generate imaginative responses for interpreting the texts.
Identify and respond to the writer's central purpose.

Determine the philosophical, historical, and artistic assumptions implicit in the content and structure of literary works.
Recognize and analyze the intertextuality of biblical literature and the unity in the text(s).

Apply criteria of literary/artistic excellence developed by the various “schools” of interpretation.

Discover the importance and utility of personal experience in the world as a tool for evaluating and criticizing literature.

Distinguish between personal responses to a work and the work itself.

Identify levels and shades of meaning in figurative language and in literary symbols.

Recognize the close relationship or identity of form and content in literature.

**Student Learning Outcomes:**

Analyze and evaluate texts associated with the biblical canon for structure, soundness, originality, and importance.

Plan and compose original essays and presentations that analyze and evaluate literary works from the biblical canon.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Survey of English Literature I**

**ENGL231:**

3.0 Units

Introductory study of representative selections of British literature from the Anglo-Saxon period to the neo-classical period. Emphasis on authors best exemplifying their period, such as Chaucer, Shakespeare, Spenser, Jonson, Milton, Donne, Dryden, Johnson, Behn, Pope, and others.

**Requisites**

**Requisites:**

**Prerequisite**

**ENGL100 - Freshman Composition with Integrated Support**

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

**ENGL101 - Freshman Composition**

**Outcomes**

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR
Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area C: Humanities

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C

Area 3B: Humanities

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

English

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Demonstrate an understanding of the background of this era: Anglo-Saxon language and culture, the medieval world view

Identify and respond to the writer’s central purpose

Determine the philosophical/artistic assumptions implicit in the content and structure of literary works

Apply criteria of literary/artistic excellence developed by the various “schools” of interpretation

Identify the importance of utilizing one’s own experience in the world as a tool for criticizing literature

Distinguish between one’s own responses to a work and the work itself

Identify levels and shades of meaning in figurative language and literary symbols

Predict probable consequences within the plot line by recognizing adumbration and then justify those assumptions

Recognize the close relationship or identity of form and content in literature

Analyze works in terms of generic conventions and changes

Demonstrate an understanding of the background of this era and major events of this period: The Renaissance and Counter-Renaissance. Renaissance views of humankind and society evident in such major works as The Faerie Queene, Dr. Faustus, Henry IV, I, King Lear, and/or Twelfth Night

Demonstrate an understanding of the social and political trends of this period, the Puritan revolution
Demonstrate an understanding of the social and political trends of this era, the Glorious Revolution, Neoclassicism

**Student Learning Outcomes:**

- Analyze and evaluate texts of the English literary tradition from its origins to 1800 for structure, soundness, originality and importance
- Plan and compose original essays and presentations that analyze and evaluate literary works from the Anglo-Saxon period through the neo-classical period.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Survey of English Literature II**

**ENGL232:**

3.0 Units

Introductory study of representative selections from the English Romantic Movement to the present. Emphasis on those authors best exemplifying their period, such as Blake, Wordsworth, Coleridge, Byron, the Shelleys, Keats, Tennyson, Arnold, Carlyle, the Brownings, Dickens, the war poets, Yeats, Wilde, Woolf, Joyce, Lawrence, Mansfield, and Larkin.

**Requisites**

**Requisites:**

**Prerequisite**

**ENGL100 - Freshman Composition with Integrated Support**

- Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**OR**

**Prerequisite**

**ENGL101 - Freshman Composition**

**Outcomes**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**OR**

**Prerequisite**

**ENGL101H - Honors Freshman Composition**

**Outcomes**
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the political, social, and cultural backgrounds, major events, and key topics of The Romantic Era and world view.

Identify and respond to the writer’s central purpose.

Determine the philosophical/artistic assumptions implicit in the content and structure of literary works.

Apply criteria of literary/artistic excellence developed by the various "schools of interpretation."

Identify the importance of utilizing one’s own experience in the world as a tool for criticizing literature.

Distinguish between one’s own responses to a work and the work itself.

Identify levels and shades of meaning in figurative language and in literary symbols.

Predict probable consequences within the plot line by recognizing foreshadowing and then justify those assumptions.

Recognize the close relationship between form and content in literature.

Analyze the works in terms of generic conventions and changes.

Identify the form and stylistic elements used within works.

Situate works within their social, historical, and literary contexts.

 Demonstrate an understanding of the political, social, and cultural backgrounds, major events, and key topics of The Victorian Era and world view, including the following: The effects on Victorian writings of industrialism, imperialism, and rising democracy.

Demonstrate an understanding of the political, social, and cultural backgrounds, major events, and key topics of the 20th Century and world view.

Student Learning Outcomes:
Analyze and evaluate texts of the English literary tradition from the Romantic movement through the present for structure, soundness, originality and importance.

Plan and compose original essays and presentations that analyze and evaluate literary works form the Romantic movement through the present.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Shakespeare's Comedies and Romances
ENGL233A:

3.0 Units

Study of a select number of plays to discover how Shakespeare uses the genres of comedy and romance to explore the human condition as it relates to historical, philosophical, social, political, and aesthetic contexts. Augmented by films and, if available, appropriate field trips. Different selections in English 233A and 233B.

Requisites

Requisites:

Prerequisite

ENGL100 - Freshman Composition with Integrated Support

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101 - Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.
Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Demonstrate an understanding of drama’s origins
Identify some of the essential elements of William Shakespeare’s life and works.
Discuss and analyze comedy and romance genres.
Explicate texts based on reviews of current critical views as well as analysis of themes, characterization, conflicts, and dramatic devices.
Discuss and address the historical, philosophical, social, political, and aesthetic contexts of the plays.
Examine the influence of gender, economic, cultural, racial, and/or ethnic groups on Shakespeare’s plays.
Demonstrate an understanding of how Shakespearean Sonnets exemplify Shakespeare’s writing style, themes, and motifs.
Write scene analyses, perform oral scene analyses, write short critical papers, and complete a longer research project that will demonstrate the ability to apply critical thinking skills to an analysis of Shakespearean plays.
Recognize and interpret Shakespeare’s writing style and use of literary devices through close reading.
Recognize and interpret the relationship of plays to each other through close reading.

Student Learning Outcomes:
Analyze and evaluate texts of Shakespeare’s comedies and romances for structure, soundness, originality and importance.
Plan and compose original essays and presentations that analyze and evaluate the comedies and romances.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0
Shakespeare's Tragedies and History Plays
ENGL233B:

3.0 Units

Study of a select number of plays to discover how Shakespeare uses tragedy and history plays to explore the human condition as it relates to historical, philosophical, social, political, and aesthetic contexts. Augmented by films and, if available, appropriate field trips. Different selections in English 233A and 233B.

Requisites

Requisites:
Prerequisite

ENGL100 - Freshman Composition with Integrated Support

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101 - Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)
IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Demonstrate an understanding of drama's origins.

Identify some of the essential elements of William Shakespeare's life and works.

Discuss and analyze tragedy and history genres.

Explicate texts based on reviews of current critical views as well as analysis of themes, characterization, conflicts, and dramatic devices.

Discuss and address the historical, philosophical, social, political, and aesthetic contexts of the plays.

Examine the influence of gender, economic, cultural, racial, and/or ethnic groups on Shakespeare's plays.

Demonstrate an understanding of how Shakespearean Sonnets exemplify Shakespeare's writing style, themes, and motifs.

Write scene analyses, perform oral scene analyses, write short critical papers, and complete a longer research project that will demonstrate the ability to apply critical thinking skills to an analysis of Shakespearean plays.

Recognize and interpret Shakespeare's writing style and use of literary devices through close reading.

Recognize and interpret the relationship of plays to each other through close reading.

Student Learning Outcomes:

Analyze and evaluate texts of Shakespeare's tragedy and history plays for structure, soundness, originality and importance.

Plan and compose original essays and presentations that analyze and evaluate the history plays and tragedies.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Survey of American Literature, 1600-1865
ENGL241:

3.0 Units
This course provides a survey of America's greatest works of literature from 1600-1865, emphasizing the relationship between various works and general movements in American culture and literary history.

Requisites

Requisites:

Prerequisite

ENGL100 - Freshman Composition with Integrated Support
Outcomes
Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101 - Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Education

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify and interpret the writer’s central purpose
Determine the philosophical/artistic assumptions implicit in the content and structure of literary works

Apply criteria of literary/artistic excellence developed by the various “schools” of interpretation

Discover the importance and utility of the students' own experience in the world as a tool for criticizing literature

Distinguish between the students' own responses to a work and the work itself

 Identify levels and shades of meaning in figurative language and in literary symbols

Recognize foreshadowing

Recognize the close relationship between form and content in literature

Situate works within their historical and social context

Student Learning Outcomes:

Analyze texts of the American literary tradition from the 1600s through 1865 and evaluate inter-textual significance for structure, soundness, originality, and importance.

Plan and compose original essays and presentations that analyze and evaluate literary works from the 1600s through to 1865.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Survey of American Literature, 1865-Present
ENGL242:

3.0 Units

The course provides a survey of America's greatest works of literature and their contributions to the American culture from 1865 to present, emphasizing the relationship between literary and intellectual history.

Requisites

Requisites:

Prerequisite

ENGL100 - Freshman Composition with Integrated Support

OUTCOMES

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101 - Freshman Composition

OUTCOMES

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

ENGL101H - Honors Freshman Composition

**Outcomes**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**

Area C: Humanities

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**

Area 3B: Humanities

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Course Identifier (C-ID)**

English

Santa Ana College - Shared Course

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

- Identify and respond to the writer's central purpose
- Determine the philosophical/artistic assumptions implicit in the content and structure of literary works
- Apply criteria of literary/artistic excellence developed by the various "schools" of interpretation
- Discover the importance and utility of his/her own experience in the world as a tool for criticizing literature
- Distinguish between his/her own responses to a work and the work itself
- Identify levels and shades of meaning in figurative language and in literary symbols
- Predict probable consequences within the plotline by recognizing adumbration and then justify those assumptions
- Recognize the close relationship or identity of form and content in literature
- Situate works within their historical and social context

**Student Learning Outcomes:**
Analyze texts of the American literary tradition from the 1865 through to the present and evaluate inter-textual significance for structure, soundness, originality, and importance.
Plan and compose original essays and presentations that analyze and evaluate literary works from 1865 through the present.

Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 54.0

The Modern American Novel
ENGL243:

3.0 Units
Study of significant American novels written since 1900. May include, but is not limited to, works by Fitzgerald, Hemingway, Faulkner, Hurston, Heller, Kerouac, Nabokov, Roethke, Erdrich, Vonnegut, and Morrison.

Requisites
Requisites:
Prerequisite
ENGL100 - Freshman Composition with Integrated Support
Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101 - Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101H - Honors Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area C: Humanities

CSU GE - Plan B
   Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
   Area 3B: Humanities

Santa Ana College - Shared Course
   Shared Course with SAC

Learning Outcomes

Course Objectives:
Contrast Romanticism, realism and/or naturalism with the Modern American period and thus explain the period of modernity.

Demonstrate an understanding of the genre of novel, including literary terminology.

Examine critically the reception of modern novels through outside readings.

Analyze the relationship between American literary novels and concepts of American identity.

Articulate an understanding of the Modern Period through verbal and written assignments.

Identify and discuss the ethos of the major writers of The Lost Generation.

Critically read and understand novel(s) written by members of The Lost Generation.

Examine the reception of the novels of The Lost Generation.

Articulate the relationship between the novels of The Lost Generation and concepts of American identity and modernity.

Analyze and connect the political, historical, and cultural contexts of these novels.

Articulate an understanding of The Lost Generation through verbal and written assignments.

Identify and discuss the ethos of the major writers of the Harlem Renaissance.

Critically read and understand novel(s) written by members of the Harlem Renaissance.

Examine the reception of the novels the Harlem Renaissance.

Articulate the relationship between the novels of the Harlem Renaissance and concepts of American identity and modernity.

Analyze and connect the political, historical, and cultural contexts of Harlem Renaissance novels.

Articulate an understanding of the Harlem Renaissance through verbal and written assignments.

Identify and discuss the ethos of the major writers of social protest.

Critically read and understand social protest novel(s).

Examine the reception of social protest novels.

Articulate the relationship between social protest novels and concepts of American identity and modernity.

Analyze and connect the political, historical, and cultural contexts of social protest novels.

Articulate an understanding of social protest through verbal and written assignments.

Identify and discuss the ethos of the major writers of the Southern Renaissance.
Critically read and understand Southern Renaissance novels
Examine the reception of Southern Renaissance novel(s)
Articulate the relationship between the novels of the Southern Renaissance and concepts of American identity and modernity
Analyze and connect the political, historical, and cultural contexts of Southern Renaissance novels
Articulate an understanding of the Southern Renaissance through verbal and written assignments
Identify and discuss the ethos of the major writers of the post-war novels
Critically read and understand post-war novel(s)
Examine the reception of post-war novels
Articulate the relationship between post-war novels and concepts of American identity and modernity
Analyze and connect the political, historical, and cultural contexts of post-war novels
Articulate an understanding of post-war novels through verbal and written assignments
Identify and discuss the ethos of the major writers of the post-modern novels
Critically read and understand post-modern novel(s)
Examine the reception of post-modern novels
Articulate the relationship between post-modern novels and concepts of American identity and modernity
Analyze and connect the political, historical, and cultural contexts of post-modern novels
Articulate an understanding of post-modern novels through verbal and written assignments

Student Learning Outcomes:
- Analyze and interpret themes found in the novel-length literature and the intellectual movements of the American Modern period.
- Discuss, plan, and compose original arguments/essays and presentations that analyze and evaluate Modern American literary works in their historic, philosophical, social, political, regional, and/or aesthetic contexts.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Survey of Chicano Literature
ENGL246:

3.0 Units
Examines American literature by and about Chicanos. Emphasizes the relationships between various works and the Chicanos' place in American society/culture.

Requisites
Requisites:
Prerequisite

ENGL100 - Freshman Composition with Integrated Support

Outcomes
Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101 - Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the historical, social, and cultural impacts on Chicano literature.

Analyze and interpret literary works from the Chicano tradition through summarizing, paraphrasing, and understanding figurative language.
Define, identify, evaluate basic literary elements and terms in Chicano literature, including plot, theme, setting, characterization, point of view, figurative language, and style.

Identify important themes of identity, discrimination, culture, and history, with an emphasis on validating the Mexican-American experience or Chicano culture in the United States.

**Student Learning Outcomes:**
- Analyze and evaluate texts written by and about Chicano and/or Latin American authors-examining written, visual, and oral traditions for structure, soundness, originality and importance.
- Plan and compose original essays and presentations that analyze and evaluate literary works from Chicano literature, examining the Chicano (Latin) voice along with historical and cultural perspectives.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Children's Literature**

**ENGL270:**

3.0 Units

This course offers a study of literature for children, emphasizing the history, trends, issues, and evaluation of all major genres: picture books, poetry, drama, traditional literature, non-fiction, and fiction, including full-length works.

**Requisites**

**Requisites:**

**Prerequisite**

ENGL101 - Freshman Composition

**Outcomes**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

**Prerequisite**

ENGL101H - Honors Freshman Composition

**Outcomes**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.
ENGL100 - Freshman Composition with Integrated Support

Outcomes
Use the writing process to compose essays--including research papers in MLA format--that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use. Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

Course Identifier (C-ID)
Education

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

IGETC - Plan C
Area 3B: Humanities

Learning Outcomes
Course Objectives:
Demonstrate the understanding of the history of literature for children, the attitudes towards this literature, and the literature’s changing purposes from largely didactic to aesthetic

Analyze poetry and drama, recognizing common rhetorical elements, tropes, and figures of speech including but not limited to types of imagery, alliteration, metaphor, soliloquies, asides, and irony.

Classify poetry according to different forms and generic conventions: these include but are not limited to the limerick, the sonnet, haiku, concrete poetry, free verse, and the lyric.

Appraise poetry and drama for their literary merit according to established criteria and for their appeal to children.

Explore drama and poetry’s instructional potential for the K-12 classroom, for instance in the aiding of vocabulary development and language acquisition.

Design a creative lesson plan utilizing poetry or drama.

Demonstrate knowledge of major authors, works, awards, and trends in poetry and drama written for children.

Demonstrate knowledge of major authors and illustrators, works, awards, (such as the Caldecott and Greenaway awards), and trends in picture books.

Interpret, analyze and evaluate the visual content of picture books for elements such as line, perspective, color, texture, and composition.

Identify media (such as collage, computer-generated, watercolor, gouache, pen and ink) and artistic styles (such as expressionism, impressionism, surrealism, realism, and cartoon).
Demonstrate understanding of how children's cognitive development, gender, and age determine the appropriateness of book selections.

Classify picture books according to generic conventions: these genres include board book, concept book, alphabet and/or counting book, picture storybook, toy book, and transitional reader.

Analyze and evaluate the textual content of picture books for elements such as symbolism, theme, and style.

Read and appraise picture books for their literary and artistic merit using specific genre-based criteria, appeal to children, age-appropriateness, and instructional potential.

Demonstrate knowledge of major compilers/translators/composers of and of several examples of traditional literature coming from the oral tradition.

Read some variants of a single tale such as Cinderella, distinguish, and analyze the differences between variants for an understanding of how a tale's country of origin or audience influences the arrangement of and choice of elements within a variant.

Demonstrate understanding of various theories of the transmission of traditional literature and distinguish between traditional and modern fantasy.

Interpret, analyze, and evaluate traditional literature for literary elements such as theme, imagery, symbol.

Identify stock elements of traditional literature including backdrop settings; themes of cottage to castle, rags to riches, or good vs. evil; and stereotypical characters such as the evil stepmother, damsel-in-distress, child-as-hero, noodle-heads, talkin

Demonstrate understanding of how children's cognitive development, interests and age determine the appropriateness of traditional literature selections.

Classify traditional literature according to generic conventions: these genres include but are not limited to jump-rope rhymes, tongue-twisters, jokes, wonder/fairy/magic tales, porquoi tales, myths, tall tales, legends, and epics.

Evaluate traditional literature according to specific genre-based criteria.

Create a tale utilizing traditional literary elements that illustrates an understanding of theme and analyze the appropriateness of the tale for a contemporary audience or write a literary analysis (such as a comparison/contrast of some of a particular cu

Prepare a creative group presentation of a traditional tale appropriate for an elementary school audience.

Demonstrate knowledge of major authors, works, awards such as the Newbery and Scott O'Dell awards, and historical trends in fiction for children.

Interpret, analyze, and evaluate fiction for literary elements such as theme, imagery, symbolism, setting, conflict, and characters.

Read examples of the key fiction genres and classify fiction according to both generic conventions of and specific sub-genres within these larger genres: modern fantasy, historical fiction, realistic fiction, and multicultural fiction.

Appraise fictional works using specific genre-based criteria for their literary merit, appeal to children, age-appropriateness, and instructional potential.

Write a documented literary analysis of one or more novels utilizing and correctly citing passages from the primary source(s) and from appropriately selected secondary sources.

Demonstrate knowledge of major authors, works, awards such as the Orbus Pictus award, and historical trends in non-fiction for children.

Appraise non-fictional works using specific genre-based criteria including the presentation of information, age-appropriate vocabulary and style, and coverage of topic.

Read and judge the appeal of non-fictional works for children.

Classify non-fictional works by accepted subject categories (such as applied sciences, life sciences, humanities, and social studies) and/or method of information-presentation (such as photo essay, concept book, almanac, and biography).

Distinguish between types of biography as well as between fiction, non-fiction, and faction.

Demonstrate an understanding of the personal and academic benefits of children's literature in general and of specific genres.

Demonstrate through projects and/or homework an understanding of how to elicit critical and emotional/personal responses to literature.Engage in a book club

Discuss censorship, the rights of children, the rights of parents to disagree with reading choices, and options of how schools and libraries can deal with challenges to reading curricula.
Demonstrate an understanding of how to choose age-appropriate quality literature, of how to help children select reading material, and of how to instill a life-long love of literature.

Student Learning Outcomes:
- Analyze and evaluate texts in the various genres of Children’s Literature for structure, soundness, originality, and importance. 
- Plan and compose original essays and presentations that analyze and evaluate literary works from the various genres.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Survey of World Literature I
ENGL271:

3.0 Units
Survey of selections from world masterpieces from the beginnings of writing through the 1600s. Literary works studied in historical context for artistic form, influence on their and others’ cultures, and general contribution to understanding human experience.

Requisites
Requisites:
Prerequisite
ENGL100 - Freshman Composition with Integrated Support
Use the writing process to compose essays— including research papers in MLA format— that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101 - Freshman Composition
Outcomes
Use the writing process to compose essays— including research papers in the MLA format— that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite
ENGL101H - Honors Freshman Composition
Outcomes
Use the writing process to compose essays— including research papers in the MLA format— that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses

Course Identifier (C-ID)
English

Santa Ana College - Shared Course
  Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify the background of the era: the historical events, the social trends and the worldviews of each of the following periods: the Ancient World, the Middle Ages, and the Renaissance;
Identify and respond to the writer’s central purpose;
Interpret the themes of literary works through plot, character, and other elements of fiction;
Apply criteria of literary/artistic excellence developed by various schools of interpretation;
Discover the importance and utility of his/her own experiences in the world as a tool for criticizing literature;
Distinguish between his/her own responses and the work itself;
Identify levels and shades of meaning in figurative language and in literary symbols;
Predict probable consequences within the plot line by recognizing adumbration and then justifying the assumptions;
Recognize the close relationships or identity of form and content in literature;
Analyze works in terms of generic conventions and changes.

Student Learning Outcomes:
Analyze and evaluate texts of the literary tradition of the world from the beginnings of writing to the Renaissance for structure, soundness, originality and importance.
Plan and compose original essays and presentations that analyze and evaluate literary works from the beginnings of writing to the Renaissance.

Units & Hours

Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Survey of World Literature II
ENGL272:

3.0 Units

Survey of world literary masterworks since the Renaissance studied for artistic form, cultural influence, and contributions to modern and contemporary thought.

Requisites
Requisites:

Prerequisite

ENGL101 - Freshman Composition

Use the writing process to compose essays--including research papers in MLA format--that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL101H - Honors Freshman Composition

Use the writing process to compose essays--including research papers in MLA format--that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

ENGL100 - Freshman Composition with Integrated Support

Use the writing process to compose essays--including research papers in MLA format--that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
  Area C: Humanities
  Area D: Cultural Breadth

CSU GE - Plan B
  Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
  Area 3B: Humanities

UC Comparable Transfer Courses
  UC Comparable Transfer Courses

Course Identifier (C-ID)
  English

Santa Ana College - Shared Course
  Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify the background of the era: the historical events, the social trends and the worldviews of each of the following periods: the Enlightenment, the Romantic, the Realist, the Modern, and the post Modern;

Identify and respond to the writer’s central purpose;

Interpret the themes of literary works through plot, character, and other elements of fiction;

Apply criteria of literary/artistic excellence developed by various schools of interpretation;

Discover the importance and utility of his/her own experiences in the world as a tool for criticizing literature;

Distinguish between his/her own responses and the work itself;

Identify levels and shades of meaning in figurative language and in literary symbols;

Predict probable consequences within the plot line by recognizing adumbration and then justifying the assumptions;

Recognize the close relationships or identity of form and content in literature;

Analyze works in terms of generic conventions and changes.

Student Learning Outcomes:

Analyze and evaluate texts of the literary tradition of the world since the Renaissance for structure, soundness, originality and importance

Plan and compose original essays and presentations that analyze and evaluate literary works since the Renaissance.

Units & Hours

Minimum Units:
  3.0

Maximum Units
  3.0

Total Hours
  54.0

Survey of Literature by Women
  ENGL278:
  3.0 Units
An historical survey of literature by women, including short stories, novels, plays, poetry, and non-fiction.

Requisites

Requisites:

Prerequisite

**ENGL100 - Freshman Composition with Integrated Support**

Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

**ENGL101 - Freshman Composition**

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite

**ENGL101H - Honors Freshman Composition**

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area D: Cultural Breadth

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

Area D: Social Sciences

IGETC - Plan C

Area 3B: Humanities

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:

- Identify and respond to the writer’s central purpose
- Determine the philosophical/artistic assumptions implicit in the content and structure of literary works
- Apply criteria of literary/artistic excellence developed by the various “schools” of interpretation
- Discover the importance and utility of his/her own experience in the world as a tool for criticizing literature
- Distinguish between his/her own responses to a work and the work itself
- Identify levels and shades of meaning in figurative language and in literary symbols
- Analyze works in terms of generic conventions and changes
- Compare/contrast works across historical spectrum and from writers of different cultures/ethnicities
- Demonstrate a critical understanding about recurrent themes and issues in literature by women.
- Analyze the differences that culture, ethnicity, class, sexuality, and religion have on women’s writing in each period.
- Evaluate women’s literature from each time period in a historical and/or cultural context.

Student Learning Outcomes:

- Analyze and evaluate texts written by women since the medieval period for structure, soundness, originality, theme, and importance.
- Plan and compose original essays and presentations that analyze and evaluate women’s literary works since the medieval period.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Statics

ENGR220:

3.0 Units

An introductory course on the analysis of forces acting on objects and structures in equilibrium. Topics include equilibrium of particles, forces and friction, and static equilibrium of rigid bodies.

Requisites

Requisites:

Prerequisite

MATH185 - Single Variable Calculus II

AND

Prerequisite

PHYS250A - Physics for Scientists and Engineers I

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Course Identifier (C-ID)
Engineering

Learning Outcomes
Course Objectives:
Effectively communicate legible problem solutions to be understood by engineers in and out of their specific discipline.

Determine the forces that act on rigid bodies including external forces, weight, normal, distributed loads, friction and reactions at supports.

Calculate internal forces in members and create shear and bending moment diagrams for beams.

Perform vector analysis methods addressing forces acting on rigid bodies, trusses, frames, and machines.

Analyze two- and three-dimensional force systems on rigid bodies in static equilibrium.

Student Learning Outcomes:
- Analyze and solve equilibrium conditions for a particle, rigid body, or a beam in two or three dimensions.
- Determine and diagram the forces acting on a particle or rigid body in two or three dimensions.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Dynamics
ENGR225:
3.0 Units

Fundamentals of kinematics and kinetics of particles and rigid bodies. Topics include Newton’s laws of motion, kinematics of particles, planar and three dimensional motion of rigid bodies, conservation principles, and an introduction to vibrations.

Requisites
Requisites:
Prerequisite
ENGR220 - Statics

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Course Identifier (C-ID)
Engineering

Learning Outcomes

Course Objectives:
Derive and apply the relationships between position, velocity, and acceleration of a particle in rectilinear and curvilinear motion.

Derive relations defining the velocity and acceleration of any particle on a rigid body for translation, rotation and general plane motion.

Apply Newton’s second law to analyze the motion of both a particle in rectilinear or curvilinear translation acted upon by forces and a rigid body in plane motion acted upon by forces and moments.

Apply the method of work and energy to engineering problems modeled as a single particle, a system of particles, or a rigid body in plane motion.

Apply the method of impulse and momentum to engineering problems modeled as a single particle, as system of particles, or a rigid body in plane motion.

Select the method of analysis that is best suited for the solution of a given problem. (Newton’s Law, Work and Energy, Impulse and Momentum, or a combination of these methods.)

Describe and analyze the plane motion of a particle relative to a rotating frame. Determine the Coriolis acceleration in plane motion.

Apply the principle of impulse and momentum to problems of direct and oblique central impact, as well as eccentric impact.

To effectively communicate legible engineering solutions to be understood by engineers both in and out of their specific disciplines.

Student Learning Outcomes:

Demonstrate qualitative and quantitative understanding of Newtonian Physics and the equations of kinematics and kinetics of 2 and 3 dimensional motion.

Demonstrate an understanding of conservation laws in mechanics and apply these principles as an alternative to Newton’s law of motion in the solution of dynamics problems.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Network Analysis

ENGR230:

5.0 Units

An introductory course on the modeling and analysis of electrical networks. Topics include basic network theorems, steady state analysis, Laplace and Fourier transforms.

Requisites

Requisites:
Prerequisite:

PHYS250B - Physics for Scientists and Engineers II

AND
Co-Requisite

MATH287 - Introduction to Linear Algebra and Differential Equations
or prior completion
OR

Co-Requisite

MATH295 - Differential Equations
or prior completion

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
Learning Outcomes

Course Objectives:
Review the basics of circuit analysis covered in Physics 250B.
Analyze simple series and parallel resistive networks.
Analyze circuits using nodal and mesh analysis.
Describe and analyze the characteristics of the operational amplifier.
Analyze the natural and step response of first order RL and RC circuits.
Analyze the response of series and parallel RLC circuits.
Analyze the steady state response of various circuits.
Find the transfer function for various circuits and use it to analyze the circuit’s response.
Use Laplace transforms to analyze the response of various circuits.
Use various equipment to measure current, voltage, resistance, and capacitance.
Simulate the response of various circuits using PSpice.
Analyze data and compare it to the results expected from simulations.

Student Learning Outcomes:
Analyze an electric circuit using various techniques including node and mesh analysis and equivalent circuits.
Assemble various circuits and use the appropriate test equipment to analyze the response of the circuit.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
126.0

Physical Geology
ERTH100:

3.0 Units

Introduction to physical geology with an emphasis on the processes that change and shape Earth both internally and externally. Appropriate for students in any major. Field trips may be required.

Requisites

Requisites:
Advisory

ERTH100L - Physical Geology Laboratory

concurrent enrollment

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences

IGETC - Plan C
Area 5A: Physical Science

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Geology

Learning Outcomes

Course Objectives:
Describe Earth conditions and geological processes to develop an appreciation of the planet we live on, the local environment, and how our actions can effect or not effect the environment

Examine how knowledge of Earth is based upon observations of Earth materials and features and that the scientific method provides the mechanism for testing hypotheses about Earth processes

Describe and classify the important rock-forming minerals and major types of rocks

Describe how igneous, sedimentary and metamorphic processes and features are the observational evidence used to comprehend and interpret Earth

Discuss and illustrate the age of Earth and that Earth today is the cumulation of billions of years of changes preserved in rock

Discuss, describe, and analyze the theory of plate tectonics and that evidence for the processes that internally shape and form Earth are folds and faults, earthquakes and volcanoes, mountains, and ocean basins

Discuss and describe the role of water within and on Earth and the role of water in Earth processes

Describe and analyze stream processes, how deserts and glaciers form, and how streams and glaciers, and wind shape Earth's landscape

Describe how weathering and soils are all the result of surface processes modifying the structures set up by Earth's internal and external processes
Describe mass wasting and its effects

Describe and categorize how the resources necessary to maintain society come from Earth, and why it is important to conserve and recycle them because most are non-renewable

**Student Learning Outcomes:**
- Demonstrate that observations of Earth materials and features lead to understanding of geological processes.
- Analyze and interpret observations of Earth materials and features to deduce the processes involved.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Physical Geology Laboratory**
ERTH100L :

1.0 Units

Identification of common minerals and rocks, topographic and geologic map exercises demonstrating the work of water, wind, ice, gravity, and effects of tectonic activity. Content correlates to Earth Science 100 lecture material. Field trips may be required.

**Requisites**

**Requisites:**

**Prerequisite**

ERTH100 - Physical Geology

or concurrent enrollment

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**

Area A: Natural Sciences

**CSU GE - Plan B**

Area B3: Laboratory Activity

**IGETC - Plan C**

Area 5C: Laboratory Activities

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Course Identifier (C-ID)**

Geology

**Learning Outcomes**
Course Objectives:
Describe and discuss appropriate laboratory etiquette and safety procedures
Exploration of Earth materials and geologic processes will help students appreciate the planet we live on, the local environment, and how our actions can effect or not effect the environment
Identify common minerals by sight or using simple equipment
Develop an introductory knowledge of their geologic occurrence(s)
Identify common types of rocks by sight using simple equipment
Develop a general knowledge of their geologic occurrence(s)
Use relative and absolute dating to analyze sequence of events problems to help illustrate the depth of geologic time and understand stratigraphic relationships
Learn to read maps and the techniques needed to identify geologic features on them
Identification of landforms and the processes that create them through the use of maps, reports, diagrams, pictures, and images
Practice graphical techniques to locate and measure earthquakes and locate their associated faults/fault zones
Illustrate how plate tectonics provides a unifying picture of geological processes
Learn to identify the basic types of plate boundaries and their features
Distinguish the processes associated with each type of plate boundary

Student Learning Outcomes:
Demonstrate that observations of Earth materials and features lead to understanding of geological processes.
Analyze and interpret observations of Earth materials and features to deduce the processes involved.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Historical Geology
ERTH111:
4.0 Units
Introduction to historical geology, investigating the history of Earth as preserved in the rock record with an emphasis on North America. Appropriate for students in any major. Field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0
General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Geology

Learning Outcomes

Course Objectives:

- Describe the theory of plate tectonics
- Illustrate how plate tectonics causes crustal evolution and deformation
- Recognize the different possible mechanisms for plate tectonics and how hot spots can occur
- Categorize the features, landforms and processes that occur at plate boundaries
- Recognize the evidence supporting the supercontinent cycle
- Describe minerals and how they form and their relationship to rocks
- Classify the important rock-forming minerals, general kinds of rocks, and how igneous, sedimentary, and metamorphic processes and features are used to comprehend and interpret the geology of Earth
- Discuss and illustrate the age of Earth and that Earth today is the cumulation of billions of years of changes preserved in rock
- Describe the evolutionary development and demise of Earth's diverse life forms
- Illustrate how fossils and sedimentary rock can reveal the history of Earth
- Participate in one-day field trips to local rock and fossil localities or museums
- Identify and interpret the paleogeography and tectonic history of Earth and Earth's diverse life forms with an emphasis on the pre-Cambrian through Devonian
- Identify and interpret the paleogeography and tectonic history of Earth and Earth's diverse life forms with an emphasis on the Mississippian through Cretaceous
- Identify and interpret the paleogeography and tectonic history of Earth and Earth's diverse life forms with an emphasis on the Cenozoic
- Describe and discuss appropriate laboratory etiquette and safety procedures
- Identify common minerals by sight or using simple equipment
- Develop an introductory knowledge of the general geologic occurrence(s) of such minerals
- Identify common types of rocks by sight using simple equipment
- Develop a general knowledge of their geologic occurrence(s) with emphasis on sedimentary rock
- Identify fossils and types of fossilization by handling specimens and drawing observed details
- Use relative and absolute dating to analyze sequence of events problems to help illustrate the depth of geologic time and understand stratigraphic relationships
- Identify unconformities and analyze the geologic history of an area
Learn to read maps and the techniques needed to identify geologic features on them

Construct cross-sections and stratigraphic columns

Recognize and interpret the regional morphology of continental geology and the processes that create these landforms

Determine the geologic history of an area based upon rocks, fossils, and landforms

**Student Learning Outcomes:**

- Demonstrate an understanding that geological processes observed today are the same as the geological processes that operated in the past. The understanding of these processes is based upon observation of Earth materials and features.
- Recognize that the fossil record is the history of life on Earth as preserved in rock.
- Analyze and interpret observations of Earth materials and features to deduce the processes involved.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

108.0

**Earth Sciences**

**ERTH120:**

3.0 Units

Investigating the processes that shape and form Earth and define its place in the solar system through the sciences of geology, oceanography, meteorology and astronomy. Appropriate for students in any major. Field trips may be required. Not open to students who are enrolled in or have credit in Earth Science 121.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area A: Natural Sciences

**CSU GE - Plan B**

Area B1: Physical Sciences

**IGETC - Plan C**

Area 5A: Physical Science

**Course Identifier (C-ID)**

Geology

**Learning Outcomes**
Course Objectives:

Describe Earth conditions and astronomical, geological, oceanographic, and meteorological processes to develop an appreciation of the planet we live on, the local environment, and how our actions can effect or not effect the environment

Examine how knowledge of Earth is based upon observations of Earth materials and features and that the scientific method provides the mechanism for testing hypotheses about Earth processes

Discuss and describe Earth materials and how they are used by society

Discuss Earth's interior in terms of both composition and behavior of materials

Sketch the interior of Earth

Summarize the theory of plate tectonics and illustrate how it provides a unifying picture of geological processes

Identify the basic type of plate boundaries and their features

Distinguish the processes associated with each type of plate boundary

Discuss and illustrate the age of Earth

Demonstrate that Earth today is cumulation of billions of years of change as preserved in rock

Discuss fossils and describe fossilization

Demonstrate the role of water in Earth processes

Distinguish features and landforms cause by the action of water, wind, and ice

Discuss how oceans form and their importance

Describe water movement within oceans and the processes that are responsible

Describe the interaction between the oceans and the atmosphere

Describe the processes that occur where the land and oceans meet and the landforms they create

Describe and discuss the interrelationships of plate boundaries and sea coasts and the landforms and features that can occur

Describe the composition of the atmosphere

Demonstrate the broad pattern of global atmospheric circulation

Describe the greenhouse effect

Define air masses

Discuss the difference between weather and climate

Discuss temperature and humidity and their relationship to weather

Describe the processes that cause severe storms

Describe the size, composition and basic structuring of matter within the universe

Illustrate how planets form

Categorize planets as terrestrial or jovian based on their observed properties

Differentiate between a planet and a dwarf planet

Demonstrate how and why seasons occur

Describe the motions of the bodies within the solar system

Student Learning Outcomes:

Demonstrate that astronomical, geological, oceanographic, and meteorological observations lead to understanding natural processes.

Analyze and interpret their observations of Earth materials and features to deduce the processes involved.

Units & Hours

Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Earth Sciences for Educators
ERTH121:

4.0 Units
Investigating the processes that shape and form Earth and define its place in the solar system through the sciences of geology, oceanography, meteorology and astronomy. This course is appropriate for students in any major, but oriented towards enhancing the Earth sciences knowledge of future teachers. Field trips may be required. Not open to students who are enrolled in or have credit in Earth Sciences 120.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
  Area A: Natural Sciences

CSU GE - Plan B
  Area B1: Physical Sciences
  Area B3: Laboratory Activity

IGETC - Plan C
  Area 5A: Physical Science
  Area 5C: Laboratory Activities

Learning Outcomes
Course Objectives:
Describe Earth conditions and astronomical, geological, oceanographic, and meteorological processes to develop an appreciation of the planet we live on, the local environment, and how our actions can effect or not effect the environment

Examine how knowledge of Earth is based upon observations of Earth materials and features and that the scientific method provides the mechanism for testing hypotheses about Earth processes

Discuss and describe Earth materials and how they are used by society

Discuss Earth’s interior in terms of both composition and behavior of materials

Sketch the interior of Earth

Summarize the theory of plate tectonics and illustrate how it provides a unifying picture of geological processes

Identify the basic type of plate boundaries and their features
Distinguish the processes associated with each type of plate boundary
Discuss and illustrate the age of Earth
Demonstrate that Earth today is cumulation of billions of years of change as preserved in rock
Discuss fossils and describe fossilization
Demonstrate the role of water in Earth processes
Distinguish features and landforms caused by the action of water, wind, and ice
Discuss how oceans form and their importance
Describe water movement within oceans and the processes that are responsible
Describe the interaction between the oceans and the atmosphere
Describe the processes that occur where the land and oceans meet and the landforms they create
Describe and discuss the interrelationships of plate boundaries and sea coasts and the landforms and features that can occur
Describe the composition of the atmosphere
Demonstrate the broad pattern of global atmospheric circulation
Describe the greenhouse effect
Define air masses
Discuss the difference between weather and climate
Discuss temperature and humidity and their relationship to weather
Describe the processes that cause severe storms
Discuss the size, composition and basic structuring of matter within the universe
Illustrate how planets form
Categorize planets as terrestrial or jovian based on their observed properties
Differentiate between a planet and a dwarf planet
Demonstrate how and why seasons occur
Describe the motions of the bodies within the solar system
Describe and discuss appropriate laboratory etiquette and safety procedures
Identification of common minerals by sight or using simple equipment
Develop an introductory knowledge of the general geologic occurrence(s) of such minerals
Identification of common rocks by sight and using simple equipment
Develop a general knowledge of their geologic occurrence(s)
illustrate the different states of matter and how a solid substance can be ductile or rigid
Demonstrate conduction and convection
Demonstrate stress and strain and how geologic structures form
Determination of plate boundaries and the features associated with each
Identification of plate boundaries and their associated features on maps
Illustrate plate movement
Use simple graphical techniques to locate earthquakes and determine their intensity and magnitude
Use relative and absolute dating techniques to determine sequence of events
Analyze sequence of events problems to help illustrate the depth of geologic time and understand stratigraphic relationships
Recognize different types of fossils and fossilization
Identify the oceans of the world on a map or globe
Demonstrate the motion of waves and how that affects beaches and other coastal landforms
Demonstrate how tides occur
Interpret simple tide charts to determine the tidal pattern
Demonstrate convection and illustrate how vertical currents move
Interpret patterns of surface currents within gyres and explain their movement
Demonstrate how temperature differences lead to atmospheric motion
Demonstrate evaporation and how clouds form
Identify cloud types and patterns
Identify the symbols used on weather maps
Practice simple interpretation of weather maps
Compare and contrast the physical properties of planets to categorize them as terrestrial or jovian
Demonstrate revolution and rotation
Demonstrate/illustrate the relative motion of heavenly bodies
Demonstrate and diagram eclipses
Describe the phases of the moon and demonstrate why they occur
Demonstrate why the Earth has seasons

**Student Learning Outcomes:**
- Demonstrate that astronomical, geological, oceanographic and meteorological observations lead to understanding natural processes.
- Analyze and interpret their observations of Earth materials and features to deduce the processes involved.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
108.0

**Environmental Geology**

**ERTH130:**
3.0 Units

Introductory geology course emphasizing the fundamentals of environmental geology and the Earth system, including the interaction between, and impacts of, humans with the geological environment. Also emphasized are the interconnections among the geosphere, hydrosphere, atmosphere, and biosphere. Appropriate for students in any major. Field trips may be required.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences

IGETC - Plan C
Area 5A: Physical Science

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Geology

Learning Outcomes

Course Objectives:
Describe Earth conditions and geological processes to develop an appreciation of the planet we live on, the local environment, and how our actions can effect or not effect the environment
Examine how knowledge of Earth is based upon observations of Earth materials and features and that the scientific method provides the mechanism for testing hypotheses about Earth processes
Demonstrate an understanding of coordinate systems and finding locations on Earth
Discuss the processes of planetary formation
Discuss and illustrate the age of Earth and that Earth today is the cumulation of billions of years of changes preserved in rock
Describe geologic structures and the processes that create them
Describe the theory of plate tectonics
Compare and contrast the forces, motion, landforms, and processes at the different types of plate boundaries
Demonstrate an understanding of the different cycles that occur in the Earth system
Illustrate the interactions of the different cycles of the Earth system
Discuss and classify the important minerals and rocks of Earth
Discuss igneous, sedimentary, and metamorphic rock processes and their associations with mineral resources
Describe the different types of soils and their occurrences
Describe the ways water is stored on Earth and the how that affects the utilization of water as a resource
Describe the different energy resources on Earth and how each is utilized
Compare and contrast the different ways humans utilize energy resources and the impact of each upon the planet
Recognize and describe the different types of geologic, hydrologic, and meteorological hazards that exist on Earth and the most common tectonic and geographic locations of each
Distinguish among hazards that can be mitigated and those that cannot
Describe what can be done to mitigate geologic, hydrologic, and meteorologic hazards when possible

Student Learning Outcomes:
Demonstrate that observations of Earth materials and features lead to understanding of environmental geological processes. Analyze and interpret observations of Earth materials and features to deduce the processes involved.

Units & Hours

Minimum Units: 3.0

Maximum Units 3.0

Total Hours 54.0

Oceanography

ERTH160:

3.0 Units

Introduction to oceanography and the processes that form, shape and change Earth's oceans. Appropriate for students in any major. Field trips may be required.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable: Transferable to both UC and CSU

Weekly Lecture Hours: 3.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences

IGETC - Plan C
Area 5A: Physical Science

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Recognize the importance of the history of oceanography

Describe the development of navigation and how that led to exploration of the world

Describe the structure of the ocean basins

Examine the processes that formed the ocean basins

Describe, compare, and contrast the features of the deep oceans and the continental margins

Discuss the theory of plate tectonics and analyze the theories that lead to its development
Recognize and describe the types of marine sediment
Classify the types of marine sediment
Describe the different techniques for sampling marine sediment and distinguish the conditions under which each is preferred
Categorize how the transport of marine sediment has influenced its distribution within the ocean basins
Describe the components of seawater
Describe the physical properties of seawater and the patterns of how it varies
Examine the factors that affect the salinity of seawater and how it varies
Examine the interaction between the atmosphere and the oceans
Define water masses
Examine the processes and properties responsible for ocean circulation
Illustrate the motion of the sun and moon and explain how that affects the tides
Recognize patterns associated with the tides
Discuss and explain how to use tide charts and tables
Define what a wave is and explain its motion
Describe wave refraction and reflection
Recognize tsunamis and how they occur
Describe and diagram a beach
Explain what longshore currents are and their effect upon sediment movement and sedimentation
Recognize the effect that man-made structures have on coastal erosion and deposition
Define and explain the concept of productivity
Discuss mariculture
Examine human impact on the ocean environment
Identify types and locations of economic marine deposits
Discuss the engineering problems with their development
Discuss maritime laws concerning management of marine resources

Student Learning Outcomes:
- Demonstrate that oceanographic observations lead to an understanding of oceanographic processes.
- Analyze and interpret oceanographic observations to deduce the processes involved.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Geology of California
ERTH200:
3.0 Units
Introduction to the geology of California emphasizing tectonic processes, geologic structures, physiographic provinces, landforms, natural resources, geologic history, rocks and minerals, and the natural hazards of our state. Appropriate for students in any major. Field trips may be required.

Requisites
Requisites:
Advisory
ERTH100 - Physical Geology

OR

Advisory
ERTH120 - Earth Sciences

OR

Advisory
ERTH121 - Earth Sciences for Educators

OR

Advisory
GEOG101 - Physical Geography

OR

Advisory
GEOG101H - Honors Physical Geography

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
  Area A: Natural Sciences

CSU GE - Plan B
  Area B1: Physical Sciences

IGETC - Plan C
  Area 5A: Physical Science

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Geology
Learning Outcomes

Course Objectives:
Describe Earth conditions and geological processes to develop an appreciation of the planet we live on, the local environment, and how our actions can effect or not effect the environment

Examine how knowledge of Earth is based upon observations of Earth materials and features and that the scientific method provides the mechanism for testing hypotheses about Earth processes

Describe minerals and how they form and their relationship to rocks

Classify the important rock-forming minerals, general kinds of rocks, and how igneous, sedimentary, and metamorphic processes and features are used to comprehend and interpret the geology of Earth

Discuss and illustrate the age of Earth and that Earth today is the cumulation of billions of years of changes preserved in rock

Discuss, describe and analyze the theory of plate tectonics and that evidence for the processes that internally shape and form Earth is folds and faults, earthquakes and volcanoes, mountains and ocean basins

Categorize the features and landforms that occur at plate boundaries

Categorize the features and landforms that occur because of surface processes

Discuss and describe the role of water both within Earth and as the major agent of surface changes

Describe the relationship between mineral and energy resources and the internal and surface processes that help create them

Describe and categorize the types of faults and how they occur

Recognize and illustrate the California seismicity and paleoseismicity

Discuss and locate the San Andreas fault system and the other fault systems of California

Examine the relationship between faulting and the geology of the different provinces of California

Categorize the features and landforms of California with respect to the processes that occur at plate boundaries

Categorize the features and landforms of California with respect to surface processes

Visualize how California has geologically evolved through time

Student Learning Outcomes:

Demonstrate that observations of Earth materials and features lead to understanding of geological processes.

Analyze and interpret observations of California’s Earth materials and features to deduce the processes involved.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

San Andreas Fault System Geology Field Study

ERTH212:

1.0 Units

Introductory exploration of the geology and tectonic history of the San Andreas Fault in California. Appropriate for students in any major. Mandatory orientation along with two, one-day field trips.

Requisites

Requisites:
Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0

General Education Plan:

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the requirements of the course
Distinguish among the major types of rocks and their origins
Discuss the theory of plate tectonics and the different types of plate boundaries with an emphasis on transform plate boundaries
Describe the tectonic evolution of southern California
Define stress and strain and the relationship between tectonic forces and fault types
Explain the relationship between earthquakes and faults
Describe the different types of seismic waves
Discuss the paleoseismicity of the San Andreas fault system
Discuss and summarize geologic concepts and the geology of the San Andreas fault system

Student Learning Outcomes:
Demonstrate that observations of Earth materials and features lead to an understanding of geological processes.
Analyze and interpret observations of Earth materials and features in the San Andreas fault system to deduce the processes involved.

Units & Hours

Minimum Units:
1.0

Maximum Units:
1.0

Total Hours:
18.0

Orange County Geology Field Study

ERTH214:

1.0 Units
Introductory exploration of the geology of Orange County, California. Included are its geologic history such as mountain building, volcanic activity, faulting, coastal processes, stratigraphy and mineral resources. Appropriate for students in any major. Mandatory orientation along with two, one-day field trips.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0

General Education Plan:

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the requirements of the course
Distinguish among the major types of rocks and their origins
Discuss the theory of plate tectonics and the different types of plate boundaries
Discuss and describe how the southern California borderlands formed
Describe the geologic history of southern California
Discuss stratigraphic processes and demonstrate how stratigraphic data helps tell the geologic history of an area
Discuss coastal processes and how beaches form and evolve
Illustrate how coastal erosion helps to change and shape the shore
Define stress and strain and the relationship between tectonic forces and fault types
Discuss vulcanism and examine the evidence left by prior vulcanism in the geologic history of Orange County
Recognize the mineral resources and mining history of Orange County
Illustrate how Orange County has changed from an area known for farming and mining into a major residential and light industrial area
Discuss and summarize geologic concepts and the geology of Orange County and how that has influenced the development of Orange County as experienced today

Student Learning Outcomes:
Demonstrate that observations of Earth materials and features lead to an understanding of geological processes.
Analyze and interpret observations of Earth materials and features in Orange County, California, to deduce the geologic processes involved.

Units & Hours

Minimum Units:
1.0

Maximum Units:
1.0

Total Hours:
18.0

ESL Speaking*
ESL Writing*

ESL010:
72.0 Hours
Introduces non-native English speakers to an overview of the writing process including activities to improve student composition skills. Open Entry/Open Exit.

Requisites
Requisites:
Advisory

ESL302 - Beginning High

or higher

Learning Outcomes

Course Objectives:
Identify the steps of the publishing process.

Apply the writing process.

Employ pre-writing techniques.

Differentiate between various genres of written English.

Recognize different registers.

Consider the reader when choosing a writing focus.

Construct simple paragraphs with basic organization.

Organize ideas logically in a paragraph.

Expand ability to use verb tenses accurately and consistently.

Produce simple and compound sentences.

Use periods and commas correctly.

Identify and correct basic grammar errors.

Observe the conventions of written English.

Student Learning Outcomes:
Complete pre-writing activities in preparation for creating a well-organized paragraph.
Write an organized, well-supported paragraph using basic writing conventions.

Hours
Total Hours
72.0

ESL Civics
ESL120:

144.0 Hours

Provides development in listening, speaking, reading, and writing English within the context of history and government in preparation for the United States Citizenship Examination. Open Entry/Open Exit.

Requisites
Requisites:

None

Learning Outcomes

Course Objectives:
Apply all stages of the writing process.

Present information on U.S. government and history.

Describe the Oath of Allegiance.

Recognize the basic principles of the Constitution.
Describe the rights and responsibilities of citizens including voting, paying taxes, and serving on a jury.

Expand the use of critical thinking skills in reading comprehension activities.

Pass the CASAS Oral Interview test.

Participate appropriately in face-to-face conversations.

Identify U.S. historical figures and current leaders.

Define key naturalization terminology.

Read and answer comprehension questions about a sample N-400.

Recite the names of local, state, and federal government leaders.

Describe eligibility requirements, application procedures, and the naturalization process.

Read and interpret information about executive, legislative, and judicial activities.

Identify the meaning of words and phrases from context.

Respond appropriately to interview questions.

Increase reading comprehension on the following topics in preparation for the Naturalization Test: People, Civics, Places, and Holidays.

Recognize privileges granted to United States citizens.

Expand writing skills on the following topics in preparation for the Naturalization Test: People, Civics, Places, and Holidays.

Identify major U.S. historical events.

Describe the significance of patriotic holidays.

Identify U.S. states, cities, geographical features, and landmarks.

Identify voter qualifications and explain the basic principles of the voting process.

Distinguish between important U.S. historical documents.

Describe the significance of U.S. symbols.

Practice interview skills and participate in a simulated INS interview.

Read and interpret information about electoral politics and candidates.

Perform self-editing with attention to accuracy.

Complete an authentic application for naturalization.

Interpret information accurately that is presented orally.

**Student Learning Outcomes:**

Demonstrate sufficient knowledge of U.S. history and civics to pass the U.S. Citizenship and Immigration Services citizenship interview.

Demonstrate sufficient oral English language skills to pass the U.S. Citizenship and Immigration Services citizenship interview.

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**Hours**

**Total Hours**

144.0

**Seminar for Beginning ESL Students**

**ESL250:**

72.0 Hours

Provides instruction in English language skills (reading, writing, listening, and speaking) on topics of concern to English as a Second Language students. Students will use teamwork and communication skills to enhance learning. Open Entry/Open Exit.
Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Apply oral language skills to topics of interest.

Produce familiar words orally with comprehensible pronunciation.

Use basic listening strategies to interpret simple listening passages on topics of interest.

Employ reading strategies to decode simple texts on topics of interest.

Recall and demonstrate the use of new vocabulary.

Communicate ideas using basic grammar structures.

Create sentences related to topics of interest.

Student Learning Outcomes:
  - Demonstrate the use of listening and speaking skills at a beginning level of proficiency.
  - Demonstrate the use of writing skills at a beginning level of proficiency.

Hours
Total Hours
72.0

Seminar for Intermediate ESL Students
ESL260:

72.0 Hours

Provides instruction in intermediate English language skills (reading, writing, listening, speaking) on topics of concern to English as a Second Language students. Students will use teamwork and communication skills to enhance learning. Open Entry/Open Exit.

Requisites
Requisites:
Advisory

ESL302 - Beginning High

or higher

Learning Outcomes
Course Objectives:
Read authentic materials on topics of interest.

Discuss topics of interest.

Express opinions and ideas on topics of interest.

Use listening strategies to check for understanding.

Recall and demonstrate the use of new vocabulary.

Produce simple, compound, and complex sentences.

Construct paragraphs on topics of interest.

Student Learning Outcomes:
  - Demonstrate the use of listening and speaking skills at an intermediate level of proficiency.
  - Demonstrate the use of writing skills at an intermediate level of proficiency.
Seminar for Advanced ESL Students

ESL270:

72.0 Hours

Provides instruction in advanced English language skills (reading, writing, listening, speaking) and related digital literacy skills, on topics of value and importance to Advanced English as a Second Language students. Students will use teamwork, communication, critical thinking and creative thinking skills to enhance learning. Field trips may be included. Open Entry/Open Exit.

Requisites

Advisory

ESL304 - Intermediate High

or equivalent

Learning Outcomes

Course Objectives:
Participate in conversations and discussions about a range of topics, texts and issues
Demonstrate understanding of long passages with multiple details
Interpret reduced and natural speech
Participate in conversations and discussions about a range of topics, texts and issues for a variety of purposes
Express own opinions and ideas and expand on the ideas of others
Ask questions to clarify ideas and conclusions
Read authentic materials and demonstrate comprehension
Identify author’s point of view, audience, and purpose
Differentiate fact from opinion in authentic text
Develop an informational topic with facts, details, and evidence
Adopt and maintain, as appropriate, a formal and informal style and tone

Student Learning Outcomes:
Demonstrate an understanding of various forms of communication at an advanced level of proficiency.
Communicate in writing at an advanced level of proficiency.

Literacy

ESL300:

216.0 Hours

This is an ESL class for students who are not yet literate in English. Emphasizes communicative competence and basic functional language skills to meet immediate communication needs, including verbal and nonverbal strategies. Develops the ability of second language learners to recognize and read letters and numbers, copy and produce the alphabet, numerals, and simple personal information. The first of seven Integrated ESL core courses. Open Entry/Open Exit.
Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
- Identify high-frequency spoken words by selecting a related image.
- Respond appropriately to single-word commands.
- Identify the general topic or setting in a listening passage appropriate for this level.
- Identify a speaker's purpose in simple conversation with visual cues.
- Recognize that a response is expected when asked a question.
- Determine meaning of basic phrasal verbs describing physical actions in context.
- Match sounds with letters.
- Interpret familiar vocabulary through physical response.
- Identify the letters of the alphabet.
- Discriminate between different consonant and vowel sounds.
- Distinguish between statements and questions.
- Interpret simple questions and requests.
- Express immediate needs with one-word utterances or short phrases.
- Answer simple questions with nonverbal, yes/no, one-word responses, or short phrases.
- State lack of understanding with one- or two-word phrases.
- Recall the letters of the alphabet for spelling purposes.
- Recognize numbers 1-100.
- Repeat words and phrases for clarification and to improve pronunciation.
- Increase vocabulary by using a picture dictionary.
- Interpret information supported by visual and contextual clues.
- Identify key words that ask for name, address, and phone number.
- Distinguish between upper- and lower-case letters.
- Read from left to right.
- Recognize written numbers.
- Relate phonological sounds to letters (sound/symbol correspondence).
- Recognize common public signs (e.g., restroom signs).
- Match words to appropriate pictures.
- Print numerals and upper and lowercase letters of the alphabet.
- Group words together into a list or category (e.g., a shopping list).
- Use common words related to life, work, and the classroom.
- Trace words.
- Copy basic information (e.g., name, phone number, and address) for personal identification on a form.
- Form simple affirmative and negative statements.
Pronounce the letters of the alphabet.

Pronounce numbers from 1-100.

Recognize syllables and produce different stress levels on vocabulary previously learned.

Begin to use simple statements and questions, basic punctuation, nouns, verbs, and subject-verb agreement in the simple present.

**Student Learning Outcomes:**

- Identify and use numbers and letters.
- Communicate basic information (e.g., name, phone number, and address).

**Hours**

**Total Hours**

216.0

**Beginning Low**

**ESL301:**

216.0 Hours

For students with some literacy in English. Emphasizes language skills in everyday situations and immediate needs of adult English learners, focusing on listening comprehension and beginning oral production of simple conversations, reading of practiced words and phrases, and completing simple writing tasks in the context of school, work, and community. The second of seven Integrated ESL core courses. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

[ESL300 - Literacy](#) or equivalent

**Learning Outcomes**

**Course Objectives:**

- Identify a few key words and phrases in oral communication.
- Actively listen to others.
- Use context to determine the meaning of words or phrases in a listening passage.
- Respond appropriately to high-frequency, multi-word commands and social expressions and short warnings.
- Identify the general topic or idea.
- Respond appropriately to simple questions.
- Distinguish between a question or statement.
- Interpret simple idioms and phrasal verbs.
- Identify vocabulary in context.
- Present simple information.
- Ask for and give basic information, opinions, and directions.
- Communicate state of being (e.g., feelings, ailments, etc.).
- Use a narrow range of vocabulary and syntactically simple sentences.
- Ask for and respond to requests for simple clarification.
- Use short phrases to give simple commands and express caution.
- Produce statements related to basic needs and everyday activities using learned words and phrases.
Participate in short conversations about familiar topics and in familiar contexts.

Recognize essential idioms and idiomatic language in signs (e.g., directions and requests).

Locate specific information.

Utilize strategies such as predicting and phonics decoding and use context to infer the meaning of high-frequency sight words or phrases.

Use word structures (e.g., high-frequency prefixes and suffixes) to infer the meaning of a word or phrase.

Identify the purpose of a statement, such as an announcement or advertisement.

Follow one- to two-step written directions.

Interpret a written conversation.

Identify features of text, including titles, sentences, simple charts, and schedules.

Interpret terms on simplified forms.

Use skimming and scanning strategies for specific information.

Write words, phrases, and simple sentences related to the classroom, work, and life.

Use common pronouns, nouns, noun phrases, verbs, conjunctions, and prepositions of time and place.

Incorporate basic grammatical structures into language use, including the verb “to be”, simple present, present progressive, simple past, and future with “be going to” and “will.”

Edit writing for subject-verb agreement, spelling, basic capitalization, and punctuation.

Communicate with simple affirmative and negative statements, yes/no questions, and wh- questions.

Express an opinion about a familiar topic.

Show emerging awareness of differences between informal and formal language use.

Perform basic pre-writing activities.

Complete short dictation tasks.

Produce simple contractions.

Recognize and produce singular and plural sounds.

Recognize and produce syllables and stress patterns in vocabulary words.

Identify pitch levels and length of syllables.

Produce vowel sounds.

Produce initial “th” sounds.

Use appropriate intonation for yes/no questions.

**Student Learning Outcomes:**

- Ask and answer simple questions to demonstrate understanding.
- Complete a simple form with basic information.

**Hours**

**Total Hours**

216.0

**Beginning High**

**ESL302:**

216.0 Hours
Emphasizes comprehending and participating in simple conversations, communicating survival needs, and reading and performing written tasks in the context of college and career readiness and civic participation. The third of seven Integrated ESL core courses. Optional field trips may be offered. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

[ESL301 - Beginning Low](#) or equivalent

**Learning Outcomes**

**Course Objectives:**

- Identify the main topic or argument a speaker makes in oral presentations and simple spoken text
- Use context to infer the meaning of words or phrases
- Respond appropriately to multi-word oral commands and social expressions
- Identify the general topic, sequence of events, characters, or settings
- Distinguish between a question and a statement in a simple sentence, based on tone or mood regardless of word order
- Interpret meaning of frequently-used idioms/phrasal verbs in context
- Identify words that signal differences between present, past, and future events
- Participate in short conversations about familiar topics
- Present information and ideas, appropriately take turns in interactions with others, and respond to simple questions with wh- questions
- Deliver short oral presentations
- Express an opinion about a familiar topic, experience, or event, and give a reason for the opinion
- Show an awareness of differences and adapt between informal and formal language use
- Use some frequently occurring academic and content-specific vocabulary
- Ask for meanings of words and expressions when misunderstanding occurs
- Give and ask for directions
- Ask for and give information about past needs and events
- State a few key details from an oral presentation or simple spoken text
- Recount a short sequence of events in order
- Use pre-reading strategies
- Locate specific information and details in a short, multi-sentence paragraph, dialog, or form
- Recognize common idioms and idiomatic language in context
- Use a picture or English learners' dictionary
- Use context to infer the meaning of high-frequency sight words, phrases or expressions
- Use strategies such as predicting or phonics decoding, or word structures (affixes and roots) to interpret new words and phrases and infer meaning
- Identify the purpose and audience of texts such as permission slips, news reports, narrative, and emails
- Follow two- to four-step written directions
- Compare items using written information
- Identify the general topic, sequence of events, characters, or setting, answering who, what, where, when, and why
- Interpret terms on forms (e.g., personal identification, school registration, checks, change of address)
Use skimming and scanning strategies

Compose sentences about past activities using simple and continuous tenses with regular and irregular verbs

Write a series of simple related sentences about an experience or event

Create short written exchanges about familiar topics and/or materials

Write a short sequence of events from various prompts

Produce simple and compound sentences

Use basic words and phrases related to the workplace and school

Edit writing for subject-verb agreement, capitalization, punctuation, basic grammatical forms, and spelling

Write lists (e.g., grocery items)

Write a short note or message (e.g., a phone message or note)

Begin to use the stages of the writing process: prewriting, writing, revising, editing, and publishing

Begin to use paragraph format (e.g., indentation, linking sentences, margins) using a model

Begin writing simple emails

Recognize and produce regular past tense verb endings

Recognize and produce final "s" sounds

Begin to produce initial sounds

Produce reduced forms of going to, have to

Produce basic intonation patterns of wh-, yes/no, and either/or questions

“Yes,” “no,” “or,” and “wh-“ questions and answers using simple past, past progressive, simple future

Regular and irregular verbs, nouns, adjectives, adverbs, prepositions, and conjunctions

Adverb clauses

Compound sentences (with "and ... too," with "and ... either," with "or")

Future tense

Modals (e.g., have to, must)

Introduce verbs followed by infinitive

Phrasal verbs

Subject/object pronouns

Simple comparatives Review and expand previous levels of Language Structure and Grammar items.

**Student Learning Outcomes:**

Answer comprehension questions based on a short reading passage.

Write simple and compound sentences.

**Hours**

**Total Hours**

216.0

**Intermediate Low**

**ESL303:**

216.0 Hours
Emphasizes comprehending and participating in conversations, communicating needs and opinions, reading from academic and informational text, and performing written tasks. Exposes students to authentic spoken and written content, to prepare students for college, the workplace, and civic participation. The fourth of seven Integrated ESL core courses. Optional field trips may be offered. Open Entry/Open Exit.

Requisites
Requisites:

Advisory

ESL302 - Beginning High

or equivalent

Learning Outcomes

Course Objectives:

Use context to infer the meaning of words or phrases in listening passages

Respond appropriately to oral instructions

Identify the main idea and supporting details in oral presentations and simple spoken texts

Identify a speaker’s purpose

Distinguish between a yes/no question for information, based on a variation in tone or mood

Interpret meaning of frequently used idioms/phrasal verbs in context

Share experiences about past events in order

Use informal and formal language

Adapt language choices to task and audience with emerging control in various social and academic contexts

Use an increasing number of academic and content-specific vocabulary and expressions

Present on a specific topic with supporting details

Engage in conversations and interviews

Use formal and informal language when asking for clarification and/or making requests

Ask and answer questions using present perfect, past, and future tenses

Describe a sequence of events in the past that continues into the future

Scan to locate specific information, definitions, or details

Interpret common idiomatic language, such as idiomatic expressions, phrasal verbs, semantic clusters, and other collocations supported by contextual clues

Define common, unfamiliar words by using an English learners’ dictionary

Use context and word structures (affixes and roots) to infer the meaning of a word or phrase

Apply knowledge of cohesive devices such as pronoun references, adverbs of time, and conjunctions to interpret meaning

Identify the purpose and audience in one-page authentic text, such as letters from school, articles, narratives and brochures

Compare, interpret, and evaluate information using price lists, bar graphs, and pie charts

Identify main and supporting ideas

Expand and apply use of pre-reading strategies

Interpret transitional words

Interpret abbreviations

Write a loosely organized paragraph based on a prompt

Use words and phrases related to the workplace, school, and real life situations
Edit writing with some degree of accuracy

Write letters for personal and professional needs

Complete online and paper forms (e.g., medical history, job application, banking) requiring detailed information on varied topics

Implement the stages of the writing process: prewriting, writing, revising, editing, and publishing

Write an email for personal and professional needs

Produce intonation of questions

Produce: th, v/b, p/f

Produce contrasting sounds: ch/sh, l/r

Produce reduced forms: did you, should you, must you

Distinguish between similar sounding vowels

Practice consonant vowel linking

Recognize and produce regular past tense and participle verb endings

Recognize and produce final “s” sounds

Produce contractions with have

Begin to use

“Yes,” “no,” “or,” and “wh-” questions and answers using present perfect and present perfect progressive

Complex sentences (adverbial clauses of time and reason)

Direct speech

Modals (e.g., might, could, should)

Conditionals (present real, future real)

Verbs followed by gerunds and infinitives

Reflexive pronouns

Direct and indirect objects

Review and expand previous levels of Language Structure and Grammar items.

**Student Learning Outcomes:**

- Answer comprehension questions to demonstrate understanding of written materials.
- Write a short, loosely organized paragraph based on personal experiences or familiar materials, in response to a visual or written prompt.

**Hours**

**Total Hours**

216.0

**Intermediate High**

**ESL304:**

216.0 Hours

Emphasizes expanding oral language, critical and creative thinking skills in English, and reading comprehension of authentic academic and informational text. Written tasks focus on academic and workforce preparation, as well as increased community and civic participation. Five high school elective credits may be granted. The fifth of seven Integrated ESL core courses. Optional field trips may be offered. Open Entry/Open Exit.

**Requisites**

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Advisory

ESL303 - Intermediate Low

or equivalent

Learning Outcomes

Course Objectives:

- Use context to infer meaning of words or phrases in a listening passage
- Respond appropriately to instructions and rules or opinions presented orally
- Identify stated or implied main ideas and supporting details in oral presentations and spoken text
- Identify a speaker's purpose or points of emphasis
- Distinguish meaning and intent based on variation in tone or mood
- Determine meaning of general academic and workplace-specific words and phrases
- Interpret some natural speech
- Restate information and answer questions from varied/multiple sources
- Summarize information from varied/multiple sources
- Participate in conversations and discussions
- Express own ideas and build on the ideas of others
- Ask and answer relevant questions, add relevant information and evidence, and restate key ideas
- Ask questions to gain information or clarify understanding
- Deliver oral presentations, including an introduction, details, and conclusion
- Use persuasive language
- Ask and answer questions using present, past perfect and past perfect progressive
- Identify an author's point of view, audience, purpose and tone
- Expand use of pre-reading, while-reading and comprehension strategies
- Identify central ideas, themes, and supporting details in a reading passage
- Answer questions about key details
- Compare and contrast main and supporting ideas in texts
- Expand understanding of idiomatic language (e.g., phrasal verbs, semantic clusters, and other collocations supported by contextual clues)
- Choose the appropriate definition among multiple definitions using a dictionary
- Use context, questioning, and/or word structures (affixes and roots) to infer the meaning of a word or phrase in a reading passage
- Identify and evaluate statements of fact and opinion, explaining the reasons an author gives to support a claim
- Refer to details and examples in a text to explain explicit and implicit meaning
- Use compound and a few complex sentences using adverbial clauses
- Write a well-developed paragraph including a topic sentence, supporting details, and conclusion (e.g., an autobiography)
- Use a range of academic and content-specific words, phrases, and expressions, and show developing control of style and tone
- Edit the writing of others
- Provide a list of sources
- Gather and paraphrase information from multiple sources, avoiding plagiarism
- Develop an informational topic with facts and details, providing a conclusion
Use common transitional words and phrases to connect events, ideas, and opinions

Employ stages of the writing process: prewriting, writing, revising, editing, and publishing

Communicate with mostly clear utterances

Expand practice of word and sentence linking

Practice reduced forms of would and will

Produce endings – s, th, d

Produce contrasts – e.g., r/l, b/v, t/th

Use intonation, pitch, stress, length of syllable patterns and rhythm

Understand the similarity of sounds in medial position

Identify and practice vowel sounds that interfere with communication

Apply intonation of tag questions

Use reduced forms (could have, should have)

Begin to use “Yes,” “no,” “or,” and “wh-” questions and answers using past perfect, past perfect progressive, and future progressive

Adjectival clauses (who, which)

Embedded questions

Tag questions

Past modals/modal phrases (used to, could, should have, could have)

Indirect speech

Hope clauses

Present wish clauses

Present unreal conditional

Passive (simple present)

Reflexive and indefinite pronouns

Parallel structure

Conjunctive adverbs

Compound and complex sentences

Review and expand previous levels of Language Structure and Grammar items.

**Student Learning Outcomes:**

Answer comprehension questions that demonstrate understanding of the point and purpose of an article or short story.

Write a well-developed paragraph that includes a topic sentence, three (3) supporting details, and a conclusion, on a familiar topic.

**Hours**

**Total Hours**

216.0

**Advanced Low**

**ESL305:**

216.0 Hours
Emphasizes higher-level language skills, reading passages with increased understanding and analysis, and improving academic and informational writing skills. Prepares students for academic and workforce success and increased civic participation. Five high school elective credits may be granted. The sixth of seven Integrated ESL core courses. Optional field trips may be offered. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

[ESL304 - Intermediate High](#) or equivalent

**Learning Outcomes**

**Course Objectives:**

- Analyze development of themes/ideas in academic and informational spoken text
- Analyze reasoning in persuasive speech
- Use context to infer and determine the meaning of new vocabulary, idioms, and figurative language
- Respond appropriately to oral announcements and instructions that include multiple details
- Identify a speaker’s purpose, point of view, and points of emphasis
- Distinguish meaning and points of emphasis in questions or statements, based on stress, tone, or mood regardless of word order
- Interpret the majority of reduced and natural speech
- Participate in extended conversations and discussions about a range of topics, texts, and issues for a variety of purposes
- Express own ideas and expand on the ideas of others
- Support points with specific and relevant evidence, summarizing key points
- Ask questions to clarify ideas and conclusions
- Deliver a well-organized oral presentation
- Apply workplace and academic vocabulary
- Ask and answer questions fluently with minimal errors in the present, past, and future tenses including perfect forms
- Adjust the language used in accordance with the level of formality required by the social, academic, or workplace situation in face-to-face conversations
- Analyze, infer, and identify author’s point of view, audience, and purpose in a reading passage
- Analyze development of themes/ideas in academic and informational text
- Analyze reasoning in persuasive texts
- Demonstrate understanding of higher level idiomatic language and expressions (e.g., phrasal verbs, semantic clusters, and other collocations supported by contextual clues)
- Use the appropriate definition among multiple definitions from a dictionary
- Differentiate fact from opinion and evaluate statements of fact and opinion
- Distinguish main ideas from supporting ideas in a two-page authentic text
- Expand use of pre-reading, while-reading and comprehension strategies
- Begin to write a multi-paragraph composition
- Compose informational texts
- Develop topic with some relevant details, concepts, examples, and information about a variety of texts, topics, or events
- Vary sentence patterns, including simple and compound and complex sentences, including adverbial and adjectival clauses
Complete authentic forms, such as accident reports or applications for drivers' licenses, that require narrative description

Use transition words between paragraphs

Take notes from public announcements, short lectures, and real interviews

Refine intonation, pitch, stress and rhythm

Control the use of syllables for meaning

Use reduced forms (could have, should have, would have, might have, must have)

Begin to use

“Yes,” “no,” “or,” and “wh-” questions and answers using future perfect

Conjunctive adverbs (therefore, however)

Adverbial clauses of concession (unless, although)

Modals related to past events (should have, could have, would have, might have, must have)

Causative verb forms

Past wishes clauses

Past unreal conditional

Passive (all forms + modals)

Compound and complex sentences Review and expand previous levels of Language Structure and Grammar items.

**Student Learning Outcomes:**

- Identify and summarize the main idea and key points of an authentic academic or informational reading passage.
- Write a multi-paragraph composition on a familiar topic related to college, the workplace, or a civic issue.

**Hours**

**Total Hours**

216.0

**Advanced High**

**ESL306:**

216.0 Hours

Prepares students for academic and workforce success and civic participation. Emphasizes high-level language skills, conversations that convey complex thought patterns, and reading and writing strategies. This course uses authentic academic, informational and technical reading materials that expand the use of creative and critical thinking skills. Five high school elective credits may be granted. The seventh course out of seven Integrated core courses. Optional field trips may be offered. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

ESL305 - Advanced Low

or equivalent

**Learning Outcomes**

**Course Objectives:**

Distinguish stated or implied main ideas from supporting details in a listening passage, and analyze development of themes/ideas

Participate in conversations and discussions about a range of topics, texts and issues

Analyze reasoning and evidence in speech

Respond appropriately to detailed specific spoken instructions on an academic or workplace topic
Identify a speaker’s purpose, point of view, use of evidence, and points of emphasis

Distinguish between a question and a statement regardless of word order and identify points of emphasis, tone, or mood based on intonation

Deliver oral presentations about a variety of academic and workplace topics or events

Gather information from varied and multiple sources and integrate into an organized oral report

Use a wide range of complex academic and workplace vocabulary and phrases

Adapt language choices and style according to purpose, task and audience in various social, academic and workplace contexts

Recount a detailed sequence of events or steps in a process, with clear sequential or chronological structure

Analyze and critique a speaker’s point of view, citing examples

Use level appropriate pre-reading, while-reading, and comprehension strategies, using a variety of authentic texts

Analyze reasoning in persuasive text, determine whether evidence is sufficient to support claim, and identify textual evidence to support analysis

Evaluate an author’s point of view, audience, and purpose and analyze word choice to advance that point of view or purpose

Demonstrate understanding of advanced idiomatic language and expressions (e.g., phrasal verbs, semantic clusters, and other collocations supported by contextual clues)

Expand the use of resource materials (e.g., dictionary, thesaurus, etc.)

Delineate and evaluate clear arguments and specific claims in a text, following the line of reasoning to its conclusion; recognize when irrelevant evidence is introduced

Write a well-developed multi-paragraph composition

State a claim about a topic, introduce the topic, provide logically ordered reasons or facts that effectively support the claim, and provide a concluding statement

Conduct short research projects to answer a provided question and integrate information gathered into an organized written report

Cite sources appropriately

Adopt and maintain a formal and informal style and tone, as appropriate

Write a detailed sequence of events or steps in a process, with clear sequential or chronological order

Develop an informational topic with facts, details, and evidence

Use increasingly complex phrases and clauses, and expanded simple, compound, complex, and compound-complex sentences

Integrate indirect quotations to support the writer’s statement

Apply the writing process

Write letters of different purposes (e.g., a request, praise or complaint)

Produce proper intonation, pitch, and stress

Produce different lengths of syllable and syllable patterns for meaning

Incorporate contrastive stress (my car, not your car, etc.)

Expand and review reduced forms and linking

Begin to use

“Yes,” “no,” “or,” and “wh-” questions and answers all forms including future perfect progressive

Compound, complex, and compound-complex sentences

Adverb, adjective and noun clauses, focusing on reduced forms

Conditionals (all forms)

Modals to express appropriate register
Apply subject-verb agreement with a variety of subjects and inside relative clauses. Review and expand previous levels of Language Structure and Grammar items.

**Student Learning Outcomes:**

- Identify the main idea and key points of an authentic academic or informational reading passage, and summarize the text.
- Produce a well-developed multi-paragraph composition, a cover letter for a job application, or a letter about a civic issue, with a clear introduction, supporting details, and conclusion.

**Hours**

**Total Hours**

216.0

**Beginning Multilevel**

**ESL440:**

216.0 Hours

Provides instruction for students in various levels of beginning English proficiency. Emphasizes speaking, listening, reading, and writing English in familiar contexts. Recommended for students in Literacy, Beginning Low, and Beginning High ESL levels. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

- Incorporate common irregular verbs in language use.
- Recognize and begin to produce the consonant sounds of American English.
- Recognize words that signal differences between present, past, and future events.
- Ask for and respond to requests for clarification.
- Use skimming and scanning strategies when searching for specific information.
- Write and spell newly learned vocabulary words.
- Communicate state of being (e.g., feelings, ailments, etc.).
- Recognize and begin to produce the vowel sounds of American English.
- Incorporate simple nouns, noun phrases, adjectives, adverbs of frequency, conjunctions, and prepositions into language use.
- Interpret information on simplified forms, charts, and signs.
- Interpret meaning of frequently used idioms and phrasal verbs in context.
- Begin to produce statements and questions using simple present, simple past, simple future, and present progressive verb forms.
- Incorporate there is/there are into language use.
- Use predicting and decoding strategies to interpret vocabulary in context.
- Respond appropriately to classroom directions and short emergency warnings.
- Express an opinion about a familiar topic.
- Create short written exchanges about familiar topics and materials.
- Participate in short conversations about familiar topics and in familiar contexts.
- Communicate personal information, such as introducing oneself.
- Recognize and produce sentences with basic English word order.
Make statements and ask questions related to basic needs and common activities.

Interpret simple reading passages.

Identify the purpose of a statement, such as an announcement or advertisement.

Use the verb “to be” in the present, past, and future.

Form simple affirmative and negative statements.

Identify the main topic of conversation.

Identify simple present, simple past, simple future, and present progressive verb tenses.

Pronounce the letters of the alphabet and numbers 1 to 100.

Recognize and begin to incorporate common modal verbs in language use, such as can, should, might, may, etc.

Read and follow directions.

Employ simple contractions in writing and speaking.

Produce answers to simple questions about short passages.

Recognize and produce basic intonation patterns of wh- and yes/no questions.

Identify and produce contrasting consonant sounds.

Write simplified information in different writing formats such as short paragraphs, letters, memos, and emails.

Identify words in context of common everyday situations.

Use a picture or English learners' dictionary.

Recognize and produce syllables and word stress in familiar words.

Use short phrases in the imperative to give simple commands and express caution.

Ask for simple directions and the meaning of unknown words and expressions.

Begin to use paragraph format using a model.

Match phonological sounds to letters (sound/symbol correspondence).

Fill out simplified forms requiring personal information.

Use word structures such as high-frequency prefixes and suffixes to infer the meaning of words and phrases.

Recognize and begin to produce subject and object pronouns and possessive determiners.

Begin to use the stages of the writing process.

Student Learning Outcomes:

- Interpret simple conversations about familiar topics.
- Describe basic situations and communicate personal information in writing.

Hours

Total Hours

216.0

Intermediate Multilevel

ESL500:

216.0 Hours

Provides instruction for students in various levels of intermediate English proficiency. Emphasizes creative oral language activities, introductory critical thinking skills, and academic writing tasks. Recommended for students in Intermediate Low and Intermediate High ESL levels. Open Entry/Open Exit.
Requisites

Requisites:

Advisory

ESL302 - Beginning High

or higher

Learning Outcomes

Course Objectives:

Identify stated or implied main ideas and supporting details in oral presentations and spoken text.

Recognize words that signal differences between present, past, and future events.

Identify different opinions, and begin to detect differing moods and tones.

Use context to infer meaning of words or phrases in a listening passage.

Interpret common idiomatic language, such as idiomatic expressions, phrasal verbs, semantic clusters, and other collocations supported by contextual clues.

Distinguish between informal and formal language, and formulate polite requests.

Participate in conversations and discussions.

Use persuasive language.

Share experiences about past events in order.

Respond appropriately to instructions and rules or opinions presented orally.

Ask questions to gain information or clarify understanding.

Use an increasing number of academic and content-specific vocabulary and expressions.

Adapt language choices to task and audience with emerging control in various social and academic contexts.

Pronounce consonant sounds in initial, medial, and final positions.

Recognize and produce the alveolar flap t sound.

Identify and practice vowel sounds that interfere with communication.

Employ intonation, pitch, rhythm, stress, and length of syllables for meaning.

Produce reduced forms, including contractions and the schwa.

Produce features of connected speech when speaking, including linking and elision.

Recognize and produce intonation patterns for wh-, yes/no, and tag questions.

Recognize and employ the future progressive, present perfect, present perfect progressive, past perfect, and past perfect progressive verb tenses.

Incorporate gerunds as subjects and objects and verb + infinitive into language use.

Demonstrate use of comparative and superlative adjectives, adverbs, prepositions, wh-question words, count and noncount nouns, quantifiers, reflexive pronouns, and possessive determiners.

Distinguish between past habitual forms (i.e., used to and would).

Incorporate modal verbs into language use, including past modals and modals of ability, permission, request, advice, and necessity.

Distinguish between definite and indefinite articles.

Recognize and produce relative clauses and real conditionals.

Interpret and employ common phrasal verbs, both separable and inseparable.

Identify and incorporate the passive voice in present tenses into language use.

Produce complex sentences using adverbial clauses of time and reason.
Distinguish between dependent and independent clauses.

Scan for information and skim for general meaning.

Interpret authentic materials of familiar topics (e.g., newspaper articles on current events, public information notices, etc.).

Employ critical thinking skills in order to interpret reading comprehension activities.

Draw conclusions and make generalizations based on evidence from a text.

Apply knowledge of cohesive devices such as pronoun references, adverbs of time, and conjunctions to interpret meaning.

Interpret abbreviations for familiar words and phrases.

Compare, interpret, and evaluate information using price lists, bar graphs, and pie charts.

Identify an author's point of view, audience, purpose, and tone.

Compare and contrast main and supporting ideas in texts.

Identify central ideas, themes, and supporting details in a reading passage.

Answer questions about key details.

Interpret narrative and descriptive passages.

Refer to details and examples in a text to explain explicit and implicit meaning.

Use context, questioning, and/or word structures (affixes and roots) to infer the meaning of a word or phrase in a reading passage.

Define common, unfamiliar words by using an English learners’ dictionary.

Write an email for personal and professional needs.

Complete online and paper forms (e.g., medical history, job application, and banking) requiring detailed information on varied topics.

Employ the stages of the writing process: prewriting, writing, revising, editing, and publishing.

Write a summary of a level-appropriate article.

Gather and paraphrase information from multiple sources, avoiding plagiarism.

Write a well-developed paragraph including a topic sentence, supporting details, and conclusion.

Use common transitional words and phrases to connect events, ideas, and opinions.

Edit writing with some degree of accuracy.

Write level-appropriate instructions and descriptions (e.g., recipes, directions, and autobiographical stories).

Write personal letters, resumes, and business letters.

**Student Learning Outcomes:**

- Interpret everyday communications related to school, work, and home.
- Write paragraphs related to everyday life at an intermediate level of proficiency.

**Hours**

**Total Hours**

216.0

**English for Work 1**

**ESL510:**

216.0 Hours

Prepares limited English-speaking students for employment. Focuses on vocabulary skills and vocational readings with emphasis on oral communication through basic language skills instruction. Open Entry/Open Exit.

**Requisites**
Requisites:  
None

Learning Outcomes

Course Objectives:
- Interpret simple words and phrases from vocational topics.
- Identify the main topic of conversation in familiar material.
- Produce appropriate responses to short warnings and general directions.
- Employ strategies to check for understanding.
- Construct statements related to vocational needs.
- Ask simple questions and participate in basic conversations, interviews, and social situations in the workplace.
- Interpret isolated words and phrases.
- Scan for numerical employment information.
- Summarize short, simplified vocational materials on employment topics.
- Produce answers to simple questions and short memos.
- Apply basic intonation patterns to convey meaning.
- Recognize and produce sounds representing singular and plural forms.
- Produce reduced forms, such as "going to" and "have to."
- Formulate statements and ask questions using simple present, simple past, present progressive, and past progressive verb tenses.
- Use how much, how many, how often, have to, and do/does accurately.
- Recognize and produce sentences with simple word order, simple adjectives, common irregular verbs, and basic pronouns.
- Identify work-related abilities/skills and occupations of interest.
- Interpret nonverbal behaviors used in the workplace.
- Demonstrate positive work habits that lead to success on the job.

Student Learning Outcomes:
- Recognize appropriate responses to statements and questions related to vocational topics
- Demonstrate basic communicative strategies and skills in a vocational context

Hours
Total Hours
216.0

English for Work 2
ESL520:

216.0 Hours

Prepares limited English-speaking students for employment. Focuses on vocabulary skills and vocational readings with emphasis on oral communication through intermediate language skills instruction. Open Entry/Open Exit.

Requisites

Advisory

ESL302 - Beginning High

or higher
Learning Outcomes

Course Objectives:

Participate in conversations in vocational contexts.

Participate in extended conversations.

Produce short, simple reports.

Draw conclusions and make generalizations from information presented orally.

Interpret and respond to interview questions.

Produce oral summaries of work-related reading materials.

Make requests related to giving opinions and offering advice.

Respond appropriately to tag questions.

Recognize and produce appropriate formal and informal language.

Interpret simple information on work-related topics.

Skim for general ideas and scan for specific details.

Predict the meaning of vocabulary words.

Expand workplace vocabulary.

Interpret simple charts, graphs, and tables.

Decode authentic written materials.

Compose a simple paragraph on vocational topics.

Use pitch, stress, and intonation patterns effectively.

Differentiate between direct vs. indirect speech.

Interpret embedded statements.

Compose complex sentences.

Recognize and use the passive voice effectively.

Use real and unreal conditionals.

Use present perfect and present perfect continuous.

Recognize and use complex word order, gerunds and infinitives, count and non-count nouns, and tag questions.

Distinguish between realistic short and long-term goals.

Apply goal-setting strategies.

Use appropriate nonverbal behaviors for the workplace.

Match characteristics of occupations with appropriate jobs.

Exhibit positive work habits that lead to success on the job.

Student Learning Outcomes:

Identify appropriate responses to statements and questions related to vocational topics

Demonstrate intermediate level communication strategies and skills in a vocational context

Hours

Total Hours

216.0

American English Pronunciation
ESL530:

216.0 Hours

Develops English language fluency and productive and receptive skills as they relate to sound discrimination, sound inventory, stress, intonation, linking, prominence, and rhythm. The course aims to help students understand English and be understood while functioning within employment, survival, and academic contexts. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Recognize and produce the 24 individual consonant sounds of the American English sound system.

Differentiate between phonemes which have the same manner of articulation but different place of articulation.

Recognize and produce consonant clusters.

Distinguish between a sound and a letter.

Recognize and produce the 15 individual vowel sounds of the American English sound system.

Describe and demonstrate the tongue and lip position of each vowel sound.

Distinguish between tense and lax vowel sounds.

Differentiate between simple vowels and diphthongs.

Produce unstressed vowel sounds such as the schwa.

Identify and describe the seven places of articulation.

Identify and describe the five manners of articulation.

Differentiate between voiced and voiceless sounds.

Identify and produce the alveolar flap sound.

Recognize when one word ends and another begins in spoken communication.

Link consonant sounds to vowel sounds between words and phrases.

Link vowel sounds to other vowel sounds between words and phrases.

Recognize the importance of sounds in expressing grammatical forms such as plural and past tense endings.

Recognize the difference between formal and informal speech.

Recall the (modified) IPA symbols for all of the phonemes of American English.

Define a homograph and a homonym.

Identify the number of syllables in words.

Demonstrate the use of correct stress patterns in multi-syllabic words and phrases.

Recognize and produce common features of connected speech including reductions, palatalization, and deletion.

Produce and comprehend American English spoken at a regular speed.

Identify and employ thought groups in spoken language.

Distinguish between content words and structure words through sentence stress.

Recognize and produce focus words to highlight significant information in sentences.

Convey changes in meaning through rising and falling intonation.

Recognize and produce rising and falling intonation in tag questions.
Student Learning Outcomes:
- Apply knowledge of the sound inventory of American English by producing correct consonant and vowel sounds in spoken communication (segmentals).
- Communicate thoughts and ideas effectively using connected speech, word and sentence stress, and intonation (suprasegmentals).

Hours
Total Hours
216.0

Conversation 1
ESL570:

72.0 Hours
Introduces conversational strategies in listening, language use, and non-verbal communication. Presents oral skills necessary in initiating, maintaining, and closing conversations. Emphasis on oral skills that assist in social encounters and expand listening and speaking skills. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Initiate a conversation by using greetings and openings.
Use appropriate phrases to introduce oneself to others.
Participate in short conversations about familiar topics, including daily routines, leisure activities, and current events.
Recognize and use conversational closings.
Use appropriate pacing when speaking.
Take turns while interacting with others.
Ask clarifying questions to improve comprehension.
Describe the basic plot of a movie, TV show, or story.
Interact, complain, request assistance, and ask for information in general social situations.
Make, accept, decline, and confirm invitations appropriately.
Give and accept compliments and congratulations.
Respond to job interview questions with well-developed answers.
Give and follow simple directions using prepositions of location.
Express needs, goals, and desires.
Recount a short sequence of events in order.
Ask and answer simple questions related to basic needs using phrases or simple statements.
Present information and ideas.
Interpret and begin to use common sayings, proverbs, and idiomatic expressions.
Interpret information presented orally.
Distinguish between question and statement intonation.
Identify the main argument a speaker makes.
Restate the main idea and key details in a listening passage.

Use intonation patterns accurately when forming questions and statements.

Show increasing awareness of differences between informal and formal language use.

Adapt language choices to task and audience with emerging control in various social and academic contexts.

Begin to use some frequently occurring general academic and content-specific words.

Use common linking words to connect events and ideas.

Use frequently occurring verbs, nouns, adjectives, adverbs, prepositions, and conjunctions in conversation.

Interpret and begin to use common features of U.S. body language, including hand gestures and facial expressions.

**Student Learning Outcomes:**

- Engage in a conversation about a familiar topic using level-appropriate vocabulary.
- Interpret information presented in a level-appropriate listening passage by answering listening comprehension questions.

**Hours**

**Total Hours**

72.0

**Conversation 2**

**ESL580:**

72.0 Hours

For students interested in obtaining a practical degree of fluency in spoken English. This course focuses on the further analysis of conversational strategies including verbal and nonverbal communication within large and small groups. Emphasizes differences between formal and colloquial language based on U.S. attitudes and culture. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

ESL302 - Beginning High

or higher

**Learning Outcomes**

**Course Objectives:**

- Use openings and closings to initiate and conclude conversations.
- Maintain conversations about familiar topics.
- Participate in conversations and discussions about a range of topics, texts, and issues.
- Clarify vocabulary, explanations, conversations, and statements by asking appropriate clarification questions.
- Apply clarification strategies such as paraphrasing when misunderstandings occur.
- Recount a detailed sequence of events or steps in a process, with a clear sequential or chronological structure.
- Recognize and incorporate communicative functions into language use, such as making a complaint, making a request, making and accepting an apology, giving and asking for advice, and expressing disagreement.
- Express emotions such as interest or lack of interest appropriately in conversation.
- Give clear directions using effective transition words.
- Express congratulations, sympathy, and condolences.
- Interrupt a conversation politely and change the topic.
- Use persuasion in discussions and debates.
Use common idiomatic expressions in conversations.
Answer questions to clarify ideas and conclusions.
Discuss different opinions and begin to identify differing moods and tones.
Utilize intonation and stress patterns in words and sentences.
Use a wide range of grammatical structures to talk about familiar topics.
Produce simple, compound, and complex sentences.
Adapt language choices and style according to level of formality, purpose, task, and audience in various social and academic contexts.
Use a wide range of complex general academic and content-specific words and phrases.
Interpret meaning from stress and intonation patterns in discourse.
Identify main ideas and isolate specific details from authentic listening passages.
Infer meaning of unfamiliar words and phrases through contextual cues.
Identify different opinions, and begin to detect differing moods and tones.
Employ listening macro-strategies, such as making predictions and inferences.
Utilize listening micro-strategies, such as detecting grammatical units, discriminating phonemes, and distinguishing word boundaries.
Compare and contrast the U.S. and native-language styles of verbal and non-verbal communication.
Recognize and produce features of non-verbal communication commonly used in U.S. culture.
Distinguish between intimate and non-intimate touching in U.S. culture.

**Student Learning Outcomes:**
- Demonstrate an intermediate level of spoken English by discussing a familiar topic.
- Interpret information presented in an authentic listening passage by answering listening comprehension questions.

**Hours**
**Total Hours**
72.0

**Advanced Grammar and Writing**
**ESL601:**

96.0 Hours

Emphasizes control of more advanced grammar structures in writing, with a focus on complex sentences, punctuation, verb tenses and forms, and word order. Writing instruction focuses on pre-collegiate skills: anticipating the needs and questions of readers, creating clear main ideas with strong support and development, using effective transition strategies, and learning to edit. Open Entry/Open Exit.

**Requisites**
**Requisites:**
**Advisory**
ESL303 - Intermediate Low

or higher

**Learning Outcomes**
**Course Objectives:**
Identify verb phrases.
Assemble the various components of verb phrases.
Identify and correct the most frequent verb phrase errors.
Demonstrate the ability to join sentences appropriately and effectively.

Use a variety of syntactic options to join sentences.

Produce papers in which ideas are presented clearly and logically connected.

Use commas, periods, and semicolons correctly.

Identify complete vs. incomplete ideas.

Identify and correct fragments.

Interpret more advanced punctuation in readings.

Illustrate the typical order of words within English phrases and clauses.

Illustrate the typical order of phrases in English sentences.

Identify and rewrite sentences with incorrect word order.

Consider the reader when choosing a writing focus.

Predict questions the reader might have in response to a writing.

Respond effectively to predicted questions when planning and writing compositions.

Demonstrate greater ability to create a strong and effective piece of writing on various topics.

Employ rhetorical modes appropriate to a topic.

Correct grammar errors and edit a composition accordingly.

Present a composition in a college-accepted format.

**Student Learning Outcomes:**

- Express a main idea clearly and support it effectively.
- Demonstrate increased control over typical grammar problems in their written work.

**Hours**

**Total Hours**

96.0

**Interactive Language Training**

**ESL606:**

72.0 Hours

Provides students with supervised one-on-one and small group instruction in ESL listening, speaking, reading, writing, grammar, citizenship, employability skills, and academic subjects. Computer technology is used to enhance learning. The class is open to ESL students of all levels. Open Entry/Open Exit.

**Requisites**

- **Requisites:**
  - None

**Learning Outcomes**

**Course Objectives:**

- Determine specific areas of need and study.

- Develop and practice language skills (listening, speaking, reading, and writing) appropriate to student’s language acquisition level.

- Develop and use English grammar appropriate to student’s language acquisition level.

- Develop vocabulary skills.

- Develop pronunciation and conversation skills appropriate to student’s language acquisition level.
Gain employability and workforce readiness skills.

Enhance digital literacy skills related to English language acquisition.

**Student Learning Outcomes:**
- Demonstrate improved academic skills related to language acquisition
- Demonstrate improved technology skills related to language acquisition

**Hours**

**Total Hours**
72.0

**ESL for Medical Occupations**

**ESL800:**

60.0 Hours

This course prepares students with the necessary language skills to succeed in vocational medical certificate programs, bridging the gap between standard ESL coursework and CTE coursework. In addition to vocabulary and communication strategies, students will explore career pathways and training needed for allied health jobs that support medical professionals such as doctors, dentists and nurses. This course is for Intermediate High and Advanced ESL students who want to improve their job-related skills. Open Entry/Open Exit.

**Requisites**

**Requisites:**

*Advisory

ESL303 - Intermediate Low

or equivalent

**Learning Outcomes**

**Course Objectives:**
- Demonstrate familiarity with vocabulary needed to be successful in CTE introductory courses in programs such as Medical Assistant, Certified Nursing Assistant (CNA), and Medical Billing
- Distinguish between technical language (e.g. used for reporting) and conversational language (e.g. used for communicating with patients)
- Practice talking with patients about their procedures, treatments, or care
- Practice talking with medical professionals
- Demonstrate familiarity with information found on medical reports, insurance bills, and doctor/nurse/lab notes
- Interpret prescriptions, labels, charts, and lab results
- Recognize lab orders
- Take and organize notes
- Complete relevant communication forms
- Maintain a patient interaction journal noting ongoing communication with patient
- Create a career path plan based on skills and interests
- State rules for singular and plural endings of medical terms
- Recognize the importance of proper spelling and pronunciation of medical terms
- Define commonly used roots, suffixes, and prefixes
- Describe how medical terms are divided into word elements
- Recognize difference between direct speech and reported speech
Recognize active voice (who is responsible for action, e.g. the pharmacist filled the prescription)

Use adjectives describing patient symptoms

Use adverbs describing timing of symptom onset and duration

Explore career pathways in the medical field

Work with a counselor or instructor to evaluate options and determine a program that is the best fit for the student

Enroll in CTE class

Analyze and evaluate descriptions of job duties, wages, and benefits

Identify personal strengths, weaknesses, skills and experience, as they relate to potential careers

Identify workplace soft skills, such as customer care, communication, personal qualities, and leadership/teamwork skills

Apply critical thinking, creative thinking and problem solving skills

**Student Learning Outcomes:**

- Demonstrate proficiency in communicating with patients.
- Demonstrate comprehension of patient report documentation or recommended treatment.

**Hours**

**Total Hours**

60.0

**DC Circuits**

**ETEC110:**

3.0 Units

This course is an in-depth study of Direct Current (DC) electronic circuits. Students will learn how to interpret and create electrical schematics. Other topics include Ohm’s Law, Kirchhoff’s Laws, resistance, capacitance, and inductance. Lab activities will include the use of multimeters, power supplies, and oscilloscopes; building and analyzing common DC Circuits; and validating theoretical calculations by testing circuit performance.

**Requisites**

**Requisites:**

**Advisory**

Math080 - Intermediate Algebra

Basic principles of algebra and trigonometry will be used to solve practical applications of problems related to Direct Current Electrical Circuits in this course.

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Identify the characteristics, applications, and measurement methods of Direct Current Electricity.
- Identify common component symbols in Direct Current Electrical Circuit diagrams.
- Explain the functions of common components of Direct Current Electrical Circuits
Describe the operation of typical Direct Current Electrical Circuits.

Interpret Direct Current Electrical diagrams.

Calculate operating parameters of Direct Current Electrical Circuits containing resistors, capacitors, and inductors using Ohm's, Watt's, and Kirchhoff's Laws and related circuit analysis methods.

Construct Direct Current Electrical Circuits from diagrams.

Perform DC Electrical Circuit measurements using a multimeter.

Analyze and troubleshoot Direct Current Electrical Circuits.

**Student Learning Outcomes:**
- Analyze Direct Current Electrical Circuits.
- Calculate operating parameters of Direct Current Electrical Circuits.
- Construct and analyze Direct Current Electrical Circuits in a laboratory.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
66.0

**AC Circuits**

**ETEC120:**

3.0 Units

This course is an in-depth study of Alternating Current (AC) electrical circuits. This course focuses on the math describing AC circuits, specifically the relationships between impedance, resistance, and reactance. Students will use these concepts to anticipate power factors and learn how to mitigate large inductive loads. Students will design, analyze, build, and test resistance/conductance/capacitance (RLC) circuits, inductance motor drivers, and filter circuits for audio signals. Lab work will include validating theoretical calculations by building circuits and testing them for expected performance.

**Requisites**

**Requisites:**

**Advisory**

**MATH080 - Intermediate Algebra**

Basic principles of algebra and trigonometry will be used to solve practical applications of problems related to Direct Current Electrical Circuits in this course.

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Identify the characteristics, applications, and measurement methods of Alternating Current Electricity.
Explain the functions of common components of Alternating Current Electrical Circuits.

Describe the operation of typical Alternating Current Electrical Circuits.

Interpret Alternating Current Electrical diagrams.

Calculate operating parameters of Alternating Current Electrical Circuits including reactive circuit quantities, impedance, and resonance.

Measure specified parameters of Alternating Current circuits and devices using standard laboratory test equipment (including oscilloscopes) and procedures.

Design an Alternating Current electrical circuit to perform a specified function. (Draw an electrical diagram and specify all components and interconnections.)

Construct Alternating Current Electrical Circuits from diagrams.

Analyze and troubleshoot Alternating Current Electrical Circuits.

**Student Learning Outcomes:**

- Analyze Alternating Current Electrical Circuits.
- Calculate operating parameters of Alternating Current Electrical Circuits
- Construct and analyze Alternating Electrical Circuits in a laboratory.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

66.0

**Programmable Logic Controllers**

**ETEC130:**

3.0 Units

Students will learn how to connect Programmable Logic Controllers (PLCs), upload and backup programs, and obtain diagnostic data from operational PLCs. Students will interpret and draw ladder logic diagrams, and document and implement control processes using ladder logic programming on PLCs. Lab activities will include connecting various process sensors to PLC inputs as well as connecting relays to outputs to drive motor contactors, indicators, and handshaking.

**Requisites**

**Requisites:**

Advisory

**MATH080 - Intermediate Algebra**

Basic principles of algebra and trigonometry will be used to solve practical applications of problems related to Direct Current Electrical Circuits in this course.

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**
Course Objectives:
Describe the symbols of a Ladder Logic diagram.
Interpret a Ladder Logic diagram.
Design a Ladder Logic diagram to execute a specified function, including related sequencing and timing requirements.
Construct a Programmable Logic Controller from a Ladder Logic diagram.
Analyze the function of a Programmable Logic Controller to identify proper execution or errors in Ladder Logic or circuitry.
Explain serial communications for Programmable Logic Controllers.
Explain the addressing structure required to control discrete components using a Programmable Logic Controller.
Identify and recognize discrete digital and analog inputs and outputs and their respective interface constraints to a Programmable Logic Controller.

Student Learning Outcomes:
- Analyze a Ladder Logic diagram for a Programmable Logic Controller.
- Design and construct a Programmable Logic Controller Ladder Logic circuit to control a series of specified functions, including related sequencing and timing.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
66.0

Introduction to Ethnic Studies
ETHN101:
3.0 Units
This introductory course will take an intersectional and interdisciplinary approach to the examination of the cultural, economic, educational, and political issues that impact various ethnic/racial groups within the United States. Using a socio-historical perspective, this course will analyze how racial formations have been constructed and contested, as well as, provide theories and tools to understand and combat racism across multiple relations of power.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
- Area D: Cultural Breadth

CSU GE - Plan B
- Area D: Social Sciences
IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

CSU GE - Plan B
Area F: Ethnic Studies

Learning Outcomes

Course Objectives:
Define and apply the key concepts to past and current social situations.
Demonstrate an understanding of the perspectives and use these theories to explain discrimination and racism.
Examine the historical waves of immigration and how immigrants were absorbed into the U. S.
Evaluate ethnic relations and economic stratification in the United States from colonization through post-industrialization.
Describe the cultures and social structure of indigenous Americans, as well as, the effects of colonization, private property, and genocide.
Summarize African American culture, history, and resilience.
Discuss how the connection between the U. S. economy and immigration policies disproportionately impact Latino Americans.

Explain how different types and amounts of capital impact Asian Americans and pan-ethnic unity.

Analyze which factors most effect multi-racial Americans’ identity contraction and why.
Determine the motivation for more recent immigration and whether assimilation is possible with nativism.

Compare and contrast ethnic experiences in the U.S. and evaluate the impacts of intersectionality.
Identify the impact of globalization on population changes and assess ways to improve inter/intraracial relations.

Student Learning Outcomes:
Demonstrate knowledge of the discipline of Ethnic Studies and the historical and cultural experiences of the four major ethnic groups in the United States (i.e., Native American, African American, Latino/Chicano, Asian American), with an emphasis on multi-
Critically examine the issues that impact various minority groups and determine whether racial formations is the source of these problems, as well as, identify possible solutions.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Asian Pacific American Studies
ETHN110:

3.0 Units

This introductory course will take an intersectional and interdisciplinary approach to the examination of the cultural, economic, educational, and political issues that may impact Asian and Pacific Islander Americans. Topics that will be addressed include, but are not limited to, Asian Pacific American history, identity construction, gender, class, sexual orientation, religion, language, stereotypes, sovereignty, anti-Asian violence, generational status, immigration, labor, and social justice.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

CSU GE - Plan B
Area F: Ethnic Studies

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the origins of Asian Pacific American Studies and identity.

Summarize the historical legacy of Asian Pacific Americans and assess how immigration and/or annexation has influenced these communities.

Analyze the impacts of anti-Asian bias and violence on U.S. laws and other legal matters, as well as, on the lives of Asian Pacific Americans.

Discuss how the “Model Minority” myth and the “Yellow Peril” stereotype contributed to the perception and treatment of Asian Pacific Americans.

Examine and list the factors that affect Asian Pacific American family formation, family structure, and family resilience.

Evaluate the connection between gender, class, industry, and occupation on unionization rates for Asian Pacific American workers.

Outline how ethnic identity/ies can impact political involvement and/or motivation to pursue social change for Asian Pacific Americans.

Identify the most influential factors in the expressions and expectations of sexuality among Asian Pacific Americans.

Describe contemporary concerns within the Asian Pacific American community and assemble strategies to resolve these issues.

Student Learning Outcomes:

Demonstrate knowledge of the discipline of Asian Pacific American Studies and the history of Asian Pacific American culture in the U.S. society.

Demonstrate critical thinking about the problems and solutions regarding the Asian Pacific American community, identity, and struggles.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0
Total Hours
54.0

Introduction to African American Studies
ETHN120:

3.0 Units

This introductory course will take an intersectional and interdisciplinary approach to the examination of the cultural, economic, educational, and political issues that may impact African Americans. Topics that will be addressed include, but are not limited to, origins of African Studies, African American history, gender, class, sexual orientation, religion, family dynamics, educational attainment, labor, empowerment, and social justice.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

CSU GE - Plan B
Area F: Ethnic Studies

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the origins of African American Studies and identity.

Summarize the historical legacy of African Americans and assess how slavery, "Jim Crow," and the pursuit of civil rights has influenced these communities.

Evaluate and list the factors and the influential people that contributed to the development of African American social and political thought.

Describe African American artistic and cultural expression and its connection to the historical context from which it manifested.

Identify the most influential factors in the expressions and expectations of sexuality among African Americans.

Assess and list the factors that affect African American family formation, family structure, and family resilience.

Outline how different approaches impact political involvement and/or motivation to pursue social change among African Americans.

Describe contemporary concerns within the African American community and assemble strategies to resolve these issues.

Student Learning Outcomes:
Demonstrate knowledge of the discipline of African American/Africana Studies and the history of African American culture in the U. S. society.

Demonstrate critical thinking about the problems and solutions regarding the African American community, identity, and struggles.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Chicano Studies
ETHN130:

3.0 Units

This introductory course will take an intersectional and interdisciplinary approach to the examination of the cultural, economic, educational, and political issues that may impact Chicanas/os/x. Topics that will be addressed include, but are not limited to, Chicano history, identity construction, gender, class, sexual orientation, religion, language, educational attainment, generational status, immigration, and labor. Former Title: CHST 101, Introduction To Chicano Studies

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

CSU GE - Plan B
Area F: Ethnic Studies

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the origins of Chicano Studies and the rise of Chicanismo.

Summarize the contributions of indigenous groups to contemporary Chicano society.
Analyze the impacts of Spanish colonization on both the colonizer and the colonized.

Describe the cultural, political, and historical conflicts between the U.S. and Mexico.

Show the connection between the invasion of Texas and social banditry.

Discuss how the colonization of New Mexico impacted Mexican identity.

Give examples of interracial alliances and appraise the results.

Examine the significance of the Bear Flag and recognize both the concerns and efforts of Californios.

Estimate the impacts of the Mexican Revolution on immigration on the border and to the U.S. in general.

Evaluate the effects of WWI on the Chicano community and list their responses.

Outline how and why the Great Depression increased deportations and segregation.

Estimate the causes for the Zoot Suit Riots and the connection to WWII.

Assess the impacts of both the Korean War and the Cold War on the Chicano community.

Identify the most influential contributors of the Chicano Movement and critique the strategies and results of the movement.

Predict how Chicanos are becoming a larger minority group and whether the rise of nativism impacts their collective efforts.

Describe contemporary concerns within the Chicano community and assemble strategies to resolve these issues.

**Student Learning Outcomes:**

- Explain the discipline of Chicano Studies and the history of Chicana/o/x culture in U.S. society.
- Critically examine the issues that impact Chicana/o/x community and determine the source of these problems, as well as, identify possible solutions.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Introduction to Native American Studies**

**ETHN140:**

3.0 Units

This introductory course will take an intersectional and interdisciplinary approach to the examination of the cultural, economic, educational, and political issues that may impact Native Americans. Topics that will be addressed include, but are not limited to Native American history, languages, gender, sexual orientation, class, labor, health, land conflicts, sovereignty, stereotypes, anti-indigenous violence, identity construction, tribal recognition, cultural permanence, and empowerment.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0
General Education Plan:
UC Comparable Transfer Courses

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

CSU GE - Plan B
Area F: Ethnic Studies

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the origins Native American Studies and the research conducted on this group.
Assess how indigenous people in the Americas lived prior to European contact.
Summarize the historical impacts of European colonization and settler colonialism on American Indian communities.
Analyze the effects of federal policies and treaties on Native American lands, autonomy, and self-governance.
Discuss how American Indian experiences and activism influence Native American identity construction.
Outline the importance and preservation of indigenous epistemologies and the origins of this knowledge.
Examine and list the factors that affect American Indian family formation, educational attainment, economic development, religious expression, and political organization.
Identify the sources of intergenerational trauma and stereotypes for Native Americans and provide ideas to mitigate their effects.
Explain American Indian visual and performing arts and appraise its popularity and visibility.
Evaluate the ongoing and/or contemporary issues Native American communities are facing and cite examples of resilience and activism.

Student Learning Outcomes:
   Explain the discipline of Native American Studies and the history of indigenous cultures in U. S. society.
   Critically examine the issues that impact the Native American community and determine the source of these challenges, as well as, identify possible solutions.

Units & Hours
Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Employment Readiness, CC
Certificate of Completion
Control Number:
36215

Curriculum Id:
OEC.EMPRD.CC
Provides courses designed to meet specific needs of students with intellectual and learning disabilities focusing on basic education and job skills. Provides certificate programs in educational and employment areas with opportunities to transfer to content courses or directly into the workforce.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKPR003</td>
<td>Getting Around Town</td>
<td>60.0</td>
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<tr>
<td>WKPR004</td>
<td>Choosing the Right Employment Path</td>
<td>60.0</td>
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<tr>
<td>WKPR005</td>
<td>Safety on the Job</td>
<td>60.0</td>
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**Program Requirements**

Certificate of Completion

<table>
<thead>
<tr>
<th>Certificate Requirements: 180 hours (credits are in hours)</th>
<th>180.0 Hours</th>
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</thead>
<tbody>
<tr>
<td>WKPR003 - Getting Around Town</td>
<td>60.0</td>
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<tr>
<td>AND</td>
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<tr>
<td>WKPR004 - Choosing the Right Employment Path</td>
<td>60.0</td>
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<tr>
<td>AND</td>
<td></td>
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<tr>
<td>WKPR005 - Safety on the Job</td>
<td>60.0</td>
</tr>
</tbody>
</table>

**Total Hours**

180.0

**Learning Outcomes**

Demonstrate foundational knowledge and comprehension of basic employment skills.

**Enhanced Advanced ESL Skills, COM**

Certificate of Competency

**Control Number:** 40510

**Curriculum Id:**

OEC.ESLAEN.COM

The Certificate of Competency in Enhanced Advanced ESL Skills is designed to improve the reading, writing, listening, speaking, and digital literacy skills of Advanced English as a Second Language students for effective communication and personal growth.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ESL270</td>
<td>Seminar for Advanced ESL Students</td>
<td>72.0</td>
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<tr>
<td>ESL601</td>
<td>Advanced Grammar and Writing</td>
<td>96.0</td>
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</table>

**Program Requirements**

Certificate of Competency

<table>
<thead>
<tr>
<th>Certificate Requirements: 168 hours (credits are in hours)</th>
<th>168.0 Units</th>
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</thead>
</table>
Certificate Requirements: 168 hours (credits are in hours) 168.0 Units

ESL270 - Seminar for Advanced ESL Students 72.0

AND

ESL601 - Advanced Grammar and Writing 96.0

Total Units 168.0

Learning Outcomes
Demonstrate advanced reading, writing, listening, and speaking skills with a focus on writing in English.

Essential Mathematics and Math Study Skills Support, COM
Certificate of Competency

Control Number: 36898
Curriculum Id: OEC.EMSSS.COM

The Certificate of Competency in Adult Secondary Education, Essential Mathematics and Math Study Skills Support is designed to prepare students with basic math skills and math study skills to make a successful transition to college math courses.

Program Courses
Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATHCE100</td>
<td>Math Study Skills and Basic Skills Support</td>
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<tr>
<td>MATHCE206</td>
<td>College Preparation Essential Mathematics</td>
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</table>

Program Requirements
Certificate of Competency

Certificate Requirements: 244 hours (credits are in hours) 244.0 Units

MATHCE100 - Math Study Skills and Basic Skills Support 100.0

AND

MATHCE206 - College Preparation Essential Mathematics 144.0

Total Units 244.0

Learning Outcomes
Accurately compute essential arithmetic concepts.
Demonstrate effective math study skills.

Ethnic Studies, AA
A.A. Degree Major

Control Number:
Curriculum Id:
The Associate in Arts Degree in Ethnic Studies is designed to provide students with a comparative and interdisciplinary examination of the unique histories, cultures, and experiences of African Americans, Asian and Pacific Islander Americans, Latino/x Americans, and Native Americans in the United States. Students will assess their own individual cultural identity/ies, build consciousness about race and ethnic relations in America, and begin to formulate and implement strategies that will challenge multiple and intersecting forms of oppression. The major prepares students to work collaboratively with diverse populations given its emphasis on group-centered leadership and communication skills, as well as, critical thinking and praxis. Completion of the associates of arts degree facilitates a pathway to move into a four-year institution leading to baccalaureate degree.

**Program Courses**

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>ETHN110</td>
<td>Introduction to Asian Pacific American Studies</td>
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<td>ETHN120</td>
<td>Introduction to African American Studies</td>
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<td>ETHN130</td>
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<td>ETHN140</td>
<td>Introduction to Native American Studies</td>
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<tr>
<td>ANTH100</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
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<td>ANTH100H</td>
<td>Honors Introduction to Cultural Anthropology</td>
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<tr>
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<td>ENGL246</td>
<td>Survey of Chicano Literature</td>
<td>3.0</td>
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<tr>
<td>HIST118</td>
<td>Social and Cultural History of the United States</td>
<td>3.0</td>
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<td>HIST124</td>
<td>Mexican-American History in the United States</td>
<td>3.0</td>
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<tr>
<td>HIST132</td>
<td>Modern African History</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST142</td>
<td>History of the Modern Middle East</td>
<td>3.0</td>
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<tr>
<td>HIST152</td>
<td>Latin American History</td>
<td>3.0</td>
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<tr>
<td>HIST162</td>
<td>Asian Civilizations</td>
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</tr>
<tr>
<td>SOC150</td>
<td>Introduction to Race and Ethnicity</td>
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**Program Requirements**

A.A. Degree Major

<table>
<thead>
<tr>
<th>Major Requirements:</th>
<th>15.0 Units</th>
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<tbody>
<tr>
<td>CHST101 - Introduction to Chicano Studies</td>
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<tr>
<td>ETHN101 - Introduction to Ethnic Studies</td>
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### Major Requirements: 15.0 Units

**AND**

- ETHN110 - Introduction to Asian Pacific American Studies 3.0

**AND**

- ETHN120 - Introduction to African American Studies 3.0

**AND**

- ETHN140 - Introduction to Native American Studies 3.0

Select one (1) from the following: 3.0 Units

- ANTH100 - Introduction to Cultural Anthropology 3.0
  
  OR

- ANTH100H - Honors Introduction to Cultural Anthropology 3.0
  
  OR

- COMM120 - Intercultural Communication 3.0
  
  OR

- COMM120H - Honors Introduction to Intercultural Communication 3.0
  
  OR

- ENGL246 - Survey of Chicano Literature 3.0
  
  OR

- HIST118 - Social and Cultural History of the United States 3.0
  
  OR

- HIST124 - Mexican-American History in the United States 3.0
  
  OR

- HIST132 - Modern African History 3.0
  
  OR

- HIST142 - History of the Modern Middle East 3.0
  
  OR

- HIST152 - Latin American History 3.0
  
  OR

- HIST162 - Asian Civilizations 3.0
  
  OR
Select one (1) from the following:

**SOC150 - Introduction to Race and Ethnicity**  
3.0 Units

**Total Units**  
18.0

**Learning Outcomes**

**Labor Market Data**

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<tr>
<th>Job Title</th>
<th>Job Growth</th>
<th>Wages</th>
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<td>*For Program</td>
</tr>
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</table>

**F1. Lifelong Understanding and Self-Development**
F2. Lifelong Understanding and Self-Development

KIN189A - Basic Aqua Aerobics

Elementary French 1

FREN101:

5.0 Units

A college-level French course focusing on fundamentals of pronunciation, grammar, basic vocabulary, idioms, and simple conversation and composition, including supplementary cultural readings. French 101 is equivalent to two years of high school French.

Requisites

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 6: Language Other than English

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Apply new vocabulary to facilitate basic communication skills.

Internalize vocabulary and structures to communicate and engage in beginning level dialogues.

Write and organize thoughts through guided composition and exercises.

Communicate in writing on a variety of meaningful beginning level topics, integrating vocabulary, idiomatic expressions, and correct use of grammatical patterns.

Apply correct grammatical structures when communicating in writing and speaking and to comprehend written and spoken language.

Derive meaning of implicit and explicit written material at beginning level.

Compare and contrast the sound system and structure of the language and reproduce language responses to linguistic, structural and cultural situations.

Articulate various facets of French pronunciation for adequate communication.
Develop listening comprehension skills.

Describe various aspects of French culture.

Develop the four skills: Listening, speaking, reading, and writing.

**Student Learning Outcomes:**

- Demonstrate understanding of French language grammar, vocabulary, idiomatic expressions, and French speakers' culture to communicate orally, using appropriate pronunciation on designated topics at the beginning level in public and in interpersonal situations.
- Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the beginning level.
- Effectively apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit written material at the beginning level.
- Effectively apply knowledge of vocabulary, grammar, idiomatic expressions and culture to accurately recognize and comprehend spoken messages in French at the beginning level.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units:**

5.0

**Total Hours:**

108.0

**Elementary French II**

**FREN102:**

5.0 Units

A college-level French course focusing on further training in pronunciation, more extensive vocabulary development, conversation, grammar, reading, and composition. French 102 is equivalent to the third year of high school French. Additional hours in the Modern Language Lab required.

**Requisites**

**Prerequisite**

[FREN101 - Elementary French 1](#)

or two years of high school French with a grade of C or better

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

5.0

**General Education Plan:**

**Local - Plan A**

Area C: Humanities

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**

Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Compare and contrast the sound systems of English and French.

Respond to a variety of linguistic and cultural stimuli using different modalities.

Pronounce the sounds of French at the advanced-beginning level.

Write increasingly complex conversations.

Communicate information in a narrative style.

Use a variety of constructions to avoid repetition.

Write using basics of French writing style.

Produce simple expository paragraphs.

Use correct grammar structures to communicate in speaking and writing.

Relate to written and spoken messages.

Recognize main and supporting ideas, and understand literal and implied meanings.

Summarize the main idea, conclusion, sequence of ideas and inferences.

Orally paraphrase and interpret written work.

Apply increased skill sets in oral presentations.

Use different word forms to communicate similar ideas.

Expand vocabulary and idioms.

Compare various aspects of French culture.

Student Learning Outcomes:

Demonstrate understanding of grammar, vocabulary, idiomatic expressions, and culture and apply them to communicate orally, using appropriate pronunciation on designated topics at the advanced-beginning level in public and in interpersonal situations.

Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the advanced-beginning level.

Apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit written material at the advanced-beginning level.

Apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to accurately recognize and comprehend spoken messages in French at the advanced-beginning level.

Units & Hours

Minimum Units:

5.0

Maximum Units

5.0

Total Hours

108.0

Conversation and Composition I

FREN194:
3.0 Units

Course emphasizes extensive practice in oral expression and listening comprehension in the context of French culture, daily life, and topics of current interest.

Requisites
Requisites:

Prerequisite

FREN101 - Elementary French 1

or two years of high school French with a grade of C or better

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area C: Humanities

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Expand vocabulary and increase fluency through discussion of a variety of topics.

Acquire and manipulate an expanded repertoire of vocabulary to develop conversational skills in the target language.

Demonstrate beginning communicative competence in the target language.

Formulate statements and questions needed to describe situations and convey information in the present, past, and future.

Write narrations, summaries, and dialogues with increasing fluency.

Develop ability to understand native speakers without resorting to translation and to respond appropriately with greater length and complexity.

Comprehend and discuss main ideas and basic supporting details in short dialogues and narratives.

Summarize narratives.

Acquire appreciation of and familiarity with French culture and civilization through conversation, reading, videos, music and web sites information.

Investigate, analyze, and explain customs and culture where target language is spoken.

Student Learning Outcomes:

Integrate vocabulary, grammar, and culture in oral communication at the beginning level for interpersonal and public audience.

Recognize and comprehend spoken messages in French at the beginning level.

Apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit written material at the beginning level.

Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the beginning level.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Intermediate French I
FREN201:
5.0 Units
A college-level French class focusing on expansive review of usage and grammar, discussion in French of interpretive reading material, and conversation and composition.

Requisites

Prerequisite
FREN102 - Elementary French II

or three years of high school French with a grade of C or better

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:

Apply grammar correctly to formulate simple and more complex statements and questions about present, past, and future situations.

Use subjunctive mood and commands accurately.

Synthesize material covered in reading.

Compose a coherent response to readings, without relying on translation.
Extract meaning from the context in readings.

Produce writing at the intermediate level to narrate, describe, report, compare and contrast, summarize, appraise and express personal opinion.

Produce essays that develop a thesis statement in a coherent, logical and unified manner.

Compose a response to a variety of linguistic and cultural stimuli.

Use a variety of vocabulary at the intermediate level in a variety of situations: socializing, traveling, conveying feelings, expressing opinions, making judgments, obtaining facts, and talking about past experiences.

Engage in dialogues and discussions and demonstrate expanded vocabulary.

Examine various aspects of French-speaking culture.

Compare and contrast cultural differences.

**Student Learning Outcomes:**

- Demonstrate clear understanding of grammar, vocabulary, idiomatic expressions, and culture and apply it to communicate effectively in French using appropriate pronunciation on designated topics at beginning-intermediate level in public and in interpersonal
- Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the beginning-intermediate level.
- Apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit communication in written material at the beginning-intermediate level.
- Apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to recognize and comprehend spoken messages in French at the beginning-intermediate level.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

108.0

**Intermediate French II**

**FREN202:**

5.0 Units

A college-level French class focusing on a specialized review of grammar and composition; discussion in French of history and culture based on literary materials.

**Requisites**

**Requisites:**

**Prerequisite**

FREN201 - Intermediate French I

or four years of high school French with a grade of C or better

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

5.0
General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Relate with accurate language responses, both orally and in writing, to linguistic and cultural stimuli.
Apply and use grammatical structures.
Summarize various readings.
Extract meaning from the context in readings.
Demonstrate awareness and understanding of various readings within cultural and socio-political movements of the time.
Produce writing at the intermediate level to narrate, describe, report, compare and contrast, summarize, appraise and express personal opinion.
Write clearly, coherently and demonstrate creativity and analytical thinking.
Write with greater grammatical accuracy.
Produce essays that develop a thesis statement in a coherent, logical and unified manner.
Demonstrate the ability to use target vocabulary in speech and in writing.
Demonstrate an understanding of advanced vocabulary in cultural and literary contexts.
Acquire an expanded knowledge of Francophone cultures.
Extrapolate meaningful comparisons, similarities, influences, and differences between the cultures of the U.S. and Francophone countries.

Student Learning Outcomes:
Demonstrate understanding of grammar, vocabulary, idiomatic expressions, and culture and apply them to communicate orally on designated topics at the advanced-intermediate level in public and in interpersonal situations.
Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the advanced-intermediate level.
Apply acquired vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit written material at the advanced-intermediate level.
Recognize and comprehend spoken messages in French at the advanced-intermediate level.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
108.0
Introductory Colored Stones
GEM011:

4.0 Units
Introduction to identification, appreciation, and evaluation of colored gemstones. Overview of the world colored-stone industry. Experience using gemological testing equipment and procedures to identify the most commonly seen varieties of natural and synthetic-fashioned gemstones.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Describe the historical background of gems.
Define basic terminology.
Identify the various environments and crystal systems.
Utilize all of the characteristics of a gemstone to make an identification.
Apply theoretical values to a physical sample.
Determine single and double refractivity.
Determine the ratio of the speed of light through a gem and through air.
Determine the two colors of a double refractive (DR) stone.
Distinguish the characteristic inclusion in a gem.
Determine the absorption spectra.
Determine the ratio of the weight of a gem to that of water.
Apply filters in determinations.
Locate optic axes within the stone.
Describe a gemstone properly with given characteristics.
Examine individual gemstones for physical characteristics and identification.
Determine gemstone position in the marketplace.

Student Learning Outcomes:
Evaluate the quality, clarity, origin and value of colored stones using the samples provided in the classroom.
Determine if a stone is synthetic or natural by using the refractory information gained in an examination of a stone.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

**Total Hours**
108.0

**Advanced Colored Stones**
**GEM012:**

4.0 Units

Advanced identification, appreciation, and evaluation of colored gemstones. Overview of the world colored-stone industry. Further experience using gemological testing equipment to identify the most commonly seen varieties of both natural and synthetic-fashioned gemstones.

**Requisites**

**Requisites:**

Advisory

**GEM011 - Introductory Colored Stones**

**Outcomes**

Evaluate the quality, clarity, origin and value of colored stones using the samples provided in the classroom.

Determine if a stone is synthetic or natural by using the refractory information gained in an examination of a stone.

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

4.0

**Learning Outcomes**

**Course Objectives:**

Define basic terminology.

Demonstrate understanding of classifications and procedures used to identify colored stone.

Interpret the nature of color and impurities as an integral part of gemstone structure.

Apply advanced concepts of the optic axis, advanced use of the refractometer and graphing refractometer results.

Interpret optic sign.

Demonstrate understanding of the causes of phenomena in gemstones, advanced light theory and the underlying physics.

Identify and evaluate phenomena in regards to quality.

Analyze pretemporary, contemporary and postformed inclusions.

Analyze characteristic inclusions of different species and varieties.

Assign types to different species and determine characteristic inclusions in synthetics.

Examine the history of the flame fusion process and different growing methods of synthetic stones.

Apply characteristic properties in making an identification.

Differentiate the treatment methods in use today to enhance the value of gemstones.

Examine individual gemstones including physical characteristic, identification and position in the marketplace.

Determine the weight of stones that are set in jewelry for appraisal.

Determine the potential value in rough gemstones.
Demonstrate an understanding of the techniques and theory of cutting and fashioning gemstones.

Identify the values and grades of different stones.

**Student Learning Outcomes:**

Utilize the testing techniques specific to the gemological industry to determine the structure and refractory assignments of stones.

Determine the weight of stones using the technology specific to the industry and record that information.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

108.0

**Colored Stones and Diamond Lab**

GEM015:

1.0 Units

Laboratory experience in testing and identification of colored gemstones and/or full grading of diamonds for clarity, color, cut and carat weight.

**Requisites**

**Advisory**

Previous or concurrent enrollment in another Gemology course

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

1.0

**Learning Outcomes**

**Course Objectives:**

Apply advanced knowledge and skill development in testing and identification of gemstones.

Grade diamonds and colored stones for clarity, color, cut and carat weight.

**Student Learning Outcomes:**

Determine the need and make recommendations of specifics for colored stone or diamond merchandise as well as evaluate the effectiveness of a given repair.

Evaluate colored stones and diamonds in a lab setting using equipment and diagnostic supplies as is the accepted industry standard practice; create reports in both verbal and in accepted written appraisal format for both retail or wholesale sales as well.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0
Total Hours
54.0

Diamonds
GEM020:

4.0 Units

Full range of diamond grading techniques, history, diamond substitutes, physical and optical properties, all types of synthetic, techniques of valuing/pricing, famous diamonds, detecting enhancements.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
4.0

Learning Outcomes
Course Objectives:
Identify and describe the basic characteristics of a diamond.
Demonstrate understanding of the DeBeers consortium and distribution channels.
Identify diamond mining techniques used in different parts of the world.
Describe the fascinating roles diamonds have played in history.
Demonstrate understanding of diamond cutting.
Demonstrate understanding of the techniques and procedures used to determine the clarity grade of a diamond.
Describe plotting and what to plot.
Identify the orientation of Crown and Pavilion angles.
Identify equipment needed, use of equipment, and plotting positioning.
Apply estimation and actual measurements using a proportion scope/analyzer.
Distinguish between industry vs. FTC rulings on estimation tolerances.
Describe proportion grading for table measurements, percentages and culet sizes.
Demonstrate understanding of estimation and actual measurements, industry tolerances, table measurements and how they evolved through the last two centuries.
Identify various grading laboratories world-wide and tolerances used by such.
Determine estimation of crown angles so as to determine crown height and total depth of diamonds.
Utilize microscope camera.
Use formulas for total depth, major and minor symmetry of a diamond.
Determine which to use on a diamond grading sheet.
Identify the importance in the total cut of a diamond in determining the brilliance, scintillation or luster of a diamond which in turn means beauty and salability.
Analyze how to judge the finish on a diamond and relate that to a diamond grading sheet and color grading.
Identify the procedures used to determine the color grade of a diamond and diamond master sets including how they are graded and put together.

Distinguish between diamond vs. CZ master sets and how the industry vs. the grading laboratories judge the sets.

Identify what you can find in the marketplace today.

Identify equipment available for the well-equipped laboratory including how each instrument is used and cared for.

Explain new equipment in development.

Recognize which equipment not to buy and why.

Analyze and classify fancy colored diamonds.

Identify which colors are the most rare and the pricing of such diamonds.

Identify applicable industry standards and concerns.

Compare wholesale and retail pricing of diamonds.

Identify factors that lead to discounts to the pricing in the guides.

Identify rough diamond crystal forms that must be used to cut fancy shaped diamonds.

Recognize determination of final weight of a diamond in need of re-cutting.

Identify the four types of diamond that are typically in need of a re-cutting transformation.

Describe the determination of weight loss vs. viability of a re-cutting.

Calculate the weight of a diamond without the use of a scale.

Identify intricate formulas for use with round brilliant and fancy cut diamonds and fracture filled diamonds.

Identify industry standards and potential problems.

Describe the identification and separation of synthetic vs. natural diamonds including instruments that can and can’t be used.

Describe the various method of determining the specific gravity of synthetic, simulants and natural diamond material.

Identify the techniques and special circumstances encountered with grading mounted diamonds.

Identify relevant FTC rulings, industry standards, and customer concerns.

Student Learning Outcomes:
- Describe and evaluate diamonds using all measurements of grading.
- Appraisal of diamonds to determine value.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

Antique and Period Jewelry

GEM030:

3.0 Units

The history, techniques, styles, and periods of antique and period jewelry. Identification of period pieces from Georgian to Retro, including authentic vs. reproductions. Includes types of metals and materials, stone cutting, setting techniques, and types of gemstones used.
Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Identify and describe the various styles, techniques, and materials for the different periods.
Describe stone cutting techniques.
Identify simulants used in antique/period jewelry.
Identify specific metals used and their components, and unusual materials and their composition.
Identify and contrast famous jewelry makers.
Identify and contrast the hallmarks for gold and silver for various countries.

Student Learning Outcomes:
Identify as to date, material, and design antique and period jewelry from the 18th century through the 1960s.
Evaluate condition and material condition to determine value for appraisal purposes.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Pearls
GEM050:
3.0 Units

Introduction to the history, appreciation, and evaluation of natural and cultured pearls, including an overview of the world pearl industry. Pearl identification and grading techniques covering the physical and optical properties for judging the luster, surface, shape, color, and size of the various types.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0
Learning Outcomes

Course Objectives:
Identify Mollusks and snails that produce pearls including Mollusk genus and species.
Identify where natural pearls are found and describe how they are harvested.
Identify natural and cultured salt water pearls by type.
Compare locations, species, shell sizes, pearl sizes, colors, pearl shapes, quantity per shell, care, cleaning, and storage for each type.
Identify freshwater cultured pearls by types, shapes and colors.
Identify the types and grading of salt and freshwater pearl products.
Describe various pearl settings and stringings.
Describe post-harvest processing and treatments.
Identify pearl types and describe tests for detection.
Identify and compare grading systems for pearls.
Identify grading pearl shapes by type of pearl including techniques and methodology.
Recognize grading surface quality by pearl type including techniques and methodology.
Explain how to grade for the various characteristics.
Describe grading matching by pearl type.
Discuss jewelry as a fashion statement, as used in royal adornments, and famous pearls.
Identify various appraisal and valuation techniques.
Identify and describe the various industry associations and regulations.

Student Learning Outcomes:
Identify the difference between natural and cultured salt and fresh water pearl types using techniques designed specifically for the gemology and jewelry industry.
Identify and grade pearls as to size, origin, hue, saturation and origin for insurance and wholesale and retail markets.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

World Regional Geography
GEOG100:

3.0 Units
The study of major world political and natural regions. The location of the regions on earth, the physical and cultural elements that lend the regions with their identities, and ways in which these elements related to the regions’ inhabitants and economies.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
  Area B2: Social and Behavioral Sciences: Social Science Elective
  Area D: Cultural Breadth

CSU GE - Plan B
  Area D: Social Sciences

IGETC - Plan C
  Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
  UC Comparable Transfer Courses

Course Identifier (C-ID)
  Geography

Learning Outcomes

Course Objectives:
Identify the different components of globalization, including their controversial aspects, and list several ways in which globalization is changing world geographies

Summarize the major tools used by geographers to study Earth's surface

Explain the concepts and metrics used to document changes in global population and settlement patterns

Explain how different aspects of globalization have interacted with global geopolitics from the colonial period to the present day

Explain tectonic plate theory by describing those aspects responsible for shaping Earth's surface

List the factors that control the world's weather and climate

Describe the major characteristics and global location of the world's major climate regions

Describe the characteristics and distribution of the world's major bioregions

Identify key environmental issues facing North Americans in the 21st century and describe how these relate to the region's resource base and economic development

Explain the major ways in which people have modified the North American environment

Describe North America's major landform and climate regions

Summarize the three most important periods of European settlement in North America

Identify major migration flows in North American history

List the five phases of immigration shaping North America and describe the recent importance of Hispanic and Asian immigration

Provide examples of how cultural globalization has shaped the region

Indicate the role of key location factors in explaining why economic activities are located where they are in North America

Explain the relationships among elevation, climate, and agricultural production

Summarize the demographic issues impacting this region, such as rural-to-urban migration, urbanization, smaller families, and emigration

Describe the cultural mixing of European and Amerindian groups in this region and indicate where Amerindian cultures thrive today
Describe the colonial settlement of the region and how it affected the formation of today's modern states

Summarize the significance of primary exports from Latin America, especially agricultural commodities, minerals, wood products, and fossil fuels

Describe the neoliberal economic reforms that have been applied to Latin America and how they have influenced the region's development

Explain the reasons why European colonists so aggressively sought control of the Caribbean and why independence in the region came about more gradually than in neighboring Latin America

Identify the demographic and cultural implications of the massive transfer of African peoples to the Caribbean, as well as other smaller labor flows from South Asia

Differentiate island and rimland environments and the environmental issues that affect these areas

Describe, in general terms, the topography, climate, and hydrology of Europe

List those countries with slow, no, or negative population growth and discuss the economic and social implications

Describe the characteristics and implications of internal migration within Europe, as well as the geography of external migration to the region

Describe the major languages and religions of Europe

Summarize how the map of European states has changed in the last 100 years

Explain how Europe was divided during the Cold War and how Europe has changed since the end of the Cold War in 1990

Describe how Europe has become integrated economically and politically by the EU and its predecessors

Identify the major characteristics of the current economic tensions within Europe in terms of economic and social development

List the characteristics that make Sub-Saharan African a distinct world region

Summarize the major ecosystems in the region and how humans have adapted to living in them

Describe the factors that have made wildlife conservation and tourism important aspects of the region's economy

Explain the region's rapid demographic growth and describe the differential impact of HIV/AIDS upon the region

Summarize various cultural influences of African peoples within the region and globally

Describe the relationship between ethnicity and conflict in this region and the strategies for maintaining peace

Assess the roots of African poverty and explain why many of the fastest-growing economies in the world today are in Sub-Saharan Africa

List the major resources of the region, especially metals and fossil fuels, and describe how they are impacting the region's development

Describe the region's fragile, often arid setting shapes the region's contemporary environmental challenges

Explain how latitude and topography produce the region's distinctive patterns of climate

Describe distinctive ways in which people have learned to adapt to the region's rural environment

Summarize the major forces shaping recent migration patterns within the region

List the major characteristics and patterns of diffusion of Islam

Identify the key modern religions and language families that dominate the region

Describe the local impacts of the Arab Spring rebellions in different regional settings

Identify the role of cultural variables in understanding key regional conflicts in Israel, Syria, and Iraq

Summarize the geography of oil and gas reserves in the region

Describe traditional roles for Islamic women and provide examples of recent changes

Explain the close connection among latitude, regional climates, and agricultural production

Identify the potential benefits and hazards of global warming within the region
Summarize major migration patterns, both in Soviet and post-Soviet eras

Identify key regional patterns of linguistic and religious diversity

Summarize the historical roots of the region’s modern geopolitical system

Provide examples of how persistent cultural differences shape contemporary geopolitical tensions

Identify key ways in which natural resources, including energy, have shaped economic development in the region

Describe key contributions of the Soviet-era economy and list major changes that have shaped the region’s economic geography since the fall of the Soviet Union in 1991

Explain the ways in which the interaction of tectonic plates and the resulting volcanism and seismic activity have influenced this region

Describe the main environmental problems facing this region today

Summarize the relationships among topography, climate, food production, and population density

Explain why China’s population is so unevenly distributed, with some areas densely settled and others almost uninhabited

Outline the ways in which the patterns of human population growth in South Asia have changed over the past several decades and explain why they vary so strikingly from one part of the region to another

Outline the distribution of major urban areas and explain why the continued expansion of the region’s largest cities is often viewed as a problem

Describe the ways in which religion and other systems of belief both unify and divide this region

Describe the geopolitical division of East Asia during the Cold War period and explain how the division of that period still influences East Asian geopolitical relations

Describe the geographic characteristics of the region known as Oceania

Explain how the Pacific Rim of Fire is linked to the landforms of Oceania

Describe the array and location of climate types found in Australia and Oceania

Summarize the prehistoric peopling of the Pacific, as well as the colonial exploration and settlement of Australia and Oceania

List several geopolitical tensions that persist in Australia and Oceania

Describe the diverse economic geographies of Oceania

**Student Learning Outcomes:**

- Identify major landforms and climates for the world’s regions and discuss their impacts on culture.
- Compare and contrast the major regions of the world based on demographic, economic and cultural characteristics.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Honors World Regional Geography**

**GEOG100H:**

3.0 Units
Enriched and intensive study, including seminar approach with individual written and oral presentations of major world political and natural regions. The location of the regions on earth, the physical and cultural elements which provide the regions with their identity and ways in which these elements relate to the regions’ inhabitants and economies.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Geography

Learning Outcomes
Course Objectives:
Identify the different components of globalization, including their controversial aspects, and list several ways in which globalization is changing world geographies

Summarize the major tools used by geographers to study Earth’s surface

Explain the concepts and metrics used to document changes in global population and settlement patterns

Explain how different aspects of globalization have interacted with global geopolitics from the colonial period to the present day

Explain tectonic plate theory by describing those aspects responsible for shaping Earth’s surface

List the factors that control the world’s weather and climate

Describe the major characteristics and global location of the world’s major climate regions

Describe the characteristics and distribution of the world’s major bioregions

Identify key environmental issues facing North Americans in the 21st century and describe how these relate to the region’s resource base and economic development

Explain the major ways in which people have modified the North American environment

Describe North America’s major landform and climate regions

Summarize the three most important periods of European settlement in North America

Identify major migration flows in North American history

List the five phases of immigration shaping North America and describe the recent importance of Hispanic and Asian immigration
Provide examples of how cultural globalization has shaped the region

Indicate the role of key location factors in explaining why economic activities are located where they are in North America

Explain the relationships among elevation, climate, and agricultural production

Summarize the demographic issues impacting this region, such as rural-to-urban migration, urbanization, smaller families, and emigration

Describe the cultural mixing of European and Amerindian groups in this region and indicate where Amerindian cultures thrive today

Describe the colonial settlement of the region and how it affected the formation of today’s modern states

Summarize the significance of primary exports from Latin America, especially agricultural commodities, minerals, wood products, and fossil fuels

Describe the neoliberal economic reforms that have been applied to Latin America and how they have influenced the region’s development

Explain the reasons why European colonists so aggressively sought control of the Caribbean and why independence in the region came about more gradually than in neighboring Latin America

Identify the demographic and cultural implications of the massive transfer of African peoples to the Caribbean, as well as other smaller labor flows from South Asia

Differentiate island and rimland environments and the environmental issues that affect these areas

Describe, in general terms, the topography, climate, and hydrology of Europe

List those countries with slow, no, or negative population growth and discuss the economic and social implications

Describe the characteristics and implications of internal migration within Europe, as well as the geography of external migration to the region

Describe the major languages and religions of Europe

Summarize how the map of European states has changed in the last 100 years

Explain how Europe was divided during the Cold War and how Europe has changed since the end of the Cold War in 1990

Describe how Europe has become integrated economically and politically by the EU and its predecessors

Identify the major characteristics of the current economic tensions within Europe in terms of economic and social development

List the characteristics that make Sub-Saharan African a distinct world region

Summarize the major ecosystems in the region and how humans have adapted to living in them

Describe the factors that have made wildlife conservation and tourism important aspects of the region’s economy

Explain the region’s rapid demographic growth and describe the differential impact of HIV/AIDS upon the region

Summarize various cultural influences of African peoples within the region and globally

Describe the relationship between ethnicity and conflict in this region and the strategies for maintaining peace

Assess the roots of African poverty and explain why many of the fastest-growing economies in the world today are in Sub-Saharan Africa

List the major resources of the region, especially metals and fossil fuels, and describe how they are impacting the region’s development

Describe how the region’s fragile, often arid setting shapes the region’s contemporary environmental challenges

Explain how latitude and topography produce the region’s distinctive patterns of climate

Describe distinctive ways in which people have learned to adapt to the region’s rural environment

Summarize the major forces shaping recent migration patterns within the region

List the major characteristics and patterns of diffusion of Islam

Identify the key modern religions and language families that dominate the region
Describe the local impacts of the Arab Spring rebellions in different regional settings
Identify the role of cultural variables in understanding key regional conflicts in Israel, Syria, and Iraq
Summarize the geography of oil and gas reserves in the region
Describe traditional roles for Islamic women and provide examples of recent changes
Explain the close connection among latitude, regional climates, and agricultural production
Identify the potential benefits and hazards of global warming within the region
Summarize major migration patterns, both in Soviet and post-Soviet eras
Identify key regional patterns of linguistic and religious diversity
Summarize the historical roots of the region’s modern geopolitical system
Provide examples of how persistent cultural differences shape contemporary geopolitical tensions
Identify key ways in which natural resources, including energy, have shaped economic development in the region
Describe key contributions of the Soviet-era economy and list major changes that have shaped the region’s economic geography since the fall of the Soviet Union in 1991
Explain the ways in which the interaction of tectonic plates and the resulting volcanism and seismic activity have influenced this region
Describe the main environmental problems facing this region today
Summarize the relationships among topography, climate, food production, and population density
Explain why China’s population is so unevenly distributed, with some areas densely settled and others almost uninhabited
Outline the ways in which the patterns of human population growth in South Asia have changed over the past several decades and explain why they vary so strikingly from one part of the region to another
Outline the distribution of major urban areas and explain why the continued expansion of the region’s largest cities is often viewed as a problem
Describe the ways in which religion and other systems of belief both unify and divide this region
Describe the geopolitical division of East Asia during the Cold War period and explain how the division of that period still influences East Asian geopolitical relations
Describe the geographic characteristics of the region known as Oceania
Explain how the Pacific Rim of Fire is linked to the landforms of Oceania
Describe the array and location of climate types found in Australia and Oceania
Summarize the prehistoric peopling of the Pacific, as well as the colonial exploration and settlement of Australia and Oceania
Explain the changing migration patterns to and within postwar Australia and Oceania
List several geopolitical tensions that persist in Australia and Oceania
Describe the diverse economic geographies of Oceania

Student Learning Outcomes:
- Identify major landforms and climates for the world’s regions and discuss their impacts on culture.
- Compare and contrast the major regions of the world based on demographic, economic and cultural characteristics.

Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 3.0
Introduction to the Natural Environment
GEOG101:

3.0 Units
Introduction to the physical elements of geography: maps, earth/sun relationships, meteorology and climatology, natural vegetation, soils, and geomorphology. Former Title: Physical Geography (2021)

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B1: Physical Sciences

IGETC - Plan C
Area 5A: Physical Science

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Geography

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Explain the earth’s reference system and utilize mapping basics.
Identify, interpret spatial patterns (distribution) and linkages between climates, vegetation, soils, and landforms.
Explain the driving forces within the atmosphere and the varieties of winds produced.
Understand the forces behind weather, the way vegetation responds to the physical environment, and how landforms develop.
Assess the natural and human-induced causes of the greenhouse effect and global climate change.
Describe geomorphic principles and processes connected to arid, fluvial, and coastal landscape features.
Observe environment and understand how it was formed and processes at work.

Student Learning Outcomes:
Demonstrate an understanding of basic principles and concepts related to weather and climate.
Explain the formation and distribution of landforms as they pertain to the theory of plate tectonics and gradational processes.
Analyze the distribution and classification of world climates and earth’s biomes.
Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
5.0

Honors Introduction to the Natural Environment
GEOG101H :

3.0 Units

Introduction to the physical elements of geography: maps, earth/sun relationships, meteorology and climatology, natural vegetation, soils, and geomorphology. Former Title: Honors Physical Geography (2021)

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area A: Natural Sciences

CSU GE - Plan B
   Area B1: Physical Sciences

IGETC - Plan C
   Area 5A: Physical Science

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Differentiate between the unique characteristics of the four components of the earth system.

Compare and contrast Latitude and Longitude.

Use maps, graphs and/or Geographic Information Systems (GIS) to analyze and interpret data.

Apply the fundamental concepts of the scientific method to basic components of earth's physical systems: atmosphere, biosphere, hydrosphere and lithosphere.

Distinguish the elements responsible for generating the seasons on earth, and apply this knowledge to formation of temperature patterns and climate zones on the planet.

Evaluate temperature differences.

Interpret data related to relative humidity and determine the likely outcome of specific weather conditions.
Measure and calculate problems associated with the adiabatic processes and stable and unstable air using appropriate formulas.

Interpret barometric data and draw logical conclusions from those data.

Evaluate local and global pressure systems.

Demonstrate the ability to predict likely weather scenarios by reading and interpreting weather maps.

Analyze climographs to determine climate type and location.

Assess the natural and human-induced causes of the Greenhouse Effect and Global Climate Change.

Describe biogeography and explain the climate and distribution of natural vegetation.

Explain the relationship between biomes and climate regions.

Identify ecological succession, plant and animal adaptations.

Describe the nature of soil, soil characteristics and spatial distribution of soils.

Identify the differences between the formation of igneous, sedimentary, and metamorphic rocks.

Describe the locations and give the names of the major tectonic plates.

Differentiate between the tectonic causes of the major landforms on earth.

Discuss the formation of the state of California.

Explain and evaluate the differences between physical and chemical weathering.

Discuss the circumstances that lead to the process of infiltration and creation of a water table and those that lead to runoff.

Compare and contrast the processes associated with erosional and depositional landforms.

Differentiate between erosional and depositional landforms associated with the fluvial, aeolian, glacial and coastal processes.

**Student Learning Outcomes:**

- Demonstrate an understanding of basic principles and concepts related to weather and climate.
- Explain the formation and distribution of landforms as they pertain to the theory of plate tectonics and gradational processes.
- Analyze the distribution and classification of world climates and earth’s biomes.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Introduction to the Natural Environment Laboratory**

**GEOG101L :**

1.0 Units

Laboratory exercises and experiments designed to explore and understand the primary areas of physical geography. Exercises and applications related to map scales and projections, stereoscopic, topographic and aerial photo interpretation, meteorological tools and models and weather prognostication, geomorphologic models and processes, and landform interpretation. Field trips may be required.

Former Title: Physical Geography Laboratory (2021)

**Requisites**

**Requisites:**

Prerequisite
GEOG101 - Physical Geography

or concurrent enrollment

OR

Prerequisite

GEOG101H - Honors Physical Geography

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area A: Natural Sciences

CSU GE - Plan B
Area B3: Laboratory Activity

IGETC - Plan C
Area 5C: Laboratory Activities

Course Identifier (C-ID)
Geography

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Explain the proper methodologies employed in a lab setting

Apply the scientific method to a variety of physical geography processes.

Demonstrate how the basic interactions between the Sun and the Earth's subsystems of the lithosphere, biosphere, hydrosphere and atmosphere affect such things as climate, seasonal changes, and hydrology

Apply concepts from lecture to hands-on mapping, instrument reading, and spatial analysis through a lab exercises and online tools.

Demonstrate an understanding of various tools used for geographic inquiry.

Critically analyze maps to identify, measure and evaluate environmental features.

Interpolate and construct various types of isopleths (isotherm, isobar, isohyet).

Analyze real-world variations in environmental patterns.

Analyze the environmental patterns through aerial photo interpretation and topographic maps.

Forecast the weather based on weather maps.

Analyze atmospheric processes through the application of adiabatic and environmental lapse rates.

Employ the Theory of Plate Tectonics to interpret a variety of landforms

Classify and interpret data related to global climates.

Student Learning Outcomes:
Utilize latitude and longitude to determine time, solar altitude, temperature distribution and describe locations on earth’s surface.
Analyze weather data with the goal of classifying sites according to climate type.
Interpret a variety of topographic and thematic maps.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Cultural Geography
GEOG102:

3.0 Units

An introductory survey of the geography of culture, and the influences of the physical environment on culture, along with the impact of human activity on the environment, and the role of culture within societies and social groups. The course includes global patterns of population, migration, religion, language, agriculture, politics, customs, resources, and urban and rural settlement.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective
Area D: Cultural Breadth

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)
Geography

Learning Outcomes

Course Objectives:
Describe the scope of geography and its main branches of study.

Explain how geographers study landscapes and regions.
Contrast the concepts of place and space.

Identify four different types of diffusion.

Explain globalization and spatial interaction.

Review the different scales using geographic research.

Explore how remote sensing, GIS and GPS work.

Describe how population is distributed around the globe.

Identify factors affecting fertility rates.

Describe how population pyramids display population data.

Explain how to calculate the age-dependency ratio.

Describe the differences among the four stages in the demographic transition model.

Distinguish among different types of internal migration.

Describe patterns of international migration.

Provide evidence to illustrate the process of globalization.

Explain the cultural impacts of globalization.

Identify elements of folk culture and its manifestations on the landscape.

Identify landscapes of popular culture and the transformation of the folk culture landscape.

Explain why using race as a classification system is problematic.

Contrast the geography of the trans-Atlantic slave trade and the geography of human trafficking.

Describe what is meant by institutional discrimination.

Identify components of ethnicity.

Identify a regional pattern associated with use of the terms race and ethnicity on censuses.

Distinguish between ethnic islands, ethnic neighborhoods and ethnoburbs.

Define environmental justice.

Identify the pattern of large and small languages in the world today.

Outline the distribution of major language families around the globe.

Explain how political, economic, and religious forces can affect the diffusion of language.

Distinguish among pidgin languages, creole languages, and lingua francas.

Identify the major dialect regions that exist in the United States.

Explain what toponyms are and what information they can provide.

Identify characteristics of animistic and syncretic religions.

Distinguish between universalizing and ethnic religions.

Identify similarities and differences among Buddhism, Hinduism, and Sikhism.

Relate the spread of religion to different types of diffusion.

Discuss the role of sacred spaces in religion.

Summarize the influence of religion on social institutions.

Define sovereignty.

Distinguish between state and nation.

Compare and contrast centripetal and centrifugal forces.
Identify two systems of internal spatial organization.

Explain how internationalism and supranational organizations are related.

Summarize the key events leading to the establishment of the European Union.

Explain how globalization can influence the diffusion of terrorism.

Distinguish between reapportionment and redistricting.

Explain gerrymandering.

Explain what development is.

Distinguish between development indicators and indexes.

Contrast the HDI, IHDI and GII.

Describe techniques for measuring and mapping income inequality.

Contrast the classical development model and dependency theory.

Define the economic sectors of the economy and the way in which they reflect in the landscape.

Identify the hearths of agriculture.

Distinguish among the first, second and third agricultural revolutions.

Distinguish between subsistence and commercial systems of agriculture.

Discuss the distribution of the four types of subsistence agriculture.

Provide examples of specialization in different types of commercial agriculture.

Summarize the von Thunen model.

Define desertification and salinization.

Explain how agriculture has been affected by globalization.

Distinguish between primary, secondary, and tertiary industries.

Summarize the origins and diffusion of the Industrial Revolution.

Identify two groups of factors that can influence the location of manufacturing.

Distinguish between outsourcing and offshoring.

Explain what an export-processing zone is.

Distinguish between a maquiladora and a special economic zone.

Identify the different categories of services.

Characterize a postindustrial society.

Summarize trends in global urbanization.

Distinguish between urban primacy and urban hierarchy.

Explain central place theory.

Identify and explain four models of urban structure for North American cities.

Define sprawl and explain how it is measured.

Identify the main goals of new urbanism.

Distinguish between redlining and blockbusting.

Define ecosystem.

Distinguish between human and natural causes of environmental degradation.

Identify important regional variations in the distribution of global oil reserves.
Asses the sustainability of hydropower.

Identify barriers associated with the wider adoption of renewable energy resources.

Distinguish between the greenhouse effect and global warming.

Relate land-use and land-cover change to sustainability.

**Student Learning Outcomes:**
- Explain the origin and distribution of language, religion, urbanization, and economic patterns.
- Discuss the impact of migration and diffusion on culture.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Honors Cultural Geography**

**GEOG102H:**

3.0 Units

An enriched and intensive study, including seminar approach with individual written and oral presentations on the geography of culture, and the influences of the physical environment on culture, along with the impact of human activity on the environment, and the role of culture within societies and social groups. The course includes global patterns of population, migration, religion, language, agriculture, politics, customs, resources, and urban and rural settlement.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area B2: Social and Behavioral Sciences: Social Science Elective
- Area D: Cultural Breadth

**CSU GE - Plan B**
- Area D: Social Sciences

**IGETC - Plan C**
- Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**
UC Comparable Transfer Courses

**Course Identifier (C-ID)**
Geography

**Learning Outcomes**

**Course Objectives:**

- Identify the pattern of large and small languages in the world today.
- Distinguish between reapportionment and redistricting.
- Explain what development is.
- Define desertification and salinization.
- Identify landscapes of popular culture and the transformation of the folk culture landscape.
- Describe how population pyramids display population data.
- Relate the spread of religion to different types of diffusion.
- Identify and explain four models of urban structure for North American cities.
- Identify four different types of diffusion.
- Distinguish between a maquiladora and a special economic zone.
- Distinguish between outsourcing and offshoring.
- Explain how political, economic, and religious forces can affect the diffusion of language.
- Identify factors affecting fertility rates.
- Describe techniques for measuring and mapping income inequality.
- Define the economic sectors of the economy and the way in which they reflect in the landscape.
- Identify important regional variations in the distribution of global oil reserves.
- Identify the major dialect regions that exist in the United States.
- Identify the main goals of new urbanism.
- Characterize a postindustrial society.
- Relate land-use and land-cover change to sustainability.
- Summarize trends in global urbanization.
- Explore how remote sensing, GIS and GPS work.
- Explain what an export-processing zone is.
- Describe patterns of international migration.
- Summarize the influence of religion on social institutions.
- Distinguish among pidgin languages, creole languages, and lingua francas.
- Outline the distribution of major language families around the globe.
- Explain what toponyms are and what information they can provide.
- Explain how globalization can influence the diffusion of terrorism.
- Explain central place theory.
- Distinguish between primary, secondary, and tertiary industries.
- Identify the hearths of agriculture.
- Summarize the key events leading to the establishment of the European Union.
- Distinguish among different types of internal migration.
- Provide evidence to illustrate the process of globalization.
Explain how to calculate the age-dependency ratio.

Identify two groups of factors that can influence the location of manufacturing.

Summarize the origins and diffusion of the Industrial Revolution.

Describe how population is distributed around the globe.

Distinguish between state and nation.

Distinguish between human and natural causes of environmental degradation.

Identify barriers associated with the wider adoption of renewable energy resources.

Describe the differences among the four stages in the demographic transition model.

Distinguish between urban primacy and urban hierarchy.

Distinguish between development indicators and indexes.

Distinguish among the first, second and third agricultural revolutions.

Contrast the HDI, IHDI and GII.

Provide examples of specialization in different types of commercial agriculture.

Explain how geographers study landscapes and regions.

Define sovereignty.

Explain why using race as a classification system is problematic.

Explain gerrymandering.

Discuss the distribution of the four types of subsistence agriculture.

Contrast the classical development model and dependency theory.

Contrast the geography of the trans-Atlantic slave trade and the geography of human trafficking.

Asses the sustainability of hydropower.

Define ecosystem.

Describe the scope of geography and its main branches of study.

Discuss the role of sacred spaces in religion.

Summarize the von Thunen model.

Compare and contrast centripetal and centrifugal forces.

Explain globalization and spatial interaction.

Distinguish between redlining and blockbusting.

Distinguish between ethnic islands, ethnic neighborhoods and ethnoburbs.

Review the different scales using geographic research.

Identify the different categories of services.

Identify characteristics of animistic and syncretic religions.

Distinguish between subsistence and commercial systems of agriculture.

Explain how internationalism and supranational organizations are related.

Explain how agriculture has been affected by globalization.

Define sprawl and explain how it is measured.

Define environmental justice.

Contrast the concepts of place and space.
Identify elements of folk culture and its manifestations on the landscape.

Identify components of ethnicity.

Identify a regional pattern associated with use of the terms race and ethnicity on censuses.

Describe what is meant by institutional discrimination.

Distinguish between universalizing and ethnic religions.

Identify two systems of internal spatial organization.

Identify similarities and differences among Buddhism, Hinduism, and Sikhism.

Distinguish between the greenhouse effect and global warming.

Describe what is meant by institutional discrimination.

Identify similarities and differences among Buddhism, Hinduism, and Sikhism.

Distinguish between the greenhouse effect and global warming.

Explain the cultural impacts of globalization.

**Student Learning Outcomes:**

- Explain the origin and distribution of language, religion, urbanization, and economic patterns.
- Discuss the impact of migration and diffusion on culture.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Introduction to Weather and Climate**

**GEOG130:**

3.0 Units

This course examines Earth’s weather and climate patterns from a geographic perspective. Students explore the basic principles of weather and climate as well as causes and effects. Emphasis is placed on understanding various elements and controls of weather and climate. Techniques and principles involved in interpreting weather data, weather charts and maps, and weather forecasting will also be introduced. Field trips may be required.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area A: Natural Sciences

**CSU GE - Plan B**

Area B1: Physical Sciences

**IGETC - Plan C**
Area 5A: Physical Science

Course Identifier (C-ID)
Geography

Learning Outcomes

Course Objectives:
Identify the reasons for seasonal change
Describe the seasons in terms of change in day length, solar altitude, and solar declination
Evaluate the day length and energy received based on latitude.
Diagram earth / sun relation models for the June Solstice, December Solstice and Equinoxes.
Compose a model of the vertical structure of the atmosphere.
Identify the variable and constant gases that make up our atmosphere
Analyze the vertical change in temperature based on the Environmental Lapse Rate
Describe the function of the Ozone layer
Evaluate how humans have impacted the Ozone layer.
Evaluate the unequal distribution of heat energy on the Earth
Identify locational differences in distribution of solar energy
Evaluate transfer of heat mechanisms
Describe the global energy budget
Identify the difference between long wave and short wave energy
Describe solar energy in terms of the electromagnetic spectrum
Describe how the angle of incidence affects energy received.
Describe how energy moves through the atmosphere
Discuss how energy is lost as it moves through the atmosphere
Identify how land and water heat differently
Describe the factors that control the distribution of temperature
Calculate temperature mean and average
Describe various components of temperature measurements
Describe current temperature trends
Categorize geographic patterns of global temperature
Construct a diagram demonstrating the global atmospheric circulation
Diagram wind patterns
Evaluate conditions to determine type of local wind produced
Describe the factors that affect atmospheric pressure
Describe the upper atmospheric winds
Identify the cause and effect of El Nino on Southern California
Identify the cause and effect of La Nina on Southern California
Describe the hydrologic cycle
Describe the storage or release of latent heat during phase changes of water

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32faa6eb18
Calculate relative humidity and dew point temperatures
Describe the adiabatic process
Calculate temperature change based on adiabatic lapse rates
Describe forms of condensation
Identify lifting mechanisms
Evaluate stable versus unstable air masses based on temperature data
Categorize geographic patterns of global precipitation
Identify and classify air masses based on source region
Describe various types of fronts
Describe the temperature, pressure, winds and cloud cover associated with various sectors of a midlatitude cyclone.
Describe anticyclones
Describe impacts of climate change on cyclones.
Describe the formation of lightning
Describe the factors that contribute to Thunderstorms
Evaluate site characteristics that encourage tornado formation
Identify the formation and movement of tropical storms
Describe the hazards associated with atmospheric disturbances.
Identify frontal systems on weather maps
Analyze weather station models
Analyze remotely sensed data to identify various aspects of weather
Describe forecasting methods
Classify climates using the Koppen Climate classification system
Evaluate climates based on climographs
Categorize geographic patterns of global climates
Identify location of climographs on world map
Construct climographs
Describe the characteristics and controls of world climates based on Koppen Climate classification
Describe proxy measurements used to determine past climates
Describe the temperature trends at various time scales
Identify the temperature trends in the past century
Evaluate data and evidence of climate change
Discuss feedback mechanisms
Describe regional impacts of climate change
Discuss projections and models
Assess natural and anthropogenic causes of modern global climate change

Student Learning Outcomes:
Identify the geographic distributions of climate processes such as temperature, precipitation and weather.
Analyze tabular data to determine climate type.
Interpret weather maps and atmospheric data.
Analyze the causes and explain the implications of global climate change.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Honors Introduction to Weather and Climate**

**GEOG130H:**

3.0 Units

Enriched and intensive study, including seminar approach with individual written and oral presentations on Earth's weather and climate patterns from a geographic perspective. Students explore the basic principles of weather and climate as well as causes and effects. Emphasis is placed on understanding various elements and controls of weather and climate. Techniques and principles involved in interpreting weather data, weather charts and maps and weather forecasting will also be introduced. Field trips may be required.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
Area A: Natural Sciences

**CSU GE - Plan B**
Area B1: Physical Sciences

**IGETC - Plan C**
Area 5A: Physical Science

**Course Identifier (C-ID)**
Geography

**Learning Outcomes**

**Course Objectives:**
Describe the storage or release of latent heat during phase changes of water

Describe forecasting methods

Describe the temperature, pressure, winds and cloud cover associated with various sectors of a midlatitude cyclone.

Identify the cause and effect of El Nino on Southern California

Analyze remotely sensed data to identify various aspects of weather

Evaluate stable versus unstable air masses based on temperature data
Describe how the angle of incidence affects energy received.

Diagram earth / sun relation models for the June Solstice, December Solstice and Equinoxes.

Calculate temperature change based on adiabatic lapse rates

Categorize geographic patterns of global climates

Describe impacts of climate change on cyclones.

Describe the temperature trends at various time scales

Diagram wind patterns

Describe anticyclones

Describe solar energy in terms of the electromagnetic spectrum

Evaluate data and evidence of climate change

Analyze the vertical change in temperature based on the Environmental Lapse Rate

Describe the characteristics and controls of world climates based on Koppen Climate classification

Construct climographs

Describe the factors that affect atmospheric pressure

Describe forms of condensation

Identify lifting mechanisms

Describe various components of temperature measurements

Discuss projections and models

Describe proxy measurements used to determine past climates

Identify the formation and movement of tropical storms

Identify location of climographs on world map

Identify the difference between long wave and short wave energy

Evaluate climates based on climographs

Describe how energy moves through the atmosphere

Discuss how energy is lost as it moves through the atmosphere

Evaluate site characteristics that encourage tornado formation

Identify the reasons for seasonal change

Describe the function of the Ozone layer

Compose a model of the vertical structure of the atmosphere.

Categorize geographic patterns of global precipitation

Identify the cause and effect of La Nina on Southern California

Categorize geographic patterns of global temperature

Describe the formation of lightning

Evaluate how humans have impacted the Ozone layer.

Evaluate the day length and energy received based on latitude.

Describe the hydrologic cycle

Identify the variable and constant gases that make up our atmosphere

Evaluate conditions to determine type of local wind produced
Calculate temperature mean and average
Evaluate transfer of heat mechanisms
Describe regional impacts of climate change
Describe the seasons in terms of change in day length, solar altitude, and solar declination
Identify frontal systems on weather maps
Describe the upper atmospheric winds
Describe various types of fronts
Describe the hazards associated with atmospheric disturbances.
Identify the temperature trends in the past century
Describe the factors that contribute to Thunderstorms
Describe the adiabatic process
Identify locational differences in distribution of solar energy
Describe the global energy budget
Describe current temperature trends
Calculate relative humidity and dew point temperatures
Discuss feedback mechanisms
Assess natural and anthropogenic causes of modern global climate change
Evaluate the unequal distribution of heat energy on the Earth
Classify climates using the Koppen Climate classification system
Identify and classify air masses based on source region
Describe the factors that control the distribution of temperature
Identify how land and water heat differently
Construct a diagram demonstrating the global atmospheric circulation
Analyze weather station models

**Student Learning Outcomes:**
- Identify the geographic distributions of climate processes such as temperature, precipitation and weather.
- Analyze tabular data to determine climate type.
- Interpret weather maps and atmospheric data.
- Analyze the causes and explain the implications of global climate change.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**California Geography**

**GEOG140:**
3.0 Units

A thematic approach to California's geographical issues, processes and topics relevant to geography including climate, landforms, natural vegetation, water resources, cultural landscape, ethnic diversity, urban and agricultural regions, and the economy. This course explores the physical and human landscapes that have evolved as a result of the human-environment interface. Field trips may be required.

Requisites
Requisites:
Advisory

GEOG100 - World Regional Geography

OR

Advisory

GEOG100H - Honors World Regional Geography

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

Course Identifier (C-ID)
Geography

Learning Outcomes
Course Objectives:
Describe California in terms of site and situation.

Identify the various regions within California.

Describe California's diverse physical landscapes, examining spatial relationships between physiographic regions

Analyze relationships between California's physical environments and the State's geologic history

Evaluate the potential for earth resources based on geologic history.

Identify landforms formed by the San Andreas Fault.

Describe the spatial distribution of modern volcanic landforms.

Identify landforms based on external processes such as weathering, mass wasting and erosion.

Identify atmospheric pressure zones and air masses that affect California.

Describe the variation in annual temperature and precipitation.

Analyze the orographic effect on California's regions.

Describe the process that creates various types of fog in California.

Analyze climographs to determine spatial location within California.
Describe California’s diverse climatic regions.

Describe California’s diverse physical landscapes examining spatial relationships between climates, geology and biology.

Distinguish between California’s diverse biomes.

Describe the various plant communities based on their habitat and structure.

Identify the soils associated with various biomes.

Describe California’s water budget.

Discuss the redistribution of water across the state.

Identify where Southern California’s water originates.

Describe how various cultural groups have utilized California’s water resources.

Discuss California’s water projects.

Analyze the use of water resources and the development of both the economic and cultural landscapes of California.

Interpret and identify prehistoric Californians and regional variations.

Analyze the European discovery of California.

Describe and define the role of Missions and the Spanish Era, Mexican influence, land-grants and ranchos.

Analyze the discovery of gold and the world rushes as California transitions to a statehood.

Describe migration patterns and their effects.

Identify population clusters in California.

Analyze the influence of varying cultural and ethnic groups in the shaping of the cultural landscapes of California.

Describe California’s economy in terms of primary, secondary and tertiary industries.

Identify the process of building an agricultural economy.

Define the various crops, livestock and dairy products that make California an agricultural powerhouse.

Describe how the rural landscape continues to evolve.

Describe the timber industry and its role in California economic development.

Evaluate the origins and development of agriculture and industry in California.

Define the various industries that make California an economic powerhouse in the nation and world.

Define the growth and evolution of California’s urban areas.

Evaluate various site and situation factors that have influenced the location and growth of cities.

Describe California’s urban landscape as economic and cultural centers.

Compare patterns of urban development in the state and evaluate current and future trends.

Analyze limited resources such as water, natural resource development, and conservation.

Describe and understand agriculture, water, rural vs. urban concerns, land ownership and control.

Interpret trends in economic development, education, and urbanization.

Analyze and evaluate potential solutions to the issues faced by all Californians including but not limited to growing population, limited resources such as water, urbanization, agriculture, diversity, and economic development.

**Student Learning Outcomes:**

- Describe and identify the physiographic, climatic types and water features in the state.
- Explain and identify the historic evolution of human population including the distribution of natural resources and analyze their economic significance.
- Analyze a variety of cultural and physical geographic data in order to understand the state of California in terms of its geographic regions, cultural and physical geography.
Units & Hours
Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 54.0

Exploring Maps and Geographic Technologies
GEOG150:

3.0 Units

This class is an introduction to maps, images and geospatial techniques and technologies. The technologies covered in this course include map and aerial photograph interpretation, tabular data, spatial statistics, cartography, Global Positioning Systems (GPS), Internet mapping, remote sensing and Geographic Information Systems (GIS), all of which aid in data collection, analysis and presentation. Field trips may be required. Previous Title: Map Interpretation and Analysis (2017)

Requisites

Requisites: None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Course Identifier (C-ID) Geography

Learning Outcomes
Course Objectives:
Describe how maps record locations and other forms of spatial information.
Describe how maps are used in various industries.
Discuss ways in which maps can mislead users.
Discuss map scale.
Use grid systems, Latitude/Longitude and Township/Range, to describe locations.
Effectively use scale for measurement and evaluation of appropriate map use.
Evaluate map projections, datums and related characteristics in terms of their function, common types, and their effect on map accuracy.
Describe geographic technologies and their use in collecting, analyzing and displaying geospatial data.
Utilize internet based mapping technologies to display data.
Discuss the use and limitations of different mapping technologies.
Collect data using a compass and rod.
Identify an unknown location using triangulation.
Estimate distances using pacing.

Construct elevation contours.

Create spatial data by digitizing images.

Tabular recording of field generated data.

Basic statistical analysis

Employ survey methods for the capture of geographic data for mapping.

Define how GPS works.

Identify limitations of GPS.

Improvise positional accuracy.

Explain post-processing vs. real-time corrections.

Employ a global position systems (GPS) for the capture of geographic data for mapping.

Define the principles of cartographic design.

Discuss how real world items are represented on maps.

Discuss how spatial and non-spatial information can be visually represented.

Evaluate classification methods.

Display numeric data.

Evaluate different cartographic techniques for mapping quantitative and qualitative data.

Demonstrate an understanding of mapping concepts and the ability to interpret maps and mapped data.

Understand how to collect field data for GIS applications.

Import GPS data into a GIS.

Collect, create, and analyze spatial data in GIS.

Differentiate between raster and vector data

Utilize geographic information systems (GIS) to explore and interpret geographic data related to population and the environment.

Produce effective maps using GIS software.

Utilize GIS to perform basic spatial analysis.

Create spatial data from street addresses.

Create maps from field-collected data.

Understand basics of aerial photography.

Interpret imagery using traditional aerial photo and digital imagery methods.

Measure surface landscapes using air photos.

Define image resolution.

Articulate remote sensing principles.

Utilize satellite imagery to study the environment.

**Student Learning Outcomes:**

Interpret maps and mapped data utilizing basic map elements, including scales, common coordinate systems, and map symbols.

Demonstrate the ability to use geographic technologies in collecting, analyzing and displaying geospatial data.

Interpret imagery using traditional aerial photo and digital imagery methods.

**Units & Hours**

**Minimum Units:**
Maximum Units
3.0

Total Hours
54.0

Introduction to Geographic Information Systems
GEOG155:

3.0 Units

This course introduces basic scientific principles of Geographic Information Systems (GIS) as they relate to working with data that have important spatial orientation and organization. Geographic concepts and theories are used to develop scientific methods for proper communication of the data and the solution of problems that have spatial relationships. The adaptability of GIS to a wide variety of applications useful for many disciplines is presented. The course covers basic concepts in mapping and orientation, the development of map scales and comparison of different coordinate systems and data error analysis.

Requisites
Requisites:
Anti-Requisite
SURV155 - Introduction to Geographic Information Systems

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

Course Identifier (C-ID)
Geography

Learning Outcomes
Course Objectives:
Describe characteristics and the history of Geographic Information Systems
Describe how Geographic Information Systems are used to solve a wide variety of Socioeconomic and Business related issues.
Interpret map projections
Identify, compare and contrast vector and raster GIS
Describe the use of data layers within GIS
Identify and evaluate GIS data sources and the importance of metadata
Describe the process by which addresses are parsed into latitude and longitude coordinates.
Identify issues with georeferencing.
Evaluate different sources of GIS data.
State plane coordinates in a digital format
Use equivalent, conformal, and other standard map projections

Describe how to setup and manage a geospatial database

Identify geoprocessing techniques (e.g., clip, dissolve, buffer)

Evaluate the use of geoprocessing techniques.

Differentiate basic analytical functions such as join, union, and buffer.

Ask a geographic question

Identify a problem of geospatial nature

Identify relevant geographic data.

Design a plan to acquire relevant geographic data

Analyze data using GIS

Apply geographic knowledge to this specific application

Present results.

Utilize the basics of industry-standard ArcGIS software

Import and format spatial data for use in GIS

Demonstrate practical applications of data input

Analyze and use aerial photography

Use street addresses to demonstrate the utility of geocoding

Digitize, scan, and collect data in the field

Convert digital data to a uniform projection and scale

Import and merge tabular data to create maps

Create basic GIS map products using a variety of geographic scales

Perform common map projections used in mapping

Query, edit and maintain a geospatial database

Identify and apply geoprocessing techniques (e.g., clip, dissolve, buffer)

Incorporate join, union, buffering, and other basic analytical functions in GIS application

Ask a geographic question

Acquire geographic resources

Explore geographic data

Analyze geographic information

Act on geographic knowledge

**Student Learning Outcomes:**

Define a Geographic Information System.

Demonstrate basic proficiency in map creation and design principles, including thematic map display, employment of map projections and cartographic design, to solve a problem of geographic nature.

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**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0
Total Hours
72.0

Regional Field Studies
GEOG160:

1.0 Units

This lecture and laboratory field course studies the cultural and physical geography of a region. Students will observe and interpret the physical and cultural processes of the region. Topographical maps will be utilized to interpret land use and terrain. Specific content will vary by geographic region. Field Trips are required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0

General Education Plan:

Course Identifier (C-ID)
Geography

Learning Outcomes

Course Objectives:
Assess climate, soil, water and vegetation
Present findings
Research historical settlement in the region
Describe ethnicity and cultural characteristics in the region
Identify locations using the geographic grid
Identify physical and cultural features using map symbols
Identify landforms using contour lines on a topographic quadrangle
Plot locations using GPS
Physical Data
Collect temperature using Fahrenheit or Celsius
Calculate humidity with the sling psychomotor
Collect soil samples
Identify flora and fauna
Describe analysis and data collection protocols
Analyze the influence of parent material and weathering in soil
Classify landform types
Classify landform types
Identify processes of landform development including tectonics, diastrophism, weathering, fluvial, aeolian, and glacial. Cultural Data
Identify regional architecture and its influences
Identify ethnic influences in the landscape – architecture, language, religion, food, dress

Analyze land use, including:

Role of physical environment in agriculture and extraction

Economic development

Identify environmental issues such as public land usage, water rights, and public policy

Document trip photographs

Document trip by mapping field locations

Summarize findings

Observe and analyze adaptation of vegetation to regional climate/s and soil types

**Student Learning Outcomes:**

Interpret real-life environments in the field in terms of climate, elements of weather, soils, vegetation, geology, and landforms.

Evaluate the interrelationships between the physical and cultural environment.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

36.0

**Introduction to Women's Studies**

**GSWS101:**

3.0 Units

A multicultural survey of social trends, issues, opportunities, and topics of special interest to women. Discussion includes sex, sex role stereotyping, family problems, work, law, gender equity, physical and mental health, feminism, rape, and women in arts, sciences, history and business. Field trips may be required. Previous Title: Women's Studies 101, Introduction to Women's Studies (2018)

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area D: Cultural Breadth

**CSU GE - Plan B**

Area D: Social Sciences

**IGETC - Plan C**
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)

Social Justice Studies

Learning Outcomes

Course Objectives:

Describe the origins and goals of the discipline of Women's Studies and the relationship to the women's movement and current social justice movements.

Articulate an understanding of issues of gender and sexuality and how expressions of sexuality are shaped by race and class.

Examine the difference between sex and gender, the roles of biology and culture in shaping gender identity, and the influence of socializing agents on the formation of gender.

Identify and explain the diverse range and scope of key concepts and theoretical strains in feminist theory.

Identify the ways in which women shape and are shaped by American politics.

Examine how the legal system and public policy affects women.

Identify and describe the reasons and impacts of women's movements and how these movements are shaped by race, class, sexuality, and other axes of identity and difference.

Demonstrate an understanding of how education structures and policies affect women.

Identify current trends in women's health, the effects of social institutions on women's health, and women's health movements.

Articulate the effects of violence against women and the micro- and macro-level movements to end violence against women.

Describe the origins of the Western family, the role of women in contemporary families, and sources of inequity in the institution of the family.

Explore women's experiences in the workforce, unequal pay, and the second shift.

Discuss feminist theoretical perspectives of the environment and the efforts of ecofeminist movements.

Explore the roles of women in religious institutions.

Investigate the social construction of gender, theories of women and crime, and women in the criminal justice system.

Define social change and feminist social and political movements.

Describe the origins and goals of the discipline of Women's Studies and the relationship to the women's movement and current social justice movements.

Articulate an understanding of issues of gender and sexuality and how expressions of sexuality are shaped by race and class.

Examine the difference between sex and gender, the roles of biology and culture in shaping gender identity, and the influence of socializing agents on the formation of gender.

Identify and explain the diverse range and scope of key concepts and theoretical strains in feminist theory.

Identify the ways in which women shape and are shaped by American politics.

Examine how the legal system and public policy affects women.

Identify and describe the reasons and impacts of women's movements and how these movements are shaped by race, class, sexuality, and other axes of identity and difference.

Demonstrate an understanding of how education structures and policies affect women.

Identify current trends in women's health, the effects of social institutions on women's health, and women's health movements.

Articulate the effects of violence against women and the micro- and macro-level movements to end violence against women.

Describe the origins of the Western family, the role of women in contemporary families, and sources of inequity in the institution of the family.
Explore women’s experiences in the workforce, unequal pay, and the second shift.

Discuss feminist theoretical perspectives of the environment and the efforts of ecofeminist movements.

Explore the roles of women in religious institutions.

Investigate the social construction of gender, theories of women and crime, and women in the criminal justice system.

Define social change and feminist social and political movements.

**Student Learning Outcomes:**

- Distinguish, explain and evaluate the differences between sex and gender.
- Describe and analyze the various issues, stages and impacts of the women's movements in the United States.
- Describe and analyze the various issues, stages, and impacts of the women’s movements in the United States.
- Critically analyze and explain how the social construction of gender affects and is affected by the following: language, the family, academic education, the media, employment, politics, law, history, religion and health.
- Critically analyze and explain how the social construction of gender affects and is affected by the following: language, the family, academic education, the media, employment, politics, law, history, religion, and health.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Money, Sex, and Power**

**GSWS102:**

3.0 Units

Examination of women's roles in America. Emphasis on employment, family structures, and personal development. Topics include historical patterns, socialization, opportunities, sexism, identity, growth, law, unionization, sexual harassment, media influence, family pressures, child care, guilt, stress. Previous Title: Women’s Studies 102, Women in America: Work, Family, Self (2018)

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area D: Cultural Breadth

**CSU GE - Plan B**

Area D: Social Sciences

**IGETC - Plan C**

Area 4: Social and Behavioral Sciences
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Critically evaluate the various theories of the working woman and the politics of knowledge building.

Employ an intersectional analysis to describe how social structure and culture shape gendered identities and experiences, including career choices.

Place issues of intersectionality and gender diversity in their historical context to understand the contemporary conditions of working women and social inequality in the workplace.

Explain trends in the gender composition of individual occupations as well as trends in occupational segregation by defining the wage gap and identifying legislative measures designed to protect workers' right.

Describe the roles and challenges of women in the military and blue and pink collar occupations.

Describe how working mothers meet their dual responsibilities inside and outside the home by examining the effects of motherhood on wages and how cultural ideals of motherhood impact mothers.

Illustrate the structural barriers, such as the glass ceiling that prevent the advancement of women in the professions and management.

Explain how capitalism and industrialization impacted women and their families by examining the second shift, childcare issues, and how work impacts parenting and the division of labor in dual-earner families.

Describe how sexual harassment, Title IX, and social movements relate to gender, sexual orientation, and related hierarchies of power in the workplace.

Articulate key concepts in globalization as they apply to women's roles and statuses by examining major transformations of women's status and roles in the developing world brought about by economic and cultural globalization.

Identify social and political movements to change gender inequalities and gender practices that affect working women.

Student Learning Outcomes:
Identify historical and contemporary events and legislation affecting women's paid and unpaid labor.
Employ an intersectional lens to analyze obstacles such as sexual harassment, child care, and the "glass ceiling," globalization, and unpaid labor as situated within a socio-political context affecting women.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Men and Masculinities

GSWS103:
3.0 Units

This interdisciplinary course utilizes an intersectional lens to understand the social construction of masculinity in the context of media, sports, fraternities, families, men's movements, and social and political institutions. This course critically analyzes how male identities are constructed and negotiated through examining theories of gender, sexuality, class, race/ethnicity, and different dimensions of difference.

Requisites

Requisites:
None
Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
  Area D: Social Sciences

IGETC - Plan C
  Area 4: Social and Behavioral Sciences

Learning Outcomes

Course Objectives:
Articulate the definition and theories of patriarchy and male privilege.

Describe the differences between essentialist and constructionist approaches to explaining gender.

Identify historical and contemporary men's movements and their ideological principles.

Define theories pertaining to the boy crisis and its socio-cultural consequences.

Demonstrate intersectional knowledge of experiences and challenges of fatherhood.

Understand how the media constructs and reproduces masculinities.

Illustrate how masculine expression and representations have evolved in the music industry.

Critique the benefits and consequences of sports in the lives of boys and men.

Describe how the intersection of men, anger, violence, and crime perpetrate violence and crime, including violence directed toward boys and men.

Analyze the influence of pornography on men and how the consumption of pornography affects men's treatment of women.

Articulate the intersectional causes, effects, and suggestions for men's health.

Student Learning Outcomes:

  Evaluate and analyze men, masculinities, and male behavior in different historical, cultural, and social contexts.
  Articulate how the intersection of race, class, gender, sexuality, and other elements of social identities construct the perspectives and life experiences of males in sociohistoric and cultural contexts.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Art*

Mission

The Santiago Canyon College Art Department is committed to creating a student-centered learning environment that encourages the development of students' aesthetic vision, knowledge of historical and contemporary art developments, awareness of the current art climate on a regional, national and international scale, and technical skills in all disciplines of the visual arts. The Department prepares students for further study and/or employment in the visual arts and related fields. (Reviewed Fall 2011)
Department Chair
Robbie Miller
(714) 628-4834

Programs
Graphic Design, AS
Apply Now

World Civilizations to the 16th Century
HIST101:

3.0 Units

Examines the development of world civilizations and their interrelationships through analysis of their basic ideas, institutions, personalities, and artistic achievements from the earliest beginnings to the sixteenth century.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area B: Social and Behavioral Sciences

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences

Course Identifier (C-ID)
History

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:

Explain the study of the earliest civilizations as they developed during the Neolithic and Bronze Ages with an emphasis on the ways early humans sought to organize their lives, the beginnings of government, development of writing and religious traditions.

Classify ancient civilizations in the fertile Crescent, Egypt, India and China with an emphasis on the development of Aryan culture in India and the religious traditions foundational to Hinduism and Buddhism.

Examine the social caste system as it developed in Aryan India and explain how it compares to other world systems.
Classify and examine ancient mythologies such as Gilgamesh, Homer, and the Bible for insight into the development of historical writing, ideas about the afterlife and the basis of morality.

Discuss how ideas of race may have limited recognition of the accomplishments of Egyptian culture and how they were classified as Middle-Eastern rather than African.

Identify and analyze ancient Greek civilization; its intellectual achievements, political, social, economic, and cultural patterns and its influence with an emphasis on the disparate Hellenistic kingdoms following the career of Alexander the Great.

Compare the different gender roles and expectations placed on women in Athens and Sparta.

Describe the Greek concept of citizenship as it concerns race and ethnicity.

Examine the role of women in Ancient Sparta.

Examine how their role was different from women in other city states.

Develop an understanding of early Rome and the institutions of the republic culminating in the death of Caesar.

Trace the development of the empire and the resulting challenges posed by barbarians, civil war and imperial hubris.

Describe the class conflict in Rome that led to the social wars and the position of Tribune.

Discuss the division between Patrician and Plebian.

Examine Roman literature and discuss female figures such as Lucretia and the Sabine Women.

Describe how marriage was an important political tool in Rome.

Analyze the last decades of the Roman empire with an emphasis on its slow decline, conversion to Christianity, economic and social problems, and relations with the Germanic peoples.

Describe Indian, Chinese, and Japanese societies during the classical era as well as the emergence of civilizations in Africa south of the Sahara.

Compare the gender roles for women in the China's Tang and Song period.

Examine the connections between culture and the interchange of ideas, commerce, and biology.

Describe the Byzantine Empire and its combination of Greek and Roman heritage with a focus on the Great Schism and the development of Orthodox Christianity.

Discuss the foundation of Islam and its spread through the Mid-East and Eastern Europe.

Examine the Crusades, the siege of Constantinople, Islamic culture, and the role of Islam in preserving Greek science.

Describe the role of women in Classical Islamic Society.

Examine Medieval civilization in Europe including the development of feudalism, advances in agriculture and technology, and the difficult relationship between church and state authorities.

Explore Asian and American civilizations during the Medieval period with an emphasis on Japan and the type of feudal system that developed in Japan.

Explain the study of the Hundred Years War as the culmination of Medieval warfare and the dynastic struggles between England and France.

Analyze the image and treatment of Joan of Arc.

Examine England's Norman conquest and the eventual issue of Magna Charta.

Describe the Trans-Saharan trade and development of African Kingdoms and Empires.

Analyze the movements of languages and cultures in Africa.

Undersand how African history uses other than written sources.

Explain study the Renaissance and the new emphasis on Greek classics and study in the humanities with an emphasis on the Italian city states as experiments in political science, banking and high culture.

Examine changing ideas about gender roles.
Analyze the theological split that initiated the Reformation.

Describe how Luther's ideas about spiritual freedom lead to class revolt.

Examine class based on uprisings such as the Peasants revolt in 1381 England.

Describe and analyze the civilizations that developed in the Americas by the 15th century with particular emphasis on the Incas and Aztecs.

Describe the period of early exploration and increasing contact among European, African, Asian and American civilizations by the end of the 15th century and analyze the cultural and technological changes which permitted these developments.

Apply concepts of the Columbian Exchange to explain the course of European expansion into the new world.

**Student Learning Outcomes:**
- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Demonstrate the ability to discuss, analyze, and compare and contrast, diverse world cultural, religious, and political traditions.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours**
54.0

**Honors World Civilizations to the 16th Century**

**HIST101H:**

3.0 Units

An enriched approach designed for honors students that includes individual research as well as small group analysis of historical problems. Examines the development of world civilizations and their interrelationships through analysis of their basic ideas, institutions, personalities, and artistic achievements from the earliest beginnings to the sixteenth century.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area B2: Social and Behavioral Sciences: Social Science Elective

**CSU GE - Plan B**
- Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
- Area D: Social Sciences

**IGETC - Plan C**
- Area 3B: Humanities
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)

History

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:
Explain the study of the earliest civilizations as they developed during the Neolithic and Bronze Ages with an emphasis on the ways early humans sought to organize their lives, the beginnings of government, development of writing and religious traditions.

Classify ancient civilizations in the fertile Crescent, Egypt, India and China with an emphasis on the development of Aryan culture in India and the religious traditions foundational to Hinduism and Buddhism.

Examine the social caste system as it developed in Aryan India and explain how it compares to other world systems.

Classify and examine ancient mythologies such as Gilgamesh, Homer, and the Bible for insight into the development of historical writing, ideas about the afterlife and the basis of morality.

Discuss how ideas of race may have limited recognition of the accomplishments of Egyptian culture and how they were classified as Middle-Eastern rather than African.

Identify and analyze ancient Greek civilization; its intellectual achievements, political, social, economic, and cultural patterns and its influence with an emphasis on the disparate Hellenistic kingdoms following the career of Alexander the Great.

Compare the different gender roles and expectations placed on women in Athens and Sparta.

Describe the Greek concept of citizenship as it concerns race and ethnicity.

Describe how slavery in the ancient world was connected to race.

Examine the role of women in Ancient Sparta.

Describe how their role was different from women in other city states.

Develop an understanding of early Rome and the institutions of the republic culminating in the death of Caesar.

Trace the development of the empire and the resulting challenges posed by barbarians, civil war and imperial hubris.

Describe the class conflict in Rome that led to the social wars and the position of Tribune.

Discuss the division between Patrician and Plebian.

Examine Roman literature and discuss female figures such as Lucretia and the Sabine Women.

Describe how marriage was an important political tool in Rome.

Analyze the last decades of the Roman empire with an emphasis on its slow decline, conversion to Christianity, economic and social problems, and relations with the Germanic peoples.

Describe Indian, Chinese, and Japanese societies during the classical era as well as the emergence of civilizations in Africa south of the Sahara.

Compare the gender roles for women in the China's Tang and Song period.

Examine the connections between cultures and the interchange of ideas, commerce, and biology.

Describe the Byzantine Empire and its combination of Greek and Roman heritage with a focus on the Great Schism and the development of Orthodox Christianity.

Discuss the foundation of Islam and its spread through the Mid-East and Eastern Europe.

Examine the Crusades, the siege of Constantinople, Islamic culture, and the role of Islam in preserving Greek science.

Describe the role of women in Classical Islamic Society.
Examine Medieval civilization in Europe including the development of feudalism, advances in agriculture and technology, and the difficult relationship between church and state authorities.

Explore Asian and American civilizations during the Medieval period with an emphasis on Japan and the type of feudal system that developed in Japan.

Explain the study of the Hundred Years War as the culmination of Medieval warfare and the dynastic struggles between England and France.

Analyze the image and treatment of Joan of Arc.

Examine England's Norman conquest and the eventual issue of Magna Charta.

Describe the Trans-Saharan trade and development of African Kingdoms and Empires.

Explain study the Renaissance and the new emphasis on Greek classics and study in the humanities with an emphasis on the Italian city states as experiments in political science, banking and high culture.

Examine changing ideas about gender roles.

Analyze the theological split that initiated the Reformation.

Describe how Luther's ideas about spiritual freedom lead to class revolt.

Examine class based on uprisings such as the Peasants revolt in 1381 England.

Describe and analyze the civilizations that developed in the Americas by the 15th century with particular emphasis on the Incas and Aztecs.

Describe the period of early exploration and increasing contact among European, African, Asian and American civilizations by the end of the 15th century and analyze the cultural and technological changes which permitted these developments.

Apply concepts of the Columbian Exchange to explain the course of European expansion into the new world.

Discuss the development of various African peoples including ideas of social organization, religion and language.

Describe how Africa historians use sources other than written documents.

**Student Learning Outcomes:**
- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Demonstrate the ability to discuss, analyze, and compare and contrast, diverse world cultural, religious, and political traditions.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**World Civilizations Since the 16th Century**

**HIST102:**

3.0 Units

Broad historical study of world civilizations and their interrelationships from the 16th century to the present. Includes ideas, institutions, personalities, and artistic achievements which have contributed to present day society.

**Requisites**

**Requisites:**

None
Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
History

Learning Outcomes

Course Objectives:
Analyze the rise of Muslim Empires in Western and Central Asia and West Africa during the 16th Century.

Identify the technologies, motivations, and limits of contacts between Europe, Africa, Asia, and Americas.

Describe the economic, social, political, intellectual, and religious characteristics of European society in the late 16th century: specifically the Enlightenment and Scientific Revolution.

Examine the trends toward centralization of power in Europe. Trace the progress of liberalism and representative government in England.

Assess the Atlantic Slave Trade, first Age of Imperialism, and limits of European expansion and global power.

Examine the development and impact, both regional and global, of the Great Power system in Europe.

Examine the roots of the French Revolution and its global reverberations.

Explain the challenges posed by the French Revolution, the rise of Napoleon Bonaparte, and the consequences of the Napoleonic era.

Analyze American independence movements in their commonalities and diversity.

Describe the origins of the industrial revolution and its impact globally.

Assess the shift from the Atlantic slave trade to “legitimate” trade between Europe and Africa.

Identify the rise of new, locally rooted regimes in Africa and the Middle East.

Examine changes in late 19th Century European society, economy, and technology.

Describe new political configurations in Europe, including the nation-state and political institutions.

Describe the evolution of European political institutions.

Explain shifts in identification and treatment of minorities in Europe, Russia, and the Ottoman Empire.

Assess modernization projects in Japan, China, and the Ottoman Empire, as well as next wave independence movements in Latin America.
Identify roots of capitalism and its global impact.

Analyze new imperialism, accommodation and resistance, and resulting economic and societal change in Africa and Asia.

Explain the global dimensions of World War I, including African participation, the creation of the modern Middle East and power dynamics in Europe.

Assess the Great Depression and World War II as global events.

Describe the rise of anti-imperialist movements in Africa and Asia, challenges faced and successes won.

Examine the liberation movements of the regimes of segregation such as South Africa, Zimbabwe, and Civil Rights movement in the United States.

Analyze the rise of socialist regimes in Asia and Russia, the development of theocratic regimes in the Middle East, and the solidification of capitalism in Europe and the United States.

Identify the global Cold War including proxy wars in Latin America, Africa and Asia.

Understand global power dynamics of the late 20th and early 21st centuries and the impact on immigration, manufacturing and consumption, and disparities of wealth.

**Student Learning Outcomes:**

- Analyze primary and secondary sources to develop analytical skills by evaluating key historical descision, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Demonstrate the ability to discuss, analyze, and compare and contrast, diverse world cultural, religious, and political traditions.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Honors World Civilizations Since the 16th Century**

**HIST102H:**

3.0 Units

An enriched approach designed for honors students with emphasis on individual research as well as small group analysis of historical problems. Broad historical study of world civilizations and their interrelationships from the 16th century to the present. Ideas, institutions, personalities, and artistic achievements which have contributed to present day society.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**
Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
History

Learning Outcomes

Course Objectives:
Analyze the rise of Muslim Empires in Western and Central Asia and West Africa during the 16th Century.
Identify the technologies, motivations, and limits of contacts between Europe, Africa, Asia and the Americas.
Describe economic, social, political, intellectual, and religious characteristics of European society in the late 16th century including trends toward absolute power. Specifically examine the Enlightenment, the Scientific Revolution.
Examine the development of liberalism and representative government in England.
Assess the Atlantic Slave Trade, the first age of imperialism, and limits of European expansion and power.
Examine the development and impact, both regional and global, of the Great Power system in Europe.
Examine the roots of the French Revolution and its global reverberations.
Explain the challenges posed by the French Revolution, the rise of Napoleon Bonaparte and the consequences of the Napoleonic era.
Analyze American independence movements in their commonalities and diversity.
Describe origins of the industrial revolution and impacts it had globally.
Assess the shift from the Atlantic slave trade to “legitimate” trade between Europe and Africa.
Identify the rise of new, locally rooted regimes in Africa and the Middle East.
Examine changes in late 19th century European society, economy, and technology.
Describe new political configurations in Europe, including the nation-state and political institutions.
Explain shifts in identification and treatment of minorities in Europe, Russia and the Ottoman Empire.
Assess modernization projects in Japan, China and the Ottoman Empire as well as next wave independence movements in Latin America.
Identify roots of capitalism and its global impact.
Analyze new imperialism, accommodation and resistance and resulting economic and societal change in Africa and Asia.
Explain the global dimensions of World War I, including African participation, the recreation of the Middle East and power dynamics in Europe.
Assess the Great Depression and World War II as global events.
Describe anti-imperialist movements in Africa and Asia, challenges faced, and successes won.
Analyze socialist regimes in Asia and Russia, the development of theocratic regimes in the Middle East, and the solidification of capitalism in Europe and the United States.
Identify the global Cold War including proxy wars in Latin America, Africa, and Asia.
Understand global power dynamics in the late 20th and 21st centuries as impacting immigration, manufacturing, consumption and disparities of wealth.

Student Learning Outcomes:

- Analyze primary and secondary sources to develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Demonstrate the ability to discuss, analyze, and compare and contrast, diverse world cultural, religious, and political traditions.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Social and Cultural History of the United States
HIST118:

3.0 Units

Examines social and cultural traditions during major historical periods. Focuses on American attitudes and responses to economic and technological changes, aesthetics, politics, music, art, language, architecture, folklore, high and popular culture.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A

Area B1: Social and Behavioral Sciences: American Institutions

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

Area D: Social Sciences

Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C

Area 3B: Humanities

Area 4: Social and Behavioral Sciences

Area US1: Historical Development of American Institutions and Ideals

Santa Ana College - Shared Course

Shared Course with SAC
Learning Outcomes

Course Objectives:

Compare and contrast economic transformations in Northern and Southern colonial societies.

Describe how the European colonists evolved into “Americans” by 1750 and identify some of the causes for this change.

Describe the links between the emerging American economy and political ideals. Contrast this with Hamilton’s goal of an economically independent republic based on manufacturing.

Describe how, between 1800-1860, Americans addressed problems limiting their economic development in areas of transportation, labor, and technology.

Describe the economic contributions of black Americans.


Analyze the culture of the “Gilded Age’ and the impact of new wealth.

Trace the impact of technology, industrialization and “Taylorism” on working conditions for newly freed blacks, immigrants, and women.

Identify ways industrialization altered American life.

Trace the arguments for women’s suffrage, the right to own property, sue in court, and gain admission to professional schools.

Describe the theory of Social Darwinism and racialism.

Analyze the social impulses behind the imperial expansion of the Roosevelt era.

Examine the causes of the 1929 economic crash and describe the characteristics of a capitalist economy ranging from laissez-fair to a system of government regulation.

Identify the artists of the plains Indians and describe their representation of the American West.

Examine the artistic assumptions of cowboy artists.

Discuss the literature of the West.

Analyze Frederick Jackson Turner’s argument about the significance of the frontier on the American character.

Discuss movie culture and the studio system after World War II and identify characteristics of different film genres.

Identify such Cold War social issues such as McCarthyism, the development of the suburbs, demographic shifts, and golden age TV.

Discuss important films such as The Ten Commandments, Rebel Without a Cause, On the Beach, Easy Rider and Dr. Strangelove.

Analyze the Civil Rights movement discussing Brown vs Board of Education, Martin Luther King, and Malcolm X.

Examine how the Vietnam War impacted American life.

Examine social change during the 1960s including the counter-culture, art, music, and feminism.

Discuss the economic and social conservatism of the Reagan era.

Describe how American society has been altered in the era of globalization and changing immigration rules.

Examine changing concepts of family and marriage.

Student Learning Outcomes:

Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.

Develop communication skills through writing exercises and discussion of critical historical events.

Act as better informed citizens and knowledgable voters through the study of U.S. political traditions and concepts of citizenship.

Units & Hours

Minimum Units:

3.0

Maximum Units:

3.0
Total Hours
54.0

The United States to 1877
HIST120:

3.0 Units

Examines the major political, economic, intellectual, and social forces shaping American life from the colonial period through Reconstruction. Credit will not be given to students who already earned credit for History 122.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B1: Social and Behavioral Sciences: American Institutions

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences
Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences
Area US1: Historical Development of American Institutions and Ideals

UC Comparable Transfer Courses

Course Identifier (C-ID)
History

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Examine Native American societies and culture prior to European settlement.
Consider the distinctive American Indian societies and their ideas about religion, property, and gender.
Discuss Indian strategies to compete with and adapt to the new arrivals.
Consider the social and economic forces behind European interest in the New world.
Examine the government, economic, and religious objectives of the competing European colonial settlements: French, Dutch, Spanish, and English.
Describe the concept and practice of mercantilism.

Describe the local political systems in the English colonies.

Describe the 3 major English-American colonial regions: Virginia, Massachusetts, and the Middle Colonies.

Trace the development in the South of a plantation economy.

Describe the impact of tobacco and slaves on the region.

Discuss the origins and practices of American slavery and contributions of Africans to colonial culture.

Describe the unique social and political structure of New England.

Examine the theology of American Puritanism and the meaning of "City on a Hill."

Discuss the ethnic and economic diversification of the 'Middle Colonies'.

Identify and explain the critical cultural and social movements affecting the colonies including:

Examine the theology of the Quakers and the Great Awakening.

Describe the Enlightenment and its influence on areas of religion, government, and science.

Examine the evolving status of women. Consider how women contributed to the independence movement.

Examine the Anglo-American empire from an Atlantic perspective.

Analyze the impact of the nearly constant state of war between England and France and particularly the significance of the French and Indian War.

Evaluate the apparently overlapping roles assigned the King, Parliament, the colonial governor, and colonial legislatures.

Describe the impact of Whig journalists such as Trenchard and Gordon on American perceptions of English colonial rule.

Examine the issue of colonial taxation and the various protest movements. stamps, tea and monopoly.

Describe measures taken by Americans, specifically the Sons of Liberty, to oppose such tax measures.

Connect the Boston Tea Party to the beginning of the rebellion at Concord and Lexington.

Explain the roles played by American-Americans and Indians in the war and how sides were chosen.

Discuss the Revolutionary War and the tactics that made victory possible for the Americans and the merits of the citizen soldier.

Discuss the Articles of Confederation and its strengths and weaknesses. Shay’s Rebellion will be linked to the demand for a new constitution.

Analyze the writing of the new constitution and the various ideological contributions, both English and American, to its construction.

Analyze the Federalist Papers and the various compromises necessary to achieve ratification of the Constitution.

Examine the diplomatic problems posed by the Jay Treaty, the French Revolution and the Quasi War.

Explain the repression in domestic politics and the threat to free speech presented by the Alien and Sedition Acts.

Competing political views offered by the Federalists and Republicans and the significance of the Revolution of 1800.

Discuss the causes of the War of 1812 and its impact from three sides: Canadian, American and Native American.

Identify the important characteristics of early industrialization and the market economy.

Analyze defining events of the Jacksonian era including Nullification and the Bank War.

Describe the course of events that led to the Cherokee Indian removal.

Describe the various reform movements in the 1830s and 1840s and discuss their goals and characteristics.

Discuss the idea of Manifest Destiny and connect it to the rapid westward expansion of the 1840s.

Examine the causes of the Texas Rebellion and the Mexican War and consider the significance for both Mexico and the U.S.

Examine the evolution of slavery in the U.S. considering the Missouri Compromise and western expansion.
Describe the beginnings of the abolitionist movement and resistance such as Nat Turner’s Rebellion.

Examine the critical connection between the expansion of slavery and the balance of political power between North and South. Important points include: The Compromise of 1850, Kansas-Nebraska Act, Dred Scott.

Analyze Lincoln’s position on slavery and his debates with Stephen Douglas.

Discuss events leading to secession and war including Lincoln’s election and the firing on Ft. Sumter.

Evaluate the Civil War from an international perspective and events like the Trent Affair.

Examine how the stated causes of the war evolved from state’s rights to emancipation. The importance of the Border States will be emphasized.

Analyze the importance of military developments such as improved weaponry, iron clads, use of black soldiers.

Critical battles such as Antietam, Gettysburg, Vicksburg, and Sherman’s March will be evaluated.

Evaluate Lincoln’s seminal speeches including the Gettysburg Address. Consider Lincoln’s views on the meaning of the war and the importance of the survival of the United States to the world.

Analyze the generous peace agreement at Appomattox and describe how this helped to end the war but made Reconstruction difficult.

Examine Andrew Johnson’s background and the policies that encouraged Black Codes and a defiant South.

Evaluate Congressional Reconstruction including the following: Impeachment and reconstruction amendments.

Analyze how popular support for Reconstruction waned during Grant’s second term and the impact of the 1877 Compromise.

Student Learning Outcomes:

- Analyze primary and secondary sources to develop analytical skills by evaluating key historical decisions, testing hypothesis, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

Units & Hours

Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 54.0

Honors The United States to 1877

HIST120H:

3.0 Units

Seminar-style, content-enriched course for honors students that examines major political, economic, intellectual, and social forces shaping American life from the colonial period through Reconstruction. Credit will not be given to students who already earned credit for History 122.

Requisites

None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU
Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B1: Social and Behavioral Sciences: American Institutions

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences
Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences
Area US1: Historical Development of American Institutions and Ideals

UC Comparable Transfer Courses

Course Identifier (C-ID)
History

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Examine Native American societies and culture prior to European settlement.
Consider the distinctive American Indian societies and their ideas about religion, property, and gender.
Discuss Indian strategies to compete with and adapt to the new arrivals.
Examine the government, economics, and religious objectives of the competing European colonial settlements: French, Dutch, Spanish, and English.
Describe the concept and practice of mercantilism.
Describe the 3 major English-American colonial regions: Virginia, Massachusetts, and the Middle Colonies.
Trace the development in the South of a plantation economy and the impact of tobacco and slaves.
Discuss the origins and practices of American slavery and contributions of Africans to colonial culture.
Examine the theology of American Puritanism and the meaning of "City on a Hill."
Identify and explain the critical cultural and social movements affecting the colonies including the Enlightenment and the Great Awakening.
Analyze the evolving status of women.
Examine the Anglo-American empire from an Atlantic perspective.
Analyze the impact of the nearly constant state of war between England and France and particularly the significance of the French and Indian War.
Describe the impact of Whig journalists such as Trenchard and Gordon on American perceptions of English colonial rule.
Examine the issue of colonial taxation and the various protest movements.
Explain the beginnings of the rebellion from the Tea Party to Concord and Lexington.
Describe the Revolutionary War and the tactics that made victory possible for the Americans.

Explain the roles played by African-Americans and Indians in the war and how sides were chosen.

Determine from the examination of various state constitutions the range of possible options being considered by the newly independent colonies.

Identify the problems, nature and character of republican government, and explore the international consequences of 1776.

Discuss the Articles of Confederation and its strengths and weaknesses. Shay’s Rebellion will be linked to the demand for a new constitution.

Analyze the writing of the new constitution and the various ideological contributions, both English and American, to its construction.

Analyze the Federalist Papers and the various compromises necessary to achieve ratification of the Constitution.

Identify the myriad problems facing the United States in the 1790s including the Quasi war and conflict with the Barbary States.

Analyze the political views offered by the Federalists and Republicans and the significance of the Revolution of 1800.

Discuss the causes of the War of 1812 and its impact from three sides: Canadian, American and Native American.

Identify the important characteristics of early industrialization and the market economy.

Analyze defining events of the Jacksonian era including the Bank War, Nullification and Indian Removal.

Describe the various reform movements in the 1830s and 1840s and discuss their goals and characteristics.

Discuss the idea of Manifest Destiny and connect it to the rapid westward expansion of the 1840s.

Examine the causes of the Texas Rebellion and the Mexican War and consider the significance for both Mexico and the U.S.

Examine the system of slavery as it developed in the U.S. and the growth of African-American culture.

Examine the connection between the issue of slavery and western expansion specifically the Missouri Compromise, 1850 Compromise and the Fugitive Slave Act.

Describe the beginnings of the abolitionist movement and slave resistance such as Nat Turner’s rebellion.

Examine the critical connection between the expansion of slavery and the balance of political power between North and South. Important points include:

- Analyze Lincoln’s position on slavery and his debates with Stephen Douglas.
- Discuss events leading to secession and war including: John Brown, Dred Scott, and Bleeding Kansas.
- Consider the Civil War from an international perspective.
- Examine how the stated causes of the war evolved from state’s rights to emancipation. The importance of the Border States will be emphasized.
- Analyze the importance of new military tactics and technologies.
- Critical battles such as Antietam, Gettysburg, Vicksburg, and Sherman's March will be evaluated.
- Evaluate Lincoln’s seminal speeches including the Gettysburg Address. Consider Lincoln’s views on the meaning of the war and the importance of the survival of the United States to the world.
- Analyze the generous peace agreement at Appomattox and describe how this helped to end the war but made Reconstruction difficult.
- Examine Andrew Johnson’s background and the policies that encouraged Black Codes and a defiant South.
- Evaluate Congressional Reconstruction including impeachment and the Reconstruction Amendments.
- Analyze how popular support for Reconstruction waned during Grant’s second term and the impact of the 1877 Compromise.

**Student Learning Outcomes:**
- Develop analytical skills by evaluating key historical decisions, testing hypothesis, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

**Units & Hours**
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

The United States Since 1865
HIST121:

3.0 Units

A critical analysis of American history. Includes industrial and technological development, the changing nature of society, cultural patterns, domestic politics, artistic attainments, and America's expanded world role. Credit will not be given to students who already earned credit for History 122. Former Title: Honors The United States Since 1865 (2020)

Requisites
Requisites:

Anti-Requisite

HIST122 - American History-Dynamics of Change

Transferability & General Education Options
Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A

Area B1: Social and Behavioral Sciences: American Institutions

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

Area D: Social Sciences

Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C

Area 3B: Humanities

Area 4: Social and Behavioral Sciences

Area US1: Historical Development of American Institutions and Ideals

UC Comparable Transfer Courses

 UC Comparable Transfer Courses

Course Identifier (C-ID)

History

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes
Course Objectives:
Examine how Presidential Reconstruction and Congressional Reconstruction each sought to impose a different model on the post-Civil War South. Describe the roles of Andrew Johnson and the Radical Republicans.

Define terms like “Carpetbagger” and Scalawag.

Examine the reality and the propaganda behind the period when African-Americans had significant political power in the South and the efforts called “Redemption.”

Explain the reasons for ending Reconstruction and the “Bargain of 1877.”


Explain what the term Gilded Age indicated about society and what progressives attempted to do to alter the situation.

Describe the contest between Mugwumps and Stalwarts about civil service reform.

Examine the evolving practices of labor from the Molly Maguires and IWW through the AFL.

Describe the Ghost Dance movement and explain how this led to Wounded Knee.

Explain how the Dawes Act impacted plains Indians.

Analyze Turner’s thesis about the impact of the frontier on the American character.

Examine the emerging feminist movement and the views of radicals such as Emma Goldman and Margaret Sanger.

Describe the workings of Machine Politics and Tammany Hall.

Analyze how Western farmers attempted to respond to economic challenges. Explain the populist movement of William Jennings Bryan and free silver.

Analyze the implications of the idea of Social Darwinism on governmental policy.

Examine alternative social and economic theories including Marxism and the visionary ideas proposed by Henry George and Edward Bellamy.

Compare the administrations of Theodore Roosevelt and William Howard Taft and examine the move toward greater democratization with the direct primary, initiative, recall, and referendum.

Describe the career of Susan B Anthony and the movement toward national women’s suffrage.

Describe the causes of the Spanish-American War and discuss the economic, moral, and political implications of American imperialism around the world. Some connections can be drawn to American foreign policy in the 21st century.

Examine the reasons for the U.S. reluctantly entering WWI Describe how the Paris Peace treaty led to more conflict and how it delayed the U.S. decision to enter WWII.

Compare and contrast the ideals of progressivism with the policies of the Harding, Coolidge, and Hoover administrations.

Examine the many vibrant social and cultural trends of the 20s including the Harlem Renaissance, jazz, the Lost Generation, and the Scopes trial.

Describe Great Crash of 1929 as a global and domestic crisis. Explain the policy decision that contributed to the Depression.

Evaluate the impact of the Depression on American society.

Evaluate the New Deal and its successes and failures.

Describe the New Deal programs such as the WPA, FDIC, AAA, NIRA, and TVA and explain their goals.

Examine arguments of FDR critics Huey Long, Father Coughlin, and Upton Sinclair. Describe the impact of the FDR’s administration on labor, minorities, and the United State’s relationship with Latin America.

Examine the origins of the Second World War in Europe and the Pacific. Discuss the difficult peace following WWI led to isolationism in the U.S. and appeasement in Europe.

Provide an overview of the major American military campaigns.

Evaluate the decision to drop the Atomic bomb.

Describe the decisions made at the Yalta Conference and how that contributed to the Cold War alignment.
Analyze U.S. foreign policy during the Cold War. Discuss the role of the CIA in Iran and Guatemala and the many awkward alliances that the U.S. accepted in the interest of fighting world communism.

Describe the seminal transformations in American society during the 1960s, identify national leaders in the various realms, and assess the impact of each movement.

Evaluate important documents from the civil rights movement such as Martin Luther King’s “Letter from a Birmingham Jail.”

Describe the path toward war in Vietnam. Examine the Cold War and its impact on social programs such as the “Great Society.” Address the impact of the Cold War on U.S. relations with countries in Latin America and the Middle East.

Examine the advantages and challenges facing the U.S. as a result of increased global immigration and a global economy.

Discuss multiculturalism and the continuing rights revolution.

Examine the decision to go to war in Iraq and the options for stability in the Middle-East.

Describe the impact of recent political ideology in the U.S. in regard to a decayed social contract and increased inequality.

Student Learning Outcomes:

- Develop analytical skills by evaluating key historical decisions, testing hypothesis, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Honors the United States Since 1865

HIST121H:

3.0 Units

Seminar-style, content-enriched course for honors students exploring a critical analysis of American history including industrial and technological development, the changing nature of society, cultural patterns, domestic politics, artistic attainments, and America’s expanded world role. Credit will not be given to students who already earned credit for History 122. Former Title: Honors the United States Since 1877 (2020)

Requisites

Requisites:

Anti-Requisite

HIST122 - American History-Dynamics of Change

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:
Local - Plan A
Area B1: Social and Behavioral Sciences: American Institutions

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences
Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences
Area US1: Historical Development of American Institutions and Ideals

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
History

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Examine how Presidential Reconstruction and Congressional Reconstruction each sought to impose a different model on the post-Civil War South. Describe the roles of Andrew Johnson and the Radical Republicans.

Examine the reality and the propaganda behind the period when African-Americans had significant political power in the South and the efforts called “Redemption.”

Define terms like “Carpetbagger” and “Scalawag.”

Explain the reasons for ending Reconstruction and the “Bargain of 1877.”


Explain what the term Gilded Age indicated about society and what progressives attempted to do to alter the situation.

Describe the contest between Mugwumps and Stalwarts about civil service reform.

Examine the evolving practices of labor from the Molly Maguires and IWW through the AFL.

Describe the Ghost Dance movement and explain how this led to Wounded Knee.

Explain how the Dawes Act impacted plains Indians.

Analyze Turner's thesis about the impact of the frontier on the American character.

Examine the emerging feminist movement and the views of radicals such as Emma Goldman and Margaret Sanger.

Describe the workings of Machine Politics and Tammany Hall.

Analyze how Western farmers attempted to respond to economic challenges. Explain the populist movement of William Jennings Bryan and free silver.

Examine alternative social and economic theories including Marxism and the visionary ideas proposed by Henry George and Edward Bellamy.

Analyze the implications of the idea of Social Darwinism on governmental policy.

Compare the administrations of Theodore Roosevelt and William Howard Taft and examine the move toward greater democratization with the direct primary, initiative, recall, and referendum.

Describe the career of Susan B Anthony and the movement toward national women’s suffrage.
Describe the causes of the Spanish-American War and discuss the economic, moral, and political implications of American imperialism around the world. Some connections can be drawn to American foreign policy in the 21st century.

Examine the reasons for the U.S. reluctantly entering WWI. Describe how the Paris Peace treaty led to more conflict and how it delayed the U.S. decision to enter WWII.

Compare and contrast the ideals of progressivism with the policies of the Harding, Coolidge, and Hoover administrations.

Examine the many vibrant social and cultural trends of the 20s including the Harlem Renaissance, jazz, the Lost Generation, and the Scopes trial.

Describe Great Crash of 1929 as a global and domestic crisis. Explain the policy decision that contributed to the Depression.

Evaluate the impact of the Depression on American society.

Evaluate the New Deal and its successes and failures.

Describe the New Deal programs such as the WPA, FDIC, AAA, NIRA, and TVA and explain their goals.

Examine arguments of FDR critics Huey Long, Father Coughlin, and Upton Sinclair. Describe the impact of the FDR’s administration on labor, minorities, and the United State’s relationship with Latin America.

Examine the origins of the Second World War in Europe and the Pacific. Discuss the difficult peace following WWI led to isolationism in the U.S. and appeasement in Europe.

Provide an overview of the major American military campaigns.

Evaluate the decision to drop the Atomic bomb.

Describe the decisions made at the Yalta Conference and how that contributed to the Cold War alignment.

Analyze U.S. foreign policy during the Cold War. Discuss the role of the CIA in Iran and Guatemala and the many awkward alliances that the U.S. accepted in the interest of fighting world communism.

Describe the seminal transformations in American society during the 1960s, identify national leaders in the various realms, and assess the impact of each movement.

Evaluate important documents from the civil rights movement such as Martin Luther King’s “Letter from a Birmingham Jail.”

Describe the path toward war in Vietnam. Examine the Cold War and its impact on social programs such as the “Great Society.” Address the impact of the Cold War on U.S. relations with countries in Latin America and the Middle East.

Examine the advantages and challenges facing the U.S. as a result of increased global immigration and a global economy.

Discuss the continuing rights revolution and increased multiculturalism.

Examine the decision to go to war in Iraq and the options for stability in the Mid-East.

Describe modern politics in regard to the breakdown of the social contract and increased economic inequality.

Evaluate the struggle in the U.S. to provide access to healthcare.

**Student Learning Outcomes:**

- Develop analytical skills by evaluating key historical decisions, testing hypothesis, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0
HIST122:

3.0 Units

Survey of the main cultural, economic, social, and political changes in American history. Fulfills the American institutions requirement for graduation. Credit will not be given to students who already earned credit for History 120/120H or 121/121H.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A
Area B1: Social and Behavioral Sciences: American Institutions

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences
Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences
Area US1: Historical Development of American Institutions and Ideals

Learning Outcomes

Course Objectives:
Analyze the interaction between European colonists and Native Americans.
Describe the origins of American slavery
Analyze the problems of the British colonial system leading to the American Revolution.
Analyze the strengths and weaknesses of the Articles of Confederation.
Summarize the events surrounding the Philadelphia Convention and the making of the Constitution.
Appraise the evolution of political parties in the early years of the Republic.
Evaluate the changes brought by the Market Revolution
Analyze the causes and significance of the War of 1812.
Examine social and economic changes of the Jacksonian Era.
Analyze how American politics became more democratic.
Discuss how slavery shaped westward expansion.
Examine the contributions of early abolitionists and feminists.
Analyze the events of the 1850s and the road to secession.
Explain how emancipation became a goal of the Civil War.
Analyze the constitutional changes of the Reconstruction Period.


Identify cultural changes brought on by the industrial age.

Describe causes of the Populist movement and proposed solutions.

Describes the causes of the Spanish-American War and American imperialism

Analyze the goals and methods of the Progressive movement.

Trace American foreign policy goals in Latin America, Mexico, Asia, and Europe.

Assess the political, social, and economic changes of the 1920s

Analyze themes in the artistic movements of the Harlem Renaissance and the Lost Generation.

Examine the economic causes of the Great Depression.

Assess the short and long term significance of the New Deal.

Assess U.S. foreign policy in the post war world and the beginnings of the Cold War.

Describe the impact of the Cold War on American society.

Trace the roots of the Civil Rights Movement and the Feminist movement and their progress in achieving their stated goals.

Evaluate the programs and legacy of the Great Society.

Examine the conservative movement from Goldwater to Reagan.

**Student Learning Outcomes:**

- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Mexican-American History in the United States**

**HIST124:**

3.0 Units

Survey of Mexican-American history in the U.S. from the Pre-Columbian period to the present. Emphasis on Mexican-American contributions to the political, social, economic, and cultural development of the U.S. Will also examine the relationship of Mexican-Americans to other cultural groups.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU
Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences
Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences
Area US1: Historical Development of American Institutions and Ideals

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Analyze the values and beliefs of the indigenous culture, Spanish culture, and newly independent Spanish-American countries, as well as the culture of beliefs of the United States, in order to appreciate and evaluate the clash and syntheses of cultures.

Analyze 19th century U.S. Mexico/U.S. relations with particular attention to the intellectual climate in both countries (e.g. "Manifest Destiny") and the difference in how the Mexican War was viewed in each country (i.e. Mexican view of the conflict as "T

Examine the history of immigration of the various ethnic groups to the United States, in order to place Mexican immigration to the United States in proper perspective.

Chart the changes in attitude over time toward Mexican immigrants in the United States and the Mexican homeland.

Explain how the Mexican-American struggle for civil rights parallels the struggle of other minorities in the United States for their rights.

Student Learning Outcomes:
Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
Develop communication skills through writing exercises and discussion of critical historical events.
Demonstrate the ability to discuss, analyze, and compare and contrast diverse world cultural, religious, and political traditions.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

United States since 1945
HIST126:
3.0 Units
This course covers the history of the United States from the end of World War II to contemporary times, emphasizing developments in politics, society, economics, and culture, including the role of race, sex, gender, and class issues. The politics of government policy and the foreign relations of the United States also receive attention. The history of the American people and the nation will be considered in the larger context of world history.

Requisites
Requisites:
Advisory
[Link to HIST121 - The United States Since 1877]

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area B1: Social and Behavioral Sciences: American Institutions
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Trace the origins of the Second World War in Europe and the Pacific with consideration given to the failed peace following WWI, the isolationism of the U.S., and appeasement in Europe.

Trace the growing militarism of Japan.

Provide an overview of the major American military campaigns.

Analyze the decision to drop the Atomic bomb and the various arguments put forth.

Examine wartime domestic issues such as racial segregation, Japanese internment, women and the war effort, and the usage of propaganda.

Describe how the end of WWII led directly to the Cold War and fall of the Iron Curtain.

Analyze U.S. foreign policy during the Cold War and consider the objective of containment.

Describe economic containment and the Marshall Plan.

Examine the relationship between the U.S. and Latin America.

Describe “Brinksmanship” and the nuclear stalemate with the Soviet Union.

Examine the origins of the Korean War.

Discuss Eisenhower's presidency, his use of the CIA, and his concerns about the Military Industrial Complex.
Examine U.S. influence and coercion in the developing world
Examine the era of McCarthyism, HUAC, and the Hollywood 10
Discuss Hiss, the Rosenberg’s and Venona: Spies in America
Describe the seminal transformations in American society during the 1960s
Examine Civil Rights and the move toward integration including Freedom Rides, SCLC and the SNCC
Discuss Wallace, Faubus and the Southern Strategy: The Dixicrats strike back
Discuss the Beat Movement
Analyze the Baby Boom and its long term impact on culture and economics.
Discuss the countercultural challenges of the 1960s
Discuss the growth of the Suburbs, Levittown and the Age of Affluence
Consider the new emphasis on the environment and “Silent Spring”
Describe JFK’s domestic policies and interventions abroad such as the Bay of Pigs and the Cuban Missile Crisis
Examine the Great Society and the high tide of liberalism
Evaluate the origins of the Vietnam War and LBJ’s critical decisions following Gulf of Tonkin
Describe the Watergate Crisis
Discuss the Carter presidency and the malaise of the 1970s
Examine the Cold War: Detente, moral diplomacy, Latin America and the Middle East
Describe Reagan and the new conservatism. Evaluate the impact of Supply-Side ideology.
Describe issues of globalization, immigration, and a changing nation identity.
Analyze the changing role of women in politics and society
Examine the end of the Cold War and the fall of the Soviet Union
Describe important movements in art, literature, movies and music
Discuss the new Democrats and the Clinton Era
Examine the philosophy of the Neo-Conservatives and the wars in Iraq and Afghanistan
Describe how 9/11 changed American society
Examine the Information Revolution: computing, internet, social media
Examine the economic crisis of 2007
Analyze Jihad vs. McWorld, liberalism vs. sectarianism, neo-conservatism vs. “Blowback”
Discuss the presidency of Barack Obama
Discuss important Supreme Court rulings on women’s rights, affirmative action, health care and marriage
Discuss changing ideas about the family
Evaluate the current immigration policies

Student Learning Outcomes:
- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

Units & Hours
Minimum Units:
3.0
Women in U.S. History
HIST127:

3.0 Units
Women of European, African, Native, Hispanic, and Asian backgrounds examined in the United States (U.S.) History 1607-present. Emphasis on individuation, social status, family, reproduction, child care, slavery, jobs, gender politics, and political activism. Legal impact and theories of patriarchal oppression raised.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences
Area US1: Historical Development of American Institutions and Ideals

IGETC - Plan C
Area 3B: Humanities

Area 4: Social and Behavioral Sciences
Area US1: Historical Development of American Institutions and Ideals

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Compare and contrast the status and gender roles of European women and Native Americans.

Compare and contrast the lives of women in the various North American colonies.

Describe the heresy trail of Anne Hutchinson and consider what role gender played in her banishment.

Analyze the process that codified the limit of slave rights.

Examine the interaction between Black women and White women in a variety of contexts.

Describe how women were politically active during the Revolution.
Assess the accomplishments and failures of the early Women’s rights movement, 1848-1870. Analyze its short-term significance, to 1900, as well as its long-term accomplishments.

Discuss women’s leadership role in the areas of moral improvement.

Assess the contributions made by women leaders, such as Mother Jones to the labor movement.

Discuss how women energized radical politics in the United States.

Compare the style of the old suffrage movement with that of younger women in urban Greenwich Village and analyze the significance of the contrasting agendas.

Describe the process that led to the passage of the 19th Amendment and the many diverse contributions.

Describe the gains women had made in the Progressive Era.

Evaluate the impact of the New Deal on the lives of women.

Describe how WWII lead to expanded opportunities for women and the reverse trend post-war.

Evaluate the various limitations facing minority women and families.

Describe the impact of the 1960s on the lives of women.

Analyze the meaning of the failure of the Equal Rights Amendment.

Analyze issues impacting women’s mobility and freedom of choice, such as the threat of rape, restrictions on abortion, sexual harassment at work, lack of affordable child care and homelessness.

**Student Learning Outcomes:**

- Develop analytical skills by evaluating key historical decisions, testing hypothesis, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Discuss, analyze and compare and contrast various distinctive forms of political, social, and economic organizations as related to American Women.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Modern African History**

**HIST132:**

3.0 Units

This course surveys sub-Saharan African history from 1850 to the present, addressing such topics as the end of the slave trade; African resistance to conquest; experiences of colonialism; settler colonialism in southern Africa; the rise of national liberation movements and achievement of independence; and the challenges of post-colonial nation building. It examines contemporary Africa through a review of economic, political, social, cultural, and intellectual history.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU
Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Identify the basic characteristics of the diverse environments of Africa
Discuss the cultural and social trends, 1990s-2000s
Examine the reasons for the end of the Atlantic slave trade, including the Industrial Revolution, political revolutions of the late 18th and early 19th centuries, and abolitionism
Discuss ramifications of the new “legitimate” trade in cash crops such as palm and rubber
Evaluate the methods dynamics that emerged within sub-Saharan African societies during the mid-19th century as a result of shifting trade with Europe
Describe the initial European coastal strongholds in sub-Saharan Africa
Identify African statebuilding movements of the mid- and late 1800s, including their causes, natures, and regional impacts
Describe the European presence in sub-Saharan Africa that preceded conquest efforts
Locate the means and motives of European conquest efforts in sub-Saharan Africa and the reasons for their success
Examine the diverse African resistance movements against European conquest
Identify the transition from conquest to “pacification”
Examine the imperatives of colonial rule
Assess the theories of rule employed by France and by Great Britain in their various colonials in sub-Saharan Africa
Interpret the role of African intermediaries under colonialism
Discuss the role of sub-Saharan Africans in WWI
Describe the objectives and strategies of colonial labor regimes
Discuss the impacts of new regimes of labor on African lives
Examine the gendered dimensions of labor under colonialism
Analyze the relationship between colonialism, urbanization, labor, and migration
Describe the onset and evolution of the mineral revolution in Southern Africa
Assess the impact of minerals on African labor, urbanization, and residence and migration
Identify the reasons for and dynamics of the South African War
Examine the post-war creation of the Union of South Africa and its race-based, broad-reaching policies of segregation
Discuss agricultural settler colonial dynamics in southern and eastern Africa
Evaluate local movements to resist displacement, segregation, and loss of rights prior to the 1940s
Demonstrate the ability to identify the locations of African states and key physical features
Identify the types and dimensions of participation of sub-Saharan Africans in the war
Analyze the impacts of the war on African perceptions of nationhood, citizenship, rights, labor, and European powers
Assess the relationship of the war and its end to the emergence of Afrikaner nationalism and Apartheid in South Africa
Examine the effects of the immediate post-war onset of the Cold War on South African politics
Describe the African intellectual movements of the 1940s
Analyze the reasons for decolonization from the 1950s through the 1960s
Analyze the various means by which African societies achieved independence
Assess the processes that led to later independence in the 1970s for Portuguese colonies
Discuss the various approaches to and modes of decolonization adopted by France and by Great Britain
Identify the philosophies and actions of key African leaders in the movement for civil rights and independence
Identify mid-century intellectual trends such as Pan-Africanism
Examine the buildup and breakdown of Apartheid in South Africa from the 1960s through the 1980s
Describe the challenges new nations faced during their initial decades of independence
Evaluate the programs of the governments across sub-Saharan Africa that attempted to address the legacies of colonialism
Assess the reasons for and ramifications of state crises in Nigeria and Congo
Examine iterations of African socialism in examples such as Guinea and Tanzania
Analyze the politics of class and identify through the examples of Liberia, Sudan, and Rwanda
Discuss the reasons for intensifying economic challenges from the 1970s into the 1980s and the legacies of colonial economic regimes
Identify the role of the Cold War in African politics
Evaluate post-Cold War political transitions and regime changes in sub-Saharan Africa
Examine the impact of the rise of the development industry and the decline of prior aid paradigms
Analyze the popular democracy and new political movements of the 1990s
Assess the urbanization and informal economies
Identify patterns of migration and remittance economics
Identify the various theaters of war in Africa

Student Learning Outcomes:
Demonstrate development of analytical skills by evaluating primary sources and scholarly work that examine and reveal key historical decisions, by crafting historical arguments supported by evidence, and by assessing contending viewpoints on African history.
Demonstrate development of communication skills through writing exercises and discussion of critical historical events and sources.
Demonstrate the ability to discuss, analyze, and compare and contrast diverse sub-Saharan African political, economic, social, cultural, and religious dynamics.

Units & Hours
Minimum Units:
Maximum Units
3.0

Total Hours
54.0

History of California
HIST133:

3.0 Units
An examination of the major social, political, and economic developments that have shaped California history from the indigenous period to the present. Special attention given to regional issues, ethnic or cultural groups, constitutional matters, cultural change, and California’s connection with the Pacific Basin.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
   Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
   Area D: Social Sciences

IGETC - Plan C
   Area 3B: Humanities
   Area 4: Social and Behavioral Sciences

Learning Outcomes
Course Objectives:
Analyze how the geographic features of the region have impacted its development

Analyze the impact of Spanish culture in California and the way in which the missions impacted relations between Indians and Europeans

Describe the cultural and economic changes that came with the end of Mexican rule and annexation by the United States

Discuss how the railroads dominated California politics and industry

Explain the link between supports of labor and anti-Chinese actions

Examine how the Progressives began as a result of corrupt local government and became a national movement

Analyze how the state was impacted by WWII and describe the process of suburbanization

Discuss the image of California in the popular imagination

Analyze the various immigration patterns and consider the cultural and economic contributions to the state

Describe the cultural identities of the various geographic regions
Analyze the impact of Depression years on state's economy and way of life

Describe the historical arc of the state's political leanings

**Student Learning Outcomes:**
- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussion of critical historical events.
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**History of the Modern Middle East**

**HIST142:**

3.0 Units

Introduction to narratives and debates in the history of the Middle East (Near East) from the mid-eighteenth century to the present. Local, regional, and global events and processes; political, social, cultural, and intellectual realities. Focusing on the major social and intellectual trends of the Arab world, Iran, Turkey, and Israel and their relation to major events and movements of the twentieth century. The influence of colonial, postcolonial, and neo-colonial thought; ways in which such struggles shaped people's social lives and futures; the causes and implications of current affairs.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**CSU GE - Plan B**
- Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
- Area D: Social Sciences

**IGETC - Plan C**
- Area 3B: Humanities
- Area 4: Social and Behavioral Sciences

**Local - Plan A**
- Area C: Humanities
- Area D: Cultural Breadth
Learning Outcomes

Course Objectives:
Discuss and debate the various narratives in the history of the Middle East (Near East) from the mid-eighteenth century to the present.

Identify and classify local, regional, and global events and processes; political, social, cultural, and intellectual realities.

Understand and describe the major social and intellectual trends of the Arab world, Iran, Turkey, and Israel and their relation to major events and movements of the twentieth century to present day.

Analyze the influence of colonial, postcolonial, and neo-colonial thought; ways in which such struggles shaped people's social lives and futures; comprehend the causes and implications of current affairs.

Student Learning Outcomes:

Demonstrate development of analytical skills by evaluating primary sources and scholarly work that examine and reveal key historical decisions, by crafting historical arguments supported by evidence, and by assessing contending viewpoints on the Modern Middle East.

Demonstrate development of communication skills through writing exercises and discussion of critical historical events and sources.

Demonstrate the ability to discuss, analyze, and compare and contrast diverse political, economic, social, cultural, and religious dynamics in the Middle East.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Latin American History

HIST152:

3.0 Units

A survey of Latin American History from the Indian and European origins to the 21st century with a focus on the historical background of the countries studied. Emphasis placed upon the interplay of Iberian, African and Indian influences upon social and cultural evolution. Also stressed are the Latin American relations with the United States in the 19th and 20th centuries.

Requisites

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C

Area 3B: Humanities

Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Evaluate the major theories and research on the development and integration of evolution of native societies.

Describe the contributions of the regions significant artists.

Discuss the conquest of the Valley of Mexico, Central America, and South America.

Evaluate the methods with which the Spanish were able to conquer the Aztec, Maya and Inca Empires.

Examine Spanish Catholicism and interpret how its structure and practices were transferred to America.

Evaluate the role of the Church in the formation of colonial value systems and customs.

Evaluate the conditions that led to the 1910 Mexican Revolution.

Discuss themes and works of modern Mexico's leading artists, musicians, writers and intellectuals.

Describe the ethnic and national origins of the population and identify the major Indian groups and their past and present roles in national life.

Evaluate the period of discovery and early settlements in relation to later conquests and expansion.

Evaluate modern conditions and problems in farming, industry and services.

Describe Chilean society and the Chilean self-image to foster an appreciation for the customs and values.

Analyze the fundamental economic and political problems of contemporary Argentina in the last 20 years and identify special features of the cultural life.

Analyze modern Brazilian nationalism as well as its regional diversity and historic regional rivalries.

Develop an appreciation for Brazilian cultural forms -- music, art, and literature.

Describe the responses to reformist philosophies of former governments in Chile and Peru.

Evaluate the revolutionary programs of the governments of Bolivia (1952-64) and Cuba (1959-present) and explain the philosophies and history of selected guerrilla groups.

Evaluate U.S.-Latin American relations since 1945.

Describe cultural themes and institutions and demonstrate knowledge of the works of major Ecuadorian artists, musicians, writers, etc.

Student Learning Outcomes:

Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.

Develop communication skills through writing exercises and discussion of critical historical events.

Demonstrate the ability to discuss, analyze, and compare and contrast diverse world cultural, religious, and political traditions.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0
Asian Civilizations
HIST162:

3.0 Units

Historical survey of Asian civilizations from the earliest time to the present. An analysis which contrasts and compares Asian cultures with an emphasis on geographic and demographic patterns and the dynamics of primitive, modern and transitional societies. Asian religions, rituals and thought, also included. Emphasis will be given to Islam, Hinduism, Shintoism, Daoism, Confucianism and Buddhism.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)
Area D: Social Sciences

IGETC - Plan C
Area 3B: Humanities
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Describe Confucianism, Daoism and the Legalist philosophy.
Analyze the impact of foreign presence on Chinese soil in the 19th and 20th centuries including the periods of imperial control, the Sino-Japanese War, and World War II
Describe the rise of the People’s Republic 1949 to Present
Examine the Meiji restoration and the end of the feudal period.
Describe Japan’s role in international affairs.
Analyze how the American occupation post WWII shaped modern Japan.
Analyze the various colonial episodes and evaluate the impact on development in the region.
Describe the communist experiments of Pol Pot and the Khmer Rouge.
Describe the emergence of Korea as a modern power and industrial center and evaluate its path to representative government.
Analyze the impact of American imperialism on the development of the Philippines. Examine the modern Filipino diaspora.
Analyze the culture, religion and politics of the Mughal dynasty.
Describe the long movement toward independence from Britain and particularly the role played by Gandhi and Nehru. Describe the continuing British cultural influence.

Examine the partition of India and Pakistan with emphasis on religious and political influences. Discuss the problem of Kashmir.

**Student Learning Outcomes:**

- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.
- Develop communication skills through writing exercises and discussions of critical historical events.
- Demonstrate the ability to discuss, analyze, and compare and contrast, diverse world cultural, religious and political traditions.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Introduction to Peace and Conflict Studies**

**HIST240:**

3.0 Units

Historical, social and economic development of the world order along with a wide range approach integral to the examination of global studies, peace and conflict resolution. The study of peace and conflict areas to include the war system, war prevention, nonviolence, human rights, social justice, environmental sustainability and the role of the United Nations and other international governing bodies.

**Requisites**

**Requisites:**

- **Advisory**
  - POLT101 - American Government and Politics

  **OR**

- **Advisory**
  - POLT101H - Honors American Government and Politics

  **OR**

- **Advisory**
  - POLT220 - International Politics

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**
Local - Plan A
  Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
  Area D: Social Sciences

IGETC - Plan C
  Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
  UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Examine Challenges to Peace: Visions, History, Culture, Social Values
Explore Concepts of Peace and Violence: Negative, Positive, Holistic, Structural, Cultural
Interpret Belief Systems about Peace, Conflict, and War: From Childhood to Adulthood
Analyze Conflict Properties: What Escalates and What De-escalates
Understand Contemplations of Peace: Evolution, Nature, Methods of Inquiry
Deconstruct how politics influences conflict
Develop Interpersonal Conflict Skills: Fundamental Needs, Psychoanalytical Perspectives
Explore the role of the Environment: Population, Growth, Scarcity, Resource Competition
Define Feminist Theory
Define Psychological Theory
Define Sociological Approach
Define Anthropological Approach
Apply the above approaches to Conflict Resolution
Identify the elements of: Negotiation, Arbitration, Mediation, Judicial
Modify Settlements, Diplomacy, and Intervention
Comprehend Peace Movements: History and Characteristics Locally, Nationally and Globally
Develop Stepping Stones to Peace: Apply Economic Well-Being, Nonviolent Successes
Developing Peace: Human-Centered Development, a New International Economic Order, Self Reliance, Empowerment of Women, Grassroots Strategies
Identify Self Determination: Basic Concepts, a Multi-Ethnic State, Methods for Reducing Tension Between Groups
Comprehend The Ripple Effect of Individual Action: Removing Blocks to Personal and Societal Transformation
Examine Global Strategies and various case studies
Identify Shifts in Paradigms: How Fear and Compassion Fit In
Explore What’s Possible for the Future
Define Peace through Education
Understand Globalization: Turning Hostile Competition into Mature Co-operation
Define and Comprehend Interconnectedness
Define and Comprehend Interdependence: Energy Conservation, Poverty, Urban Livability

Student Learning Outcomes:
Analyze the role of sovereignty and nationalism in confidence building measures and diplomacy. Examine the paradigm and theoretical perspectives of international political economy and international organizations upon the viability for democracy and its institutions while utilizing proven strategies for diplomatic solutions. Identify and critically analyze the importance of peaceful resolution of conflict upon the economies of nation-states, the military, the environment, women and children.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Literature Brought to Life
HSART020:
72.0 Hours
Provides students with reading, writing, listening, and speaking activities through the study of literature. Literary samples include novels, poetry, short stories, biographies, and essays. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Anti-Requisite
HSENG020 - Literature Brought to Life

Learning Outcomes
Course Objectives:
Summarize and interpret literature from a variety of genres.
Derive meaning of vocabulary words from the context of a text.
Analyze poetry on literal and metaphorical levels.
Describe characterization in the novel.
Distinguish between first and third person points of view.
Define figurative language terminology.
Identify metaphors in literature and create original metaphors.
Compare and contrast two novels.
Analyze plot in a short story.
Identify theme/main idea in a literary work.
Research the lives of historical figures and discuss how they shaped the social climate of our country.
Relate a story orally.
Memorize and recite a poem.
Identify elements of a drama.
Identify poetic devices used in Shakespeare's writing.
Demonstrate ability to write about or discuss literature using relevant support from the text.
Discuss social issues and concerns of today.

Explore facets of relationships through the study of literature.

Evaluate the ways in which literary texts represent culture and identity.

**Student Learning Outcomes:**
- Analyze literary elements in novels, poetry, short stories, and biographies.
- Plan and compose written responses that analyze and evaluate selected works of literature.

**Hours**

**Total Hours**

72.0

**Short Stories**

**HSART070:**

0.0 Units

Introduces the student to the short story as a literary form so that the student will learn how the individual elements work together to present a theme or effect. The student will study the development of the short story and will read selected short stories from various periods. (No credit if a student has taken HSENG 070.) Open Entry/Open Exit. 5 HS credits.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**
- Recognize the short story as a literary genre.
- Explain the development of the short story as a literary form.
- Identify the elements of the short story.
- Explain how the literary elements interrelate to present the writer's theme or effect.
- Analyze selected short stories for theme and critical details
- Demonstrate ability to write about or discuss literature using relevant support from the text.
- Research the life of a prominent author to further develop appreciation of the genre.

**Units & Hours**

**Understanding America Through Art**

**HSART828:**

0.0 Units

Provides an overview of American civilization through arts and crafts from the colonial period through the 20th century, interpreting arts and crafts in their historical context. Open Entry/Open Exit. 5 HS credits.

**Requisites**

None
Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Identify art terminology
Explain color dynamics
Analyze portraiture
Examine the historical context of quilts
Identify quilt design concepts
Discuss the role that black and white photography played in bringing realistic portrayal of war and western expansion to the American public in the 1800s
Explain color theory using subjects from frontier life during the 1800s
Analyze portraiture and characterization in art considered to be major milestone from more traditional, structured rules of realism, using subjects from the 1900s
List characterizations of paintings, murals, environmental art, sculpture, commercial art, and abstract art using examples from 1935 to the present
Analyze characterizations of paintings, signage, scrimshaw, and wood carvings
Examine the characterizations of black cloth dolls, face jugs, cowboy leather, and totem poles giving insight into the multicultural blend of civilization across the Unites States in contemporary times
Analyze the characterizations of monuments, statues, and war memorials infused throughout the country from George Washington's day to present

Student Learning Outcomes:
Identify and explain art terminology, color dynamics, and portraiture.
Demonstrate knowledge of American arts and crafts from the colonial period through the 20th century.

Units & Hours

The Film As Art

HSART837:

0.0 Units
Traces the history of film from the recording of a single event through the silent film era to current classic films, and identifies the ways films reflect the values of American culture. Culminates in the use of classic and contemporary elements as a basis for modern film.
Open Entry/Open Exit.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Learning Outcomes

Course Objectives:
Examine famous American films, silent to present
Identify the technology that helped create the motion picture industry
Analyze the role of women and immigrants in the motion picture industry
Appraise the marriage between business and art in the motion picture industry
Describe the significance of theaters or movie houses to American society
Describe American values as depicted in various films
Analyze the historical context of various films
Differentiate the characteristics of certain genres
Classify films by genre: Melodrama, Musical, Comedy, War and Cinema, Film Noir, Westerns, Horror and Science Fiction
Describe how classic and contemporary elements are used as a basis for modern film.

**Student Learning Outcomes:**
- Identify the ways films reflect the values of American culture.
- Examine the history of film from the recording of a single event through the silent film era to current classic films.

**Units & Hours**

**Drawing and Painting 1**

HSART845:

0.0 Units

Provides a beginning level studio course which introduces students to the world of visual art. Students will learn to draw and use a variety of materials and techniques to explore the elements of art and principles of design. Primary emphasis will be on drawing and creating works of art. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

Use graphic materials
Understand the line, its properties, and possibilities
Illustrate how the human brain works as it pertains to the “doing” of art
Recognize line and space as elements of art
Recognize line, rhythm, and repetition as elements of art
Recognize space, shape, form, value and contrast as elements of art
Recognize shape and form as elements of art
Recognize value and contrast as elements of art
Develop the ability to make informed aesthetic judgments about works of art
Identify the vocabulary and terminology associated with drawing and painting
Use tools, materials, and equipment in a safe and proper manner

**Student Learning Outcomes:**

- Apply elements of art and principles of design to original works of art.
- Demonstrate feelings and ideas using drawing and painting techniques.
Units & Hours
Drawing and Painting 2
HSART846:

0.0 Units
Introduces students to visual arts with an emphasis on learning to paint and create original art works. Students will employ a wide variety of materials and techniques as they explore the elements of arts and principles of design. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSART845 - Drawing and Painting 1

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Examine color theory and how to use art materials
Identify the elements and principles of art that will help in composing and judging a successful work of art
Identify the elements of art and principles of design as they apply to the painting process
Use drawing and painting techniques to express ideas, feelings, and moods
Develop a historical perspective in drawing and painting by recognizing a variety of individual and cultural themes and styles
Identify the vocabulary and terminology associated with drawing and painting
Apply learned techniques to individual goals and objectives
Use media-related problem-solving techniques

Student Learning Outcomes:
Analyze visual arts with an emphasis on learning to paint and create original art works.
Examine the elements of arts and principles of design.

Units & Hours
Literature Brought to Life
HSENG020:

72.0 Hours
Provides students with reading, writing, listening, and speaking activities through the study of literature. Literary samples include novels, poetry, short stories, biographies, and dramas from a variety of time periods and cultures. Students will analyze how literature reflects human values and thus has relevance to their lives. Open Entry/Open Exit.

Requisites
Requisites:
Anti-Requisite
HSART020 - Literature Brought to Life

Learning Outcomes
Course Objectives:
Summarize and interpret literature from a variety of genres.
Derive meaning of vocabulary words from the context of a text.
Analyze poetry on literal and metaphorical levels.
Describe characterization in the novel.
Distinguish between different points of view in literature.
Define figurative language terminology.
Identify metaphors in literature and create original metaphors.
Compare and contrast two novels.
Analyze plot in a short story.
Identify theme/main idea in a literary work.
Research the lives of historical figures and discuss how they shaped the social climate of our country.
Relate a story orally.
Memorize and recite a poem.
Identify elements of a drama.
Identify poetic devices used in Shakespeare's writing.
Demonstrate ability to write about or discuss literature using relevant support from the text.
Discuss social issues and concerns of today.
Evaluate the ways in which literary texts represent culture and identity.

Student Learning Outcomes:
Analyze and interpret works of literature.
Analyze the impact of historical figures on society.

Hours
Total Hours
72.0

AP English 1A
HSENG030:

72.0 Hours
Prepares students to take the Advanced Placement Examination. Colleges and universities give advanced placement and/or college credit based on the results of the AP examination. Areas of study include critical analysis of literature and writing assignments requiring focused practice in exposition, argument, personal narrative, and fictional or poetic forms. Open Entry/Open Exit. 5 HS credits.

Requisites
None

Learning Outcomes
Course Objectives:
Analyze diagnostic testing
Evaluate holistic scoring/AP rubrics
Identify literary forms
Read and respond to historically or culturally significant works of American and world literature.
Conduct in-depth analyses of recurrent patterns and themes.

Ensure comprehension and experience a variety of poetry

Appreciate techniques of effective expression

Learn about structure components such as meter, verse, forms, stanza form, and devices of sound and sense

Focus on biographical and socio-historic contexts, universal themes and thematic elements, interpretation, and composition strategies and techniques

Experience a variety of literary genres

Study techniques of effective expression and learn about characterization, point of view, and literary styles as studied through the various authors

Write an expository composition that introduces a complex central idea, and develop it with appropriate, specific evidence, cogent explanations, and clear transitions.

Write an argumentative composition that introduces a complex central idea, and develop it with appropriate, specific evidence, cogent explanations, and clear transitions.

Analyze test format

Practice test strategies

Practice test pacing

Prepare with test simulations

Identify vocabulary

Student Learning Outcomes:

- Produce expository and argumentative compositions that introduce a complex central idea and develop it with appropriate, specific evidence, cogent explanations, and clear transitions.
- Analyze characteristics of sub-genres (e.g., satire, parody, allegory, and pastoral) that are used in poetry, prose, drama, novel, short story, essay, and other basic genres.

Hours

Total Hours

72.0

English Through Literature 11B

HSENG050:

72.0 Hours

Provides students with the opportunity to study the literature of the United States from 1850-present. Language arts skills of reading, analysis, interpretation and writing are emphasized. Multi-media approaches are utilized. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:

Advisory

HSENG063 - English Through Literature 11A

Learning Outcomes

Course Objectives:

Analyze and interpret the literature of the representative works from this period and demonstrate an understanding of the historical and social context of the works.

Analyze and interpret the literature of the representative works from this period and demonstrate an understanding of the historical and social context of the works.
Analyze and interpret the literature of the representative works from this period and demonstrate an understanding of the historical and social context of the works.

Analyze and interpret the literature of the representative works from this period and demonstrate an understanding of the historical and social context of the works.

**Student Learning Outcomes:**

- Interpret literature of the United States from 1850-present.
- Demonstrate knowledge of literature analysis and interpretation.

**Hours**

**Total Hours**

72.0

**English Through Literature 12B**

**HSENG051:**

72.0 Hours

Provides students with the opportunity to study some of the central works/authors in British and world literature. Language arts skills of reading, analysis, interpretation and writing are emphasized. Multi-media approaches are utilized. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

**Advisory**

[HSENG064 - English Through Literature 12A](#)

**Learning Outcomes**

**Course Objectives:**

- Read representative works from this movement and demonstrate an understanding of Romanticism.
- Read representative works from this movement and demonstrate an understanding of the rise of Realism.
- Read representative works from this period and demonstrate an understanding of the Modern Period.
- Read representative works from this period and demonstrate an understanding of the Post-Modern Period.

**Student Learning Outcomes:**

- Demonstrate knowledge of the central works/authors in British and world literature.
- Demonstrate knowledge of literary analysis and interpretation.

**Hours**

**Total Hours**

72.0

**English Language Arts 1**

**HSENG052:**

72.0 Hours

Introduces students to the development of language arts skills through an integrated course which includes instruction and practice in grammar and mechanics, academic and business writing, and reading with active responses to works of literature. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None
Learning Outcomes

Course Objectives:
- Identify and critique literary tools and terminology, including plot line elements, character traits, behavior, and theme.
- Use critical thinking skills to comprehend and analyze the text.
- Write well-developed responses to questions and prompts drawn from assigned literature.
- Support ideas and viewpoints through logical and detailed references to the text.
- Demonstrate proficiency with basic English grammar.
- Apply selected English usage concepts by writing responses to literature and composition exercises.
- Write effective business letter and email.

Student Learning Outcomes:
- Effectively identify and use grammar structures.
- Demonstrate understanding of the writing process.
- Critically evaluate works of literature.

Hours

Total Hours

72.0

English Language Arts 2
HSENG053:

72.0 Hours

Expands the development of language arts skills through reading and actively responding to various works of literature. Presents concepts of English grammar, mechanics, and punctuation through a primary text and technology-enhanced instruction. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
- Identify and critique literary tools and terminology, including plotline elements, character traits, behavior, and theme.
- Use critical thinking skills to comprehend and analyze the text.
- Write well-developed responses to questions and prompts drawn from assigned literature.
- Support ideas and viewpoints through logical and detailed references to the text.
- Apply selected English concepts by writing responses to literature and composition exercises.

Student Learning Outcomes:
- Critically evaluate works of literature.
- Effectively identify and use grammatical concepts.

Hours

Total Hours

72.0

English Through Literature 11A
HSENG063:
72.0 Hours

Integrates language arts skills and reading analysis interpretation and writing through a literature-based curriculum. Survey course which allows the student an opportunity to study some of the central works in American literature. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Analyze the nuances as well as the larger meaning of the novel
Analyze a variety of poetry
Recognize techniques of effective expression
Identify structural components such as meter, verse form, stanza form, and devices of sound and sense
Identify characterization, point of view, and literary styles in a variety of literary genres
Identify characterization, point of view, and literary style
Review the mechanics of grammar and writing
Identify and properly use MLA format

Student Learning Outcomes:
Demonstrate knowledge of reading analysis and interpretation.
Analyze and interpret some of the central works in American literature.

Hours
Total Hours
72.0

English Through Literature 12A
HSENG064:

72.0 Hours

Integrates language arts skills and reading analysis interpretation and writing through world literature. This course allows the student to study some central works in world literature. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Analyze the nuances as well as the larger meaning of the novel
Comprehend and experience a variety of poetry
Recognize techniques of effective expression
Identify structural components such as meter, verse form, stanza form, and devices of sound and sense
Experience a variety of literary genres
Study techniques of effective expression and identify characterization, point of view, and literary style as studied through the various authors
Identify characterization, point of view, and literary style
Review the mechanics of grammar and writing
Identify and properly use MLA format

**Student Learning Outcomes:**
- Demonstrate knowledge of reading analysis and interpretation.
- Analyze and interpret central works in world literature.

**Hours**
**Total Hours**
72.0

**English Fundamentals 2**
**HSENG066:**

72.0 Hours

Reinforces and expands the basic concepts of sentence structure, punctuation grammar, parts of speech, and writing skills. Open Entry/Open Exit

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Identify parts of speech.
- Identify elements of a sentence.
- Recognize correct verb forms.
- Identify and correct errors in subject and verb agreement.
- Apply the correct modifier in a sentence.
- Make the correct pronoun choice.
- Identify phrases and clauses.
- Eliminate fragments and run-ons.
- Utilize correct punctuation.
- Correctly use apostrophes and quotation marks.
- Explain the rules of capitalization and identify capitalization errors.

**Student Learning Outcomes:**
- Demonstrate proficiency in basic punctuation and capitalization.
- Demonstrate proficiency in basic grammar.

**Hours**
**Total Hours**
72.0

**English Fundamentals 3**
**HSENG067:**

72.0 Hours
An intermediate English course that expands on parts of speech, grammar, punctuation, sentence patterns, and sentence skills to develop a student's writing ability. Open Entry/Open Exit

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**
- Identify parts of speech
- Identify parts of a sentence
- Recognize basic sentence patterns
- Differentiate between direct object, indirect object, and subject complement
- Identify and differentiate between adjectives and adverbs
- Recognize prepositions and prepositional phrases
- Use prepositional phrases as modifiers
- Identify adjective and adverb clauses
- Recognize compound and complex sentences
- Use appositives to combine ideas
- Recognize and correct sentence fragments and run-ons
- Identify and correct errors in subject/verb agreement
- Correctly use challenging verb forms
- Identify the correct verb form in a sentence
- Choose the correct modifier in a sentence
- Use comparatives and superlatives correctly
- Avoid the use of double negatives
- Identify subject and object pronouns
- Use possessive and reflexive pronouns correctly
- Demonstrate correct use of punctuation
- Correctly use and apply the rules of capitalization
- Apply rules of comma usage
- Correctly use apostrophes and quotation marks

**Student Learning Outcomes:**
- Demonstrate proficiency in identifying sentence patterns.
- Employ the basic conventions of English grammar, syntax, mechanics, and punctuation at the sentence level.

**Hours**

**Total Hours**

72.0

**English Fundamentals 4**

HSENG068:

72.0 Hours
An advanced course in English grammar, parts of speech, punctuation, sentence patterns, and sentence skills to further develop a student's writing ability. Open Entry/Open Exit

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Recognize basic sentence patterns
Identify parts of speech
Recognize compound sentence parts and compound sentences
Recognize complex sentences
Recognize and differentiate between clauses in sentences
Use subordination in sentence construction
Utilize devices to increase sentence variety
Identify and correct sentence fragments
Identify and correct run-on sentences
Demonstrate correct placement of modifiers in a sentence
Recognize and repair dangling modifiers
Recognize parallel construction in sentences
Correct problems with sentence construction
Identify correct use of subject/verb agreement
Correctly use difficult verb forms
Demonstrate correct use of verb tenses
Express ideas using active verbs
Correctly use adjectives and adverbs
Correctly identify modifiers after sense verbs
Classify pronouns as nominative or objective
Differentiate between reflexive, intensive, demonstrative, and possessive pronouns
Identify correct pronoun agreement
Demonstrate correct use of punctuation marks
Apply rules for capitalization

Student Learning Outcomes:
Recognize and correct grammatical mistakes in sentence construction, including non-parallel construction, dangling modifiers, and incorrect pronoun agreement.
Compose correct complex sentences using appositives, linking verbs, noun clauses, adjective clauses, and adverb clauses.

Hours

Total Hours
72.0

The Short Story

HSENG070:
Introduces the student to the short story as a literary form so that the student will learn how the individual elements work together to present a theme or effect. The student will study the development of the short story as a genre and will read selected short stories from various periods authors and cultures. (No credit if a student has taken HSART 070.) Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Recognize the short story as a literary genre.

Explain the development of the short story as a literary form.

Identify the elements of the short story.

Explain how the literary elements interrelate to present the writer's theme or effect.

Analyze selected short stories for theme and critical details.

Demonstrate ability to write about or discuss literature using relevant support from the text.

Research the life of a prominent author to further develop appreciation of the genre.

**Hours**

**Poetry**

**HSENG072:**

72.0 Hours

Introduces poetry as a literary form. Examines the fundamentals of poetry through the reading of poetry from a variety of authors and periods. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Recognize poetry as a literary form.

Define and explain vocabulary related to poetry.

Identify the elements of poetry.

Identify various rhyme schemes and metrical patterns.

Identify different types of verse.

Recognize sound devices and figurative language devices in selected poems.

Analyze components of selected poems.

Write an analysis and reaction to a selected poems.

Compose an original poem.

Recite a poem from memory.

**Student Learning Outcomes:**

Analyze and interpret works of poetry.

Compose an original poem with a minimum of ten lines.

**Hours**
Total Hours
72.0

The Novel
HSENG076:
72.0 Hours
Introduces the student to the novel as a genre and how the individual literary elements work together to present a central purpose. The student will study the elements of the novel and will read and analyze two novels from an annotated reading list. Open Entry/Open Exit. 5 HS credits.

Requisites

None

Learning Outcomes

Course Objectives:
- Recognize the novel as a literary genre
- Identify elements of the novel
- Define literary devices used in novels
- Explain how literary devices and plot techniques enhance the major elements of the novel
- Interpret how the novelist will select elements to support his or her worldview
- Analyze story content and recognize elements in selected novels
- Write about the novels using relevant support from the text
- Interpret and analyze literary devices in the selected novels

Student Learning Outcomes:
- Demonstrate understanding of the elements of the novel and how the elements interrelate.
- Analyze and interpret works of literature.

Hours

Total Hours
72.0

Composition 1
HSENG083:
72.0 Hours
Provides instruction and practice in the communication of ideas in written form. Emphasis on mastery of sentence, paragraph, and essay skills including organization in terms of unity, support, and coherence. Open Entry/Open Exit. 5 HS credits.

Requisites

None

Learning Outcomes

Course Objectives:
- Define and recognize plagiarism.
- Identify correct use of grammar and punctuation in writing.
- Write effective sentences with correct use of grammar and punctuation.
Use the steps of the writing process to plan, write, and revise paragraphs and essays.

Write freely and expressively in journals on self-selected topics.

Write expository, descriptive, narrative, and argumentative paragraphs.

Write effective topic and thesis statements.

Write five paragraph essays that are organized, supported, and coherent.

Student Learning Outcomes:
- Demonstrate knowledge of proper grammar, mechanics, punctuation, and word usage.
- Develop a clearly written expository paragraph with a clear topic sentence, sufficient support, and accurate sentence skills.

Hours

Total Hours

72.0

Composition 2

HSENG084:

72.0 Hours

Provides instruction in writing a well-developed unified essay. Introduces students to practical writing skills and research methods. Meets the composition proficiency requirement. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory

HSENG083 - Composition 1

or equivalent

Learning Outcomes

Course Objectives:
Define and recognize plagiarism.

Identify correct use of grammar and punctuation in writing.

Write effective sentences with correct use of grammar and punctuation.

Write freely and expressively on self-selected topics.

Use the steps of the writing process to plan, write, and revise essays and other writing assignments.

Write effective thesis statements.

Write essays that are organized, supported, and coherent.

Write a summary, report, resume, and cover letter.

Develop basic library research skills including searching for sources and creating citations.

Student Learning Outcomes:
- Write a well-developed five-paragraph essay unified by a central theme including an introductory paragraph, three supporting paragraphs, and a concluding paragraph.
- Write a proficient resume and cover letter.

Hours

Total Hours

72.0
Composition 3
HSENG085:

72.0 Hours

Prepares college bound students with advanced writing assignments that require in-depth research culminating in the production of expository and argumentative essays and a 1500 word-final argumentative research paper. Open Entry/Open Exit.

Requisites
Requisites:

Advisory

HSENG084 - Composition 2

Learning Outcomes
Course Objectives:
Define and recognize plagiarism

Conduct library research for the selected topic using library resources and the internet

Create outlines for papers

Correctly cite sources using in-text citation

Organize and write an expository essay

Organize and write an argumentative essay

Organize and write an argumentative research paper

Use in-text citations to attribute information to proper sources

Create a works-cited page

Student Learning Outcomes:

Cite sources using in-text citations and a bibliography.
Organize and write a 1500 word argumentative research paper.

Hours
Total Hours

72.0

College Preparatory Composition
HSENG086:

72.0 Hours

Provides development of critical reading, academic writing, and academic research skills to prepare students for transfer level associate degree courses. Students will utilize the writing process in extended practice with expository and argumentative essays, will respond to academic reading, and will develop academic research skills and documentation techniques. Emphasis will be placed on refining writing in terms of grammar and sentence skills. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:

Advisory

HSENG083 - Composition 1

Learning Outcomes
Course Objectives:
- Apply active reading strategies for pre-reading and vocabulary development.
- Distinguish between fact and opinion.
- Determine author's purpose and point-of-view in a work.
- Differentiate between main idea and supporting details.
- Read materials for understanding at the literal level and interpret the text for deeper meaning.
- Apply critical reading strategies to evaluate ideas in a work and to formulate opinions and conclusions.
- Apply pre-writing techniques to identify purpose and audience.
- Develop effective thesis statements.
- Establish a clear method of organization using ordering strategies.
- Provide sufficient supporting evidence in writing.
- Demonstrate the ability to write an effective introduction and conclusion paragraph for an essay.
- Utilize the writing process to develop unified, well-supported, organized, coherent paragraphs and essays.
- Demonstrate proficiency writing paragraphs and essays with an emphasis on expository and argumentative writing.
- Create written responses to assigned readings.
- Conduct library research and obtain appropriate sources.
- Select an appropriate, limited topic.
- Prepare research notes on readings.
- Demonstrate ability to summarize, paraphrase, and use direct quotations.
- Properly use citations in a written work.
- Distinguish between a bibliography and a works cited page.
- Write a research paper on a limited topic with MLA formatting and a works cited page.
- Construct effective sentences using proper English grammar and punctuation.
- Utilize a variety of sentence patterns in writing.
- Demonstrate ability to edit and proofread writing.

Student Learning Outcomes:
- Utilize the writing process to compose grammatically correct sentences, paragraphs, and essays that are unified, supported, organized, and coherent.
- Apply critical reading strategies to written works for meaning, rhetorical strategies, and evaluation of ideas.
- Conduct library research and write a paper in MLA format with proper documentation.

Hours
Total Hours
72.0

Building Vocabulary 3
HSENG098:

72.0 Hours

Provides practice in using context clues to develop vocabulary, including practice with synonyms, antonyms, and analogies. Builds reading comprehension skills and creates a strong vocabulary foundation that enables students to be better readers, writers, thinkers, and test-takers. Open Entry/Open Exit. 5 HS credits.
Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Derive the meaning of words from context clues.

Define groups of words which pertain to central ideas such as fear, courage, weakness, strength.

Identify the meanings of Anglo-Saxon and Latin prefixes.

Recognize the meaning of a variety of root words and use this awareness to determine the meaning of words.

Identify the meaning of a variety of Greek word elements.

Recognize word derivatives and form derivatives through the use of prefixes and suffixes.

Identify homonyms, homographs, synonyms, and antonyms for a variety of vocabulary words.

Recognize relationships between words.

Student Learning Outcomes:
  Derive meaning of unfamiliar words from the context.
  Demonstrate understanding of the meaning of words by identifying prefixes, roots, and derivatives.

Hours
Total Hours
72.0

Survey of English Level 1
HSENG201:

72.0 Hours

Introduces students to the development of language arts skills through reading and active response to works of literature. Multi-media approaches are utilized. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Comprehend the significant ideas and vocabulary of each assigned literary work.

Actively respond to the assigned literary works through the use of written, oral, and listening activities.

Develop reading comprehension and critical thinking skills in order to master state-mandated high school graduation tests and college entrance exams.

Student Learning Outcomes:
  Analyze and interpret works of literature.
  Use core literary concepts in assigned works.

Hours
Total Hours
72.0

Survey of English Level 2
HSENG202:

72.0 Hours

Expands the development of language arts skills through reading and active response to works of literature. Multi-media approaches are utilized. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Comprehend the significant ideas and vocabulary of each assigned literary work.

Actively respond to the assigned literary works through the use of written, oral, and listening activities.

Develop reading comprehension and critical thinking skills in order to master state-mandated high school graduation tests and college entrance exams.

Student Learning Outcomes:

Analyze and interpret works of literature.
Demonstrate proficiency of core literary concepts in assigned works.

Hours
Total Hours
72.0

Survey of English Level 3

HSENG203:

72.0 Hours

Explores the literature of the United States from the earliest English settlers to the present. Examines genres and characteristics of various literary movements. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Comprehend the significant ideas and vocabulary of each assigned literary work.

Actively respond to the assigned literary works through the use of written, oral, and listening activities.

Develop the reading comprehension and critical thinking skills in order to master state-mandated high school graduation tests and college entrance exams.

Student Learning Outcomes:

Analyze and interpret works of literature.
Demonstrate proficiency of core literary concepts in assigned works.

Hours
Total Hours
72.0

Survey of English Level 4
HSENG204:

72.0 Hours

Integrates the language arts skills of reading, analysis, interpretation, and writing through literature. Examines central works in world and British literature. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Comprehend the significant ideas and vocabulary of each assigned literary work.

Actively respond to the assigned literary works through the use of written, oral, and listening activities.

Develop reading comprehension and critical thinking skills in order to master state-mandated high school graduation tests and college entrance exams.

Student Learning Outcomes:
- Analyze and interpret works of literature.
- Use core literary concepts in assigned works.

GED Test Preparation
HSGED031:

360.0 Hours

Provides pre and post testing and individualized prescriptive instruction in preparation for the GED test. Covers test-taking strategies and the fundamentals of social studies, mathematics, science, writing, and reading. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Comprehend, apply, analyze, and synthesize the following: Literary texts (poetry, drama, and prose fiction) Nonfiction texts (nonfiction prose, critical review of visual and performing arts, and workplace and community documents)

Comprehend, apply, analyze, and synthesize informational texts

Comprehend, understand, interpret, apply, analyze, and evaluate key concepts and principles in: History Geography Economics Civics and government

Understand, interpret, and apply concepts in: Physical science Life science Earth and space science

Select and apply appropriate process for solving problems in: Number operations and number sense Measurement and geometry Data analysis, statistics, and probability Algebra, functions, and patterns

Use the Texas Instruments TI-30XS calculator to solve problems

Student Learning Outcomes:
- Demonstrate knowledge of quantitative & algebraic problem solving.
- Demonstrate knowledge of life science, physical science, earth and space science.
- Demonstrate knowledge of civics and government, U.S. history, economics, and geography.
Analyze fiction and nonfiction literature.

### Hours

**Total Hours**

360.0

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**Introduction to Calculus 1A**

**HSMTH101:**

72.0 Hours

Prepares students to take the Mathematics Advanced Placement Examination. Colleges and universities may give advanced placement and/or college credit based on the results of the AP examination. Areas of study include: functions, limits, continuity, and derivative. The graphing calculator is used extensively in the course and on the AP examinations. Open Entry/Open Exit. 5 HS credits.

#### Requisites

**Requisites:**

None

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#### Learning Outcomes

**Course Objectives:**

Demonstrate proficiency in the following concepts:

- Analysis of graphs
- Limits of functions (including one-sided limits)
- Calculating limits using algebra
- Estimating limits from graphs or tables of data
- Asymptotic and unbounded behavior
- Understanding asymptotes in terms of graphical behavior
- Describing asymptotic behavior in terms of limits involving infinity
- Comparing relative magnitudes of functions and their rates of change
- Continuity as a property of functions
- Understanding continuity in terms of limits
- Geometric understanding of graphs of continuous functions

Demonstrate proficiency in the following concepts:

- Concepts of the derivative
- Derivative defined as the limit of the difference quotient
- Relationship between differentiability and continuity
- Derivative at a point
- Slope of a curve at a point
- Tangent line to a curve at a point and local linear approximation
- Instantaneous rate of change as the limit of average rate of change
- Derivative as a function
- Graphing functions and their derivatives
- Mean Value Theorem

Equations involving derivatives; verbal descriptions are translated into equations involving derivatives and vice-versa
Second derivative
Relationship between f and the graphs of f1 and f2
Relationship between the concavity of f and the sign of f1
Point of inflection as place where concavity changes
Applications of derivatives
Analysis of curves, including the notions of monotonicity and concavity
Optimization, both absolute and relative extrema
Modeling rates of change, including related rates problems
Use of implicit differentiation to find the derivative of an inverse function
Interpretation of the derivative as a rate of change in varied applied contexts
Analysis of planar curves given in parametric form, polar form, and vector form
Geometric interpretation of differential equations via slope fields and the relationship between slope fields and derivative of implicit functions
Numerical solutions of differential equations using Euler's method
Computation and derivatives
Knowledge of derivatives of basic functions
Basic rules for the derivative of sums, products, and quotients of functions
Chain rule and implicit differentiation
Demonstrate proficiency in the following concepts:
Test Taking Strategies
Eliminating answers
Using the answers to determine the correct choice
Working backwards
Learning to read and interpret exam questions

Student Learning Outcomes:
Demonstrate the ability to relate Calculus concepts to their graphical, numerical and symbolic representations.
Develop and demonstrate knowledge of functions, limits, continuity, and derivatives.

Hours
Total Hours
72.0

Introduction to Calculus 1B
HSMTH102:
72.0 Hours

Prepares students to take the Mathematics Advanced Placement Examination-BC level. Colleges and universities may give advanced placement and/or college credit based on the results of the AP examination. Areas of study include integrals and polynomial approximations. The graphing calculator is used extensively in the course and on the AP examinations. Open Entry/Exit. 5 HS credits.

Requisites
Requisites:
Learning Outcomes

Course Objectives:

Demonstrate proficiency in the following concepts:

Riemann sums

Concept of a Riemann sum over equal subdivisions

Computation of Riemann sums using left, right, and midpoint evaluation points

Interpretations and properties of definite integrals

Definite integral as a limit of Riemann sums

Definite integral of the rate of change of a quantity over an interval

Basic properties of definite integrals

Applications of integrals

Area of region under a curve

Volume of a solid with known cross sections

Average value of a function

Distance traveled by a particle along a line

Length of a curve

Area of a region bounded by polar curve

Fundamental Theorem of Calculus

Use of the Fundamental Theorem to evaluate definite integrals, antiderivatives, and the analytical and graphical analysis of functions so defined

Techniques of antidifferentiation

Antiderivatives following directly from derivatives of basic functions

Integration by substitution of variables

Integration by parts and simple partial fractions

Improper integrals

Applications of antidifferentiation

Finding specific antiderivative using initial conditions, including applications to motion along a line

Solving separable differential equations and using them in modeling

Solving logistical differential equations and using them in modeling

Numerical approximations to indefinite integrals

Demonstrate proficiency in the following concepts:

Concept of series

Series of constants

Motivating examples including decimal expansion

Geometric series with applications

The harmonic series

Alternating series with error bound

Terms of series as areas of rectangles and their relationship to improper integrals
The ratio test for convergence or divergence
Comparing series to test for convergence or divergence
Taylor series
Taylor polynomial approximation with graphical demonstration of convergence
The general Taylor series centered at \( x=a \)
Maclaurin series for the functions \( e^x, \sin x, \cos x \)
Formal manipulation of Taylor series and shortcuts to computing Taylor series
Function defined by power series and radius of convergence
Lagrange error bound for Taylor polynomials
Demonstrate proficiency in the following concepts:
Eliminating answers
Using the answers to determine the correct choice
Working backwards
Learning to read and interpret exam questions

**Student Learning Outcomes:**

Demonstrate the ability to relate Calculus concepts to their graphical, numerical and symbolic representations.
Develop and demonstrate knowledge of integrals and polynomial approximations.

**Hours**

**Total Hours**

72.0

**Math Study Skills Support 1A**

**HSMTH103:**

72.0 Hours

This course is designed to assist math students in developing positive attitudes, habits, and techniques in the areas of solving word problems, test-taking strategies, note taking, time management, study skills, strategies for utilizing math textbooks and coping with math anxiety. Open Entry/Open Exit. 1HS credit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Develop daily and weekly schedules

Establish short-term and long-term goals

Compare and contrast fixed mindset and growth mindset characteristics

Apply short-term and long-term memory techniques to strengthen math skills

Classify thinking according to six cognitive levels of complexity

Utilize proper math conventions such as mathematical terminology and symbolic notations

Discuss mathematical thinking orally using math vocabulary with precision

Express mathematical ideas and strategies precisely and coherently in written form
Develop note-taking skills techniques during lectures
Develop note-taking skills from textbooks
Identify and practice problem solving strategies
Assess available resources to access when unable to solve a problem
Prepare exam study plans
Create test questions for review
Develop test review techniques
Utilize anxiety reduction techniques
Evaluate attitudes towards math and the effect they have on test performance
Assess test performance, learning from mistakes and developing strategies for growth and improvement in math
Recognize and interpret symptoms of math anxiety
Identify and evaluate belief systems regarding math

Student Learning Outcomes:
- Develop time management skills, organizational skills, textbook study techniques, and note-taking skills for success in their math courses.
- Develop study strategies when approaching math homework and exams.

Hours
Total Hours
72.0

Math Study Skills Support 1B
HSMTH104:

15.0 Hours

This course is designed to assist math students in applying positive attitudes, habits, and techniques in the areas of solving word problems, test-taking strategies, note taking, time management, study skills, strategies for utilizing math textbooks and coping with math anxiety. Open Entry/Open Exit. 1 HS credit.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Apply daily and weekly schedules
Evaluate short-term and long-term goals
Recognize fixed mindset thoughts and apply growth mindset techniques
Reinforce short-term and long-term memory techniques to strengthen math skills
Evaluate activities based on the six cognitive levels of complexity
Use math conventions such as mathematical terminologies and symbolic notations
Communicate mathematical thinking orally using math vocabulary with precision
Compose mathematical ideas and strategies precisely and coherently in written form
Apply note-taking skills techniques during lectures
Utilize note-taking skills from textbooks
Implement problem solving strategies
Utilize available resources to access when unable to solve a problem
Employ exam study plans
Create test questions for review
Execute test review techniques
Practice anxiety reduction techniques
Evaluate attitudes towards math and the effect they have on test performance
Assess test performance, learning from mistakes and developing strategies for growth and improvement in math
Analyze belief systems regarding math and math anxiety
Apply strategies to reduce math anxiety

Student Learning Outcomes:
- Apply time management skills, organizational skills, textbook study techniques, note-taking skills for success in their math courses.
- Apply study strategies when approaching math homework and exams.

Hours
Total Hours
15.0

Integrated Math 1A
HSMTH120:

72.0 Hours
Provides instruction in expressions and problem solving, solving linear equations, linear equations and inequalities, introduction to functions, exponential equations and functions, and sequences and modeling with functions. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
- Translate real-world situations into mathematical expressions and equations
- Identify variables, measurements, and units
- Identify the structure of a mathematical expression and their relationships to real-world models
- Solve equations and inequalities
- Solve equations inequalities and real-world applications
- Graph linear equations in two variables
- Use graphs to solve real-world problems
- Graph linear inequalities in two variables
- Use inequalities to model constraints in real-world contexts
- Identify mathematical relations, functions, and function notation
- Identify function equations, intercepts, and average rate of change for functions
- Express how the domain and range of a function can relate to the situation the function models
- Solve exponential equations
- Graph exponential functions
- Identify geometric, and other types of sequences
- Describe functions as models for real-world situations

Student Learning Outcomes:
- Identify mathematical expressions and problem solving, solving linear equations, linear equations and inequalities.
- Identify functions, exponential equations and functions, and sequences and modeling with functions.

Hours
Total Hours
72.0
Integrated Math 1B
HSMTH121:

72.0 Hours
Provides instruction in systems of equations, describing data, linear models for data, transformations, constructions and congruence, and analytic geometry. Open Entry/Open Exit.

Requisites
Requisites:
Advisory

HSMTH120 - Integrated Math 1A

Learning Outcomes
Course Objectives:
Solve systems of equationsUse systems to solve real-world problems.
Calculate measures of center (mean, median, and mode) and variability (variance and standard deviation)Use graphs and tables to make sense of data
Graph two dimensional data and describe how the input values (the x-values) are related to the output values (the y-values)Use correlation and linear regression to describe the relationship between the values
Identify geometric terms such as point, line, plane, and angleIdentify polygons, transformations, and symmetryUse coordinates for transformations
Identify congruence, with a focus on reasoning about the congruence of polygons and trianglesPerform geometric constructions including segment bisectors and simple regular polygons Describe how congruence and transformations are related to each other
Apply the tools of algebra to analytic geometryUse coordinates and algebra to solve geometric problems, prove theorems, and describe geometric relationships

Student Learning Outcomes:
Solve systems of equations, describing data, and linear models for data. Identify transformations, constructions and congruence, and analytic geometry.

Hours
Total Hours
72.0

Integrated Math 2A
HSMTH122:

72.0 Hours
Provides instruction in the number system, quadratic polynomials, factoring and solving quadratic equations, functions, quadratic functions and models, and conditional probability. Open Entry/Open Exit.

Requisites
Requisites:
Advisory

HSMTH121 - Integrated Math 1B

Learning Outcomes
Course Objectives:
Identify radicalsSimplify radical expressionsIdentify the relationship between radical expressions, rational exponents, and complex numbers
Add, subtract, multiply and divide polynomials

Manipulate polynomial equations to find solutions

Identify functional relationship in the real world Represent functions Use function notation Find absolute value functions, piecewise functions, step functions, and function inverses

Graph, analyze, and apply quadratic functions Solve systems of equations that include one linear and one quadratic equation

Explore conditional probability Interpret two-way tables Solve real-world problems, including independent events and conditional probability

**Student Learning Outcomes:**
- Identify number system; quadratic polynomials; and factoring and solving quadratic equations.
- Identify functions, quadratic functions and models, and conditional probability.

**Hours**

**Total Hours**

72.0

**Integrated Math 2B**

**HSMTH123:**

72.0 Hours

Provides instruction in geometric reasoning, area and volume, circles, right triangle trigonometry, and conic sections. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

**HSMTH122 - Integrated Math 2A**

**Learning Outcomes**

**Course Objectives:**

Prove and use many geometric theorems Describe geometric reasoning

Find the circumference and area of circles Apply the volume formulas for pyramids, cylinders, cones, and spheres

Find lengths of chords and arcs Identify radian measure Describe the results of combining angles, triangles, and segments with circles Find inscribed and circumscribed triangles Identify circle similarity

Identify sine, cosine, and tangent trigonometric ratios Solve applied problems using right triangle trigonometry

Write the equation of a circle or parabola when given its graph Graph a circle or parabola when given its equation Use the distance formula to derive the equation of a circle or parabola

**Student Learning Outcomes:**

Describe geometric reasoning, area and volume, and circles.

Identify right triangle trigonometry, and conic sections.

**Hours**

**Total Hours**

72.0

**Integrated Math 3A**

**HSMTH124:**

72.0 Hours
Provides instruction in polynomials beyond quadratics to graphing, problem solving, working with rational expressions, and statistical and probability tools, such as the standard normal distribution, to understand data. Open Entry/Open Exit.

Requisites

Requisites:

Advisory

**HSMTH123 - Integrated Math 2B**

Learning Outcomes

Course Objectives:

Explore different kinds of random variables

Analyze and compare data in discrete binomial distributions as well as the continuous normal distribution

Identify ways the sampling process is improved by random selection, and ways samples can be used to make estimations and predictions

Apply the Central Limit Theorem to samples for evaluating statistical claims

Identify polynomials, polynomial operations, and factoring patterns

Identify the connections between polynomials and series

Describe applying operations with rational expressions as well as solving rational equations

Identify square roots in more depth as well as higher roots and rational exponent expressions

Solve radical equations

Divide polynomials including by factoring

Identify functions such as absolute value functions, power functions, reciprocal power functions, rational functions, and radical functions, and their graphs

Identify characteristics of their graphs

**Student Learning Outcomes:**

Find polynomials beyond quadratics to graphing, problem solving, and working with rational expressions.

Identify statistical and probability tools, such as the standard normal distribution, to understand data.

Hours

Total Hours

72.0

**Integrated Math 3B**

**HSMTH125:**

72.0 Hours

Provides instruction in making inferences using simulations, experiments, and surveys. In geometry, students extend trigonometric concepts to general triangles, use trigonometric functions to model periodic processes, and use mathematical modeling by making use of well-developed skills with various mathematical tools. Open Entry/Open Exit.

Requisites

Requisites:

Advisory

**HSMTH124 - Integrated Math 3A**

Learning Outcomes

Course Objectives:
Identify exponents in exponential equations

Identify that logarithms arise naturally as inverses of exponential functions

Use logarithms to solve many mathematical and real-world problems, including problems involving growth

Use the unit circle to identify trigonometric ratios

Use radian measure to define trigonometric functions that are no longer bound by angles in a triangle

Find how the graphs of sine and cosine are waves that can be shifted, amplified, and compressed to model many periodic phenomena

Identify ways that functions can be used to model many different real-world situations and phenomena

Evaluate, combine, compare, and adjust functions that model a situation

Identify the ways to use equations and inequalities for solving several real-world optimization problems

Use angles, distances, surface area, volume, and density to solve many kinds of problems

**Student Learning Outcomes:**

Make inferences using simulations, experiments, and surveys.

Identify trigonometric concepts to general triangles, use trigonometric functions to model periodic processes, and use mathematical modeling by making use of well-developed skills with various mathematical tools.

**Hours**

**Total Hours**

72.0

**Pre-Algebra A**

**HSMTH154:**

72.0 Hours

Covers language, symbolism, and fundamental operations skills required to prepare students for success in Algebra 1. Number and operation sense, estimation skills, and the ability to judge reasonableness of results will be strengthened in the context of practical applications and problem solving. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

**Advisory**

HSMTH159 - Math Fundamentals 2

or equivalent

**Learning Outcomes**

**Course Objectives:**

Add and subtract whole numbers

Multiply and divide whole numbers

Compare whole numbers

Combine whole numbers

Read numbers on a number line

Use whole number patterns

Graph on a number line

Perform operations with integers

Graph points in the coordinate plane

Solve problems by looking for a pattern
Make and test conjectures using inductive reasoning
Use the Distributive Property
Combine integers
Apply the Order of Operations with integers
Compare numbers
Divide whole numbers
Write and solve equations
Write, solve, and graph inequalities
Round numbers
Compare and order decimals
Operations and decimals
Multiply and divide by multiples of ten
Estimate with decimals
Solve equations with decimals
Convert metric units of measure
Solve problems by simplifying the problem
Divide whole numbers
Multiply three or more factors
Recall multiplication facts
Read and write fractions
Write equivalent fractions
Use exponents
Simplify expressions with exponents
Simplify fractions
Write and calculate in scientific notation
Solve problems by accounting for all possibilities
Read and write fractions
Write fractions in simplest form
Write quotients as decimals
Solve one-step equations
Find greatest common factor
Perform operations with fractions
Solve equations with fractions
Find powers of products and quotients
Solve problems by working backward
Write fractions in lowest terms
Solve equations using the multiplication property
Write fractions as decimals
Write decimals as fractions or mixed numbers in simplest form
Write percents using the % symbol
Find and use ratios and unit rates
Write and solve proportions
Find and use percents
Solve problems by making a table

**Student Learning Outcomes:**
- Develop and demonstrate knowledge of language, symbolism, and fundamental operations skills including number and operation sense and estimation skills.
- Model and solve real-world applications involving math principles, operations, and strategies.

**Hours**

**Total Hours**

<table>
<thead>
<tr>
<th>Hours</th>
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**Pre-Algebra B**

**HSMTH155:**

72.0 Hours

Covers language, symbolism, and fundamental operations skills required to prepare students for success in Algebra 1 and Geometry. Data analysis, spatial thinking, and the ability to judge reasonableness of results will be strengthened in the context of practical applications and problem solving. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Advisory**

HSMTH154 - Pre-Algebra A

or equivalent

**Learning Outcomes**

**Course Objectives:**
- Solve one-step equations
- Simplify expressions
- Translate English phrases into variable expressions
- Solve and graph one-step inequalities
- Write and solve multi-step equations
- Write and solve two-step inequalities
- Find simple and compound interest
- Solve problems by writing equations
- Solve linear equations for a specific variable
- Determine the coordinates for a point on a coordinate plane
- Graph points on a coordinate plane
- Write ratios in simplest form
- Identify number patterns
- Determine whether a relation is a function
Solve linear equations
Solve systems of linear equations and inequalities
Solve problems by graphing
Classify polygons by the number of sides
Identify the radius of a circle
Identify the diameter of a circle
Graph points on a coordinate plane
Use properties of figures to solve problems
Classify geometric figures
Construct figures
Solve problems by drawing a diagram
Find the area of squares and rectangles
Find the product of a fraction and an integer or variable expression
Simplify the product of a number and a number squared
Find the circumference of a circle
Find the areas of figures
Find the surface areas of space figures
Find the volumes of space figures
Solve problems by making a model
Simplify numbers with exponents
Identify the coordinates of a point on an x-y plane
Solve proportions
Find the square root of numbers
Find the missing measures of right triangles
Use the Distance and Midpoint Formulas
Solve problems by writing a proportion
Compare and order whole numbers
Find the median
Compare and order decimals
Find probability
Multiply fractions
Compare fractions, decimals, and percents
Multiply whole numbers
Divide whole numbers
Use graphs to represent data
Find theoretical probability and experimental probability
Find permutations and combinations
Solve problems by doing simulations
Find values of the dependent variable using linear functions
Evaluate variable expressions
Simplify variable expressions
Use the distributive property.
Use arithmetic and geometric sequences
Graph nonlinear functions
Perform operations with polynomials
Solve problems by using multiple strategies

Student Learning Outcomes:
Develop and demonstrate knowledge in language, symbolism, and fundamental operations skills, including data analysis and spatial thinking.
Apply basic algebra and arithmetic concepts to solve real-life problems involving geometry, coordinate geometry and graphing.

Hours
Total Hours
72.0

Essential Mathematics 1
HSMTH156:

72.0 Hours
Provides the student with practice in math skills that are applicable to everyday situations. Percents, graphs, proportions, and units of measurement are included. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory

ABE009 - Academic Skills

(Math Unit)
AND

Advisory

HSMTH159 - Math Fundamentals 2

Learning Outcomes
Course Objectives:
Add, subtract, multiply, and divide decimals and fractions
Write and compare equivalent and different amounts of decimals and fractions
Compare energy savings
Write and interchange decimals, fractions, and percents
Compare fractions, decimals, and percents
Read nutritional information from labels
Compare energy savings using actual or simulated home gas and electric bills
Recognize percent problems and calculate sale prices
Use percents in home budgeting and in business situations
Compare using percents
Calculate property tax, buy at a discount, and interpret voting results
Calculate simple interest problems
Learn about installment plan buying
Calculate percent of increase/decrease
Calculate compound interest and finance charges
Learn about mark-ups
Write and solve problems using ratio and proportions
Calculate prices using proportion
Ratio and proportion word problems
Read pie, picture, bar, and line graphs
Read tables and double bar graphs
Recognize misleading graphs
Work with standard measurement when reading a time card, remodeling a house, and scheduling workers
Convert metric measurements
Compare costs of medicines and health aids using actual or simulated medical receipts

Student Learning Outcomes:

- Apply arithmetic principles to solve real world problems.
- Develop and demonstrate skills in setting up and solving percents, graphs, proportions, and units of measurement problems.

Hours
Total Hours
72.0

Essential Mathematics 2
HSMTH157:

72.0 Hours

Provides the student with practice in basic computational skills of mathematics, algebra, and geometry. Practical applications are included. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:

Advisory

HSMTH156 - Essential Mathematics 1

or equivalent

Learning Outcomes

Course Objectives:

- Review basic mathematical principles
- Understand the meaning of points, lines, and planes
- Calculate angle measure of straight lines and triangles
- Calculate exponents and roots
- Solve multi-step problems
Calculate perimeters and areas of polygons
Calculate the lowest rental cost
Similar triangle and right triangle word problems
Understand “work triangles”
Determine amount of paneling needed to panel a room
Understand radius, diameter, and circumference of a circle
Calculate area of a circle and rectangle
Calculate volumes of solids
Use a calculator
Write and order positive and negative numbers
Add, subtract, multiply, and divide both positive and negative numbers
Read and comprehend the investment’s page in a newspaper
Calculate depreciation
Write and evaluate algebraic expressions
Combine like terms
Compute problems
Learn about fuses
Understand profit
Convert to metric
Solve basic equations
Solve word problems using equations
Understand and solve real-world math problems
Solve word problems
Locate points on the plane
Find distance between points
Make, and solve, and graph equations
Learn to graph

**Student Learning Outcomes:**
- Develop and demonstrate skills in basic computational skills of arithmetic, algebra, and geometry.
- Apply arithmetic, algebraic, and geometric principles to solve simple real world problems.

**Hours**

**Total Hours**
72.0

**Math Fundamentals 1**

**HSMTH158:**

72.0 Hours

Introduces students to basic math skills including whole numbers, fractions, and decimals. Open Entry/Open Exit. 5 HS credits.
Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Apply number concepts including place value and rounding.

Apply the commutative and associative property to whole numbers.

Simplify expressions involving whole numbers by applying arithmetic operations.

Solve real-world word problems involving whole numbers.

Apply the multiplicative inverse property.

Define fractions.

Simplify expressions involving fractions by applying arithmetic operations.

Demonstrate mixed-number notation properly.

Solve real-world word problems involving fractions.

Recognize common fraction-decimal conversions.

Simplify expressions involving decimals by applying arithmetic operations.

Convert decimals to fractions and fractions to decimals.

Solve real-world word problems involving decimals.

Demonstrate improper fraction notation accurately.

Student Learning Outcomes:
Read, define, and apply basic arithmetic vocabulary and symbols.
Simplify basic expressions with whole numbers, fractions, and decimals by applying arithmetic operations.

Hours
Total Hours
72.0

Math Fundamentals 2
HSMTH159:

72.0 Hours

Provides instruction in the areas of decimals, percents, measurements, formulas, equations, ratios, and proportions. Provides learning activities that allow for remediation of difficulties and mastery of necessary skills. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Prerequisite
HSMTH158 - Math Fundamentals 1

Learning Outcomes
Course Objectives:
Read, write, and compare decimals

Place decimals in least to greatest order

Change decimals to fractions
Subtract decimals with proper decimal placement and the terms related to these operations

Change common fractions and decimals to percents

Solve word problems involving percents, finding commissions, finding net amounts, finding percent of decrease, finding percent of increase

Solve word problems finding the original price

Apply the order of operations

Identify squares, cubes, and exponents

Graph ordered pairs, solutions and linear equations

Solve inequalities, using addition, subtraction, multiplication, and division

Identify terminology in drawing to scale and using scales on maps

Solve problems using formulas for area, perimeter, and volume of rectangles, triangles, prisms; area and circumference of a circle; and volume of a cylinder

Solve algebraic equations by combining like terms, simplifying, and solving for the unknown

Solve word problems dealing with situations which require the student to set up equations to find the unknown

Solve proportion problems and understand the terminology

**Student Learning Outcomes:**

Demonstrate proficiency in the areas of decimals, percents, measurements, formulas, equations, ratios, and proportions.

Model and solve real-world applications involving math principles, operations, and strategies.

**Hours**

**Total Hours**

72.0

**Introduction to Trigonometry 1A**

**HSMTH161:**

72.0 Hours

Presents an introduction to trigonometry, analytical geometry, functional analysis, and algebraic techniques needed in preparation for the study of calculus. The graphing calculator is used extensively throughout the course. Open Entry/Open Exit. 5 HS credits.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

Demonstrate proficiency in the following concepts:

Rectangular coordinates and graphing utilities

Introduction to graphing equations

Symmetry; graphing key equations; circles

Solving equations

Solving inequalities

Lines

Demonstrate proficiency in the following concepts:

Functions
Linear functions and models
Properties of functions
Library of functions; piecewise-defined functions
Graphing techniques-transformations
Operations on functions; composite functions
Mathematical models-construction functions
Demonstrate proficiency in the following concepts:
Quadratic functions and models
Power functions and models
Polynomial functions and models
The real zeros of a polynomial function
Complex zeros; fundamental theorem of algebra
Types of discontinuities
Polynomial and rational inequalities
Demonstrate proficiency in the following concepts:
One-to-one functions; inverse functions
Exponential functions
Logarithmic functions
Properties of logarithms
Logarithmic and exponential equations
Compound interest
Growth and decay
Exponential, logarithmic and logistic models
Demonstrate proficiency in the following concepts:
Angles and their measures
Trigonometric functions
Properties of the trigonometric functions
Graphs of the sine and cosine functions
Graphs of the tangent, cotangent, cosecant and secant function
Demonstrate proficiency in the following concepts:
The inverse sine, cosine, and tangent
The inverse trigonometric functions
Trigonometric identities
Sum and difference formulas

**Student Learning Outcomes:**
- Develop and demonstrate proficiency in trigonometry and analytical geometry.
- Develop and demonstrate proficiency in functional analysis, and algebraic techniques.

**Hours**
Total Hours
72.0

Algebra 1A
HSMTH163:

72.0 Hours
Provides instruction in sets, numbers, formulas, monomials, exponents, square roots, the laws of the sign, binomials, and simultaneous equations. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSMTH159 - Math Fundamentals 2
or equivalent

Learning Outcomes
Course Objectives:
Explain the use of sets in numbers
Solve equations related to the application of formulas for area, volume, distance, interest, and temperature
Solve addition, subtraction, multiplication, and division problems of monomials
Identify the steps in factoring
Apply the commutative, associative, and distribution laws
Solve multiplication and division problems involving monomials with exponents
Identify the operation of square roots
Apply the positive and negative laws of sign
Solve addition, subtraction, multiplication, and division problems with binomials and rational numbers
Solve equations including simultaneous equations involving coefficients

Student Learning Outcomes:
Apply commutative, associative and distributive laws, laws of the sign, and exponent rules.
Solve simultaneous equations including formulas.

Hours
Total Hours
72.0

Algebra 1B
HSMTH164:

72.0 Hours
Provides instruction in coordinate systems; graphing of linear equations; simultaneous equations with fractions; ratios; proportions; factoring; formulas; inequalities and square roots. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSMTH163 - Algebra 1A

or equivalent

Learning Outcomes

Course Objectives:
Solve problems using laws of exponents
Reduce, multiply, and divide algebraic fractions
Solve multiplication and division problems involving monomials, binomials, and polynomials
Plot ordered pairs on the Cartesian coordinate plane
Graph and solve linear equations
Solve systems of equations
Solve inequalities using addition, subtraction, multiplication, and division
Solve problems involving square and cube roots
Solve problems involving ratios and proportions
Multiply binomials
Factor polynomials
Solve quadratic equations by factoring, formulas, or completing the square

Student Learning Outcomes:
Graph linear equations and simultaneous equations with fractions using coordinate systems.
Simplify, reduce and apply arithmetic operations on ratios, proportions, polynomials, formulas, inequalities and square roots.

Hours

Total Hours
72.0

Algebra 2A

HSMTH165:

72.0 Hours

Provides students with a course of study in: equations and inequalities; linear equations and functions; systems of linear equations and inequalities; matrices and determinants; quadratic functions; polynomials and polynomial functions; and powers, roots and radicals.
Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:

Advisory
HSMTH164 - Algebra 1B

Learning Outcomes

Course Objectives:
Evaluate and simplify algebraic expressions
Solve linear equations
Rewrite equations with more than one variable, including formulas
Set up and solve real-life application
Solve simple and compound inequalities
Solve absolute value equations and inequalities
Identify and represent relations and functions
Graph and evaluate linear functions
Find the slope of a line and identify parallel and perpendicular lines from their slopes
Graph linear equations using both slope-intercept and standard forms; identify and graph horizontal and vertical lines
Write an equation of a line with the slope and y-intercept given
Write an equation of a line with a point and the slope given
Write an equation of a line given two points
Write direct variation equations
Explore positive and negative correlations using scatter plots and approximate best-fitting lines
Graph a two variable linear inequality
Graph a piece-wise function
Graph an absolute value function
Write a system of linear equations algebraically
Graph a system of linear equations
Solve and graph systems of two linear equations in two variables, including those with one solution, no solution, or many solutions
Graph linear equations in three variables and consider the related functions of two variables.
Solve systems of linear equations in three variables
Add, subtract, and multiply matrices by a scalar and another matrix
Find determinants of 2x2 and 3x3 matrices and then use Cramer's rule to solve systems
Find inverse matrices
Use matrices to solve systems of equations
Solve system using augmented matrices
Graph quadratic equations
Write a quadratic function in standard, vertex, and intercept forms
Factor quadratic expressions
Solve quadratic equations using factoring
Solve a quadratic equation by finding the square root
Solve a quadratic equation by completing the square
Solve a quadratic equation by using the quadratic formula
Use factoring to find the zeros of a quadratic equation
Write quadratic models using graphs or quadratic regression
Solve quadratic equations with complex solutions and perform operations with complex numbers
Use the discriminant to determine the number and nature of the solutions to a quadratic equation
Apply complex numbers to fractal geometry
Graph quadratic inequalities in two variables
Use the graphs of quadratic functions to solve quadratic inequalities in one variable
Use properties of exponents and scientific notation to simplify algebraic expressions
Use synthetic substitution to evaluate polynomial expressions
Graph polynomial functions and investigate their end behavior
Add, subtract, multiply, and divide polynomial functions
Use factoring, synthetic division, and the rational zeros theorem to find zeros of polynomial functions
Apply the Fundamental Theorem of Algebra to determine the number of solutions of a polynomial function
Use zeros to write polynomial function; use x-intercepts and turning points to graph polynomial functions
Use finite differences to determine the degree of a polynomial that will fit a set of data
Evaluate the nth roots of real numbers using both radical and exponential notations
Use properties of rational exponents to evaluate and simplify expressions
Evaluate power functions
Perform arithmetic operations with basic functions and composite functions
Find inverses of functions and graph square root and cube root functions
Solve equations that have radical or rational exponents
Use measures of central tendency and dispersion to describe a data set and use box-and-whisker plots on histograms to represent data

Student Learning Outcomes:
- Develop and demonstrate knowledge of equations and inequalities; linear equations and functions; and systems of linear equations and inequalities.
- Develop and demonstrate knowledge of matrices and determinants; quadratic functions; polynomials and polynomial functions; and powers, roots and radicals.

Hours
Total Hours
72.0

Algebra 2B
HSMTH166:
72.0 Hours

Provides students with a course of study that includes: exponential and logarithmic functions; rational equations and functions; quadratic relations and conic sections; sequences and series; probability and statistics; trigonometric ratios and functions; trigonometric graphs. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSMTH165 - Algebra 2A
or equivalent

Learning Outcomes

Graph general exponential functions
Identify and graph exponential growth and exponential decay functions, and use them to model real-life situations such as compounding interest and depreciating the value of goods
Simplify and evaluate expressions involving the irrational number e
Identify the definition of logarithm with base “b”, and evaluate logarithmic expressions and functions, including those involving common logarithms and natural logarithms
Examine the invest relationship between logarithmic and exponential functions and graph logarithmic functions to solve problems

Use the change-of-base formula and properties of logarithm to expand and condense logarithmic functions

Solve exponential and logarithmic equations

Write exponential and power functions

Evaluate and graph logistic functions; solve logistic equations

Write and use inverse variation and joint variation models

Graph rational functions, simplify complex fractions and rational expressions, and solve questions that contain rational expressions

Graph data, fit the model to the data, and compare the model to other models

Use the Distance and Midpoint Formulas for line segments

Draw graphs for the four conic sections: parabolas, circles, ellipses, and hyperbolas

Explore quadratic relations and graphs

Solve quadratic systems by using the algebraic techniques used for systems of linear equations

Use and write sequences, including arithmetic and geometric sequences

Graph sequences

Use summation notation to write a series

Write a rule for the nth term of arithmetic and geometric sequences

Find the nth term given either a term and the common difference or common ratio or two terms

Find the sum of arithmetic and geometric sequences and series

Find common ratios and write repeating decimals as fractions

Evaluate and write recursive rules for arithmetic and geometric sequences

Use the mathematical induction for proving statements about the set of positive integers

Identify the counting techniques that are later used to calculate probabilities.

Use fundamental counting principle permutations and combinations to count the number of ways an event can happen

Use combinations and the binomial theorem to expand a binomial that is raised to a power

Find theoretical and experimental probabilities of events including those events involving the unions and intersections of events

Find probabilities of independent and dependent events

Use complements to find the probability of an event

Analyze geometric probabilities

Identify binomial and normal distributions

Construct and interpret binomial distributions and use them to test hypotheses

Use normal distributions to calculate probabilities and approximate binomial distributions

Evaluate trigonometric functions of acute angles in right triangles

Consider general angles in standard position using both degree and radian measure; find arc lengths and areas of sectors

Use knowledge of general angles to evaluate trigonometric functions of any angle

Calculate projectile distance

Evaluate and apply inverse trigonometric functions

Use the law of sines and the law of cosines to solve general triangles

Explore parametric equations and use them to model straight-line and projectile motion
Graph sine, cosine, and tangent functions by identifying the amplitude and period

Explore translations and reflections of sine, cosine, and tangent graphs

Use trigonometric functions to model real-life situations in which the frequency and amplitude are known

Use trigonometric identities to simplify trigonometric expressions and to verify other identities.

Examine techniques for solving trigonometric equations such as solving a linear equation, graphing, factoring, and the quadratic formula

Evaluate trigonometric functions using the formula for the sum and differences of two angles, the formula for double angles, or the formula for half-angles

**Student Learning Outcomes:**

- Demonstrate knowledge of exponential and logarithmic functions; rational equations and functions; quadratic relations and conic sections; sequences and series.
- Demonstrate knowledge of probability and statistics; trigonometric ratios and functions; trigonometric graphs.

**Hours**

**Total Hours**

72.0

**Geometry A**

HSMTH167:

72.0 Hours

This course covers topics in basic geometry, reasoning and proofs, perpendicular and parallel lines, congruent triangles, properties of triangles, and quadrilaterals. Open Entry/Open Exit. 5 HS credits.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Identify basic ideas and terms in geometry
- Sketch intersections of lines and planes
- Use a straightedge and compass to construct segment and angle bisectors
- Use a general problem-solving plan to solve problems involving perimeter, area, and circumference
- Recognize, analyze, and write conditional statements
- Write postulates using conditional statements
- Recognize and use definitional and biconditional statements
- Use properties from algebra and geometry to measure and justify segment and angle relationships and congruence
- Prove statements about segments and angles using congruence
- Investigate the relationships between lines and angles on a plane and in space
- Identify the angles formed when two lines are cut by a transversal
- Write flow proofs and use these proofs along with two-column and paragraph proofs to prove theorems about perpendicular and parallel lines
- Apply properties of parallel lines to solve real-life problems
- Use a straightedge and a compass to construct parallel lines
- Find the slopes of lines
Use slope to identify parallel and perpendicular lines in a coordinate plane
Write equations of parallel and perpendicular lines in a coordinate plane
Prove triangles are congruent and use congruent triangles in real-life problems
Classify triangles and find angle measure
Identify congruent figures and corresponding parts of figures, and learn to correctly name angles and triangles
Prove triangles and congruent angles SSS, SAS, ASA, and AAS
Use properties of isosceles, equilateral, and right triangles
Place geometric figures in a coordinate plane to prove statements about the figures
Analyze perpendicular bisectors and angle bisectors in general and relate these to triangles in particular
Recognize that the perpendicular and angle bisectors of a triangle are concurrent
Find medians and altitudes; recognize that these three segments associated with a triangle are also concurrent
Analyze the Midsegment Theorem and recognize various triangle inequalities
Identify indirect proofs
Identify quadrilaterals and their properties
Identify convex, concave, and regular polygons; examine properties of interior angles of quadrilaterals
Use the properties of parallelograms and algebra to solve problems involving side lengths and angle measures; prove properties of parallelograms
Use the distance and slope formulas with coordinate geometry to show figures are parallelograms
Examine properties of the sides, angles and diagonals of special parallelograms such as rhombuses, rectangles, and squares
Use properties of trapezoids and kites
Identify special quadrilaterals based on limited information and use both formal proof and coordinate geometry to prove that a quadrilateral is a special quadrilateral
Identify and apply formulas for the areas of squares, rectangles, parallelograms, triangles, trapezoids, kites, and rhombuses

Student Learning Outcomes:
- Demonstrate knowledge of basic geometry, reasoning and proofs, and perpendicular and parallel lines.
- Demonstrate knowledge of congruent triangles, properties of triangles, and quadrilaterals.

Hours
Total Hours
72.0

Geometry B
HSMTH168:

72.0 Hours
This course covers topics in transformations, similarity, right triangles, trigonometry, circles, areas of polygons and circles, surface area and volume. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSMTH167 - Geometry A

Learning Outcomes
Course Objectives:
- Identify reflections, rotations, translations, and characteristics of an isometric triangle
- Solve problems involving rigid transformations in the coordinate plane and prove theorems about reflections, rotations, and translations
- Describe translations using vectors and identify vector components
- Recognize how two or more translations produce a composition and identify glide reflections in a plane
- Use transformations to classify, identify, and draw frieze patterns
- Examine how to use frieze patterns to create decorative borders for real-life objects
- Explore the concept of similarity
- Simplify ratios; solve proportions using the cross product property
- Use polygons and their properties to solve real-life problems
- Explore similar triangles in greater depth
- Prove that two triangles are similar using the AA Similarity Postulate, the SSS Similarity Theorem, and the SAS Similarity Theorem
- Use similar triangles to solve indirect measurement problems
- Examine and use proportional theorems involving parallel lines, angle bisectors, and transversals to calculate segment lengths
- Identify dilations
- Solve problems involving similar right triangles using the geometric mean and indirect measurements
- Prove the Pythagorean Theorem and use it and its converse to solve problems
- Find lengths of sides of special right triangles and use them to solve real-life problems
- Use the sine, cosine, and tangent ratios to solve real-life problems
- Find the magnitude and direction of a vector and add vectors
- Identify segments and lines related to circles
- Solve problems related to circles by using properties of a tangent lines, arcs, chords and inscribed angles
- Solve problems with inscribed polygons in circles
- Find angle and arc measures related to circles
- Find the lengths of the segments of chords, tangents, and secants
- Find the equation of a circle given the center and radius or diameter
- Graph a circle using the equation of a circle
- Draw loci that satisfy given conditions
- Find the measures of the interior and exterior angles of polygons
- Use these angle measures to find the area of an equilateral triangle and other polygons
- Investigate perimeters and areas of similar triangles
- Identify and calculate the circumference of a circle and arc length
- Find the area of a circle and the area of a sector of a circle
- Find a basic probability
- Calculate the surface area and volume of solids
- Distinguish polyhedra from other solids and classify polyhedra
- Identify the Platonic solids and use Euler’s Theorem
Use the Pythagorean Theorem to find the surface area of pyramids and use proportions involving circles to find the surface area of cones

Develop methods for finding the volume of pyramids and cones

Analyze similar solids, including scale factors and how surface area and volume relate to the dimensions of similar solids

Student Learning Outcomes:
- Demonstrate knowledge of transformations, similarity, right triangles, trigonometry, and circles.
- Demonstrate knowledge of areas of polygons and circles, surface area and volume.

Hours
Total Hours
72.0

College Preparation Algebra 1A
HSMTH176:

72.0 Hours

This course offers an introduction to basic algebra concepts, math vocabulary, and algebraic operations. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory

HSMTH159 - Math Fundamentals 2

Learning Outcomes
Course Objectives:
Apply basic vocabulary, operations with signed numbers, basic properties of exponents to integers and rational numbers

Simplify algebraic expressions using order of operations

Translate expressions from English to algebraic expressions

Solve linear equations and inequalities by

Simplifying

Distributing

Using properties

Apply methods of solving linear equations to appropriate applications

Define and utilize basic vocabulary of the Cartesian Coordinate System

Slope and intercepts

Slope-Intercept form

Point-slope form

Plot (x,y) coordinates

Graph a line using a table and the slope-intercept form, y = mx + b

Determine the slope of a line given a graph, equation or two points

Find intercepts given a graph or equation

Graph linear equations with different methods

Apply basic properties and definitions to simplify polynomial expressions with exponents
Add, subtract, multiply and divide polynomial expressions using exponent properties

Factor polynomials with two, three and four terms by applying the appropriate methods

Recognize and factor out the greatest common factor from a polynomial expression

Factor by grouping

Factor the difference of two squares, sum and difference of cubes, perfect-square trinomials and general trinomials

Apply factoring strategies to solve polynomial equations and appropriate applications

**Student Learning Outcomes:**

- Perform algebraic operations on polynomials.
- Solve linear equations and apply the relationship between solutions of linear equations in two variables and their graphs.

**Hours**

**Total Hours**

72.0

**College Preparation Algebra 1B**

**HSMTH177:**

72.0 Hours

This course offers an introduction to basic algebra concepts, math vocabulary, algebraic operations, solutions and applications of first and second-degree equations, geometric concepts, graphs, inequalities, exponents, polynomials, rational expressions, and equations. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

Advisory

HSMTH176 - College Preparation Algebra 1A

**Learning Outcomes**

**Course Objectives:**

- Solve quadratic equations by factoring, square root property and completing the square
- Apply the quadratic formula to solve quadratic equations
- Apply solving strategies to solve appropriate applications with quadratic equations
- Simplify rational expressions
- Perform basic operations involving rational expressions
- Obtain undefined value(s) of rational expressions
- Apply factoring techniques to simplify rational expressions
- Determine the lowest common denominator of rational expressions and equations
- Solve rational equations and appropriate applications using the methods of solving rational equations
- Solve a system of two linear equations in two variables by applying the graphing, elimination by addition, and substitution methods
- Apply solving strategies to appropriate applications with two linear equations in two variables
- Simplify, add, subtract and multiply radicals
- Divide by using the quotient rule of radicals
- Rationalize the denominator
- Represent a given scenario using an appropriate algebraic equation(s)
Solve and interpret results in context of a given scenario

Review algebra concepts and algebraic operations and be advised about options for further study of mathematics

**Student Learning Outcomes:**
- Evaluate and perform algebraic operations on rational and radical expressions.
- Solve word problems and equations involving quadratic and rational expressions using appropriate algebraic techniques.

**Hours**

**Total Hours**

72.0

**Introduction to Trigonometry 1B**

**HSMTH180:**

72.0 Hours

Extends the study of trigonometry, analytical geometry, functional analysis, and algebraic techniques needed in preparation for the study of calculus. The graphing calculator is used extensively throughout the course. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

**Advisory**

HSMTH161 - Introduction to Trigonometry 1A

or equivalent

**Learning Outcomes**

**Course Objectives:**
- Demonstrate proficiency in double-angle and half-angle formulas, product-to-sum and sum-to-product formulas, and trigonometric equations.
- Demonstrate proficiency in Polar coordinates, equations and graphs, the complex plane; DeMoivre’s Theorem, and vectors.
- Demonstrate proficiency in conics, parabolas, ellipses, hyperbolas, rotation of axes and general form of a conic, and plane curves and parametric equations.
- Demonstrate proficiency in solving systems of linear equations using row reduction method, and solving systems of linear equations using inverse method (2-by-2 only).
- Demonstrate proficiency in sequences, arithmetic series, geometric sequences and geometric series, mathematical induction, and the Binomial Theorem.
- Demonstrate proficiency in algebra techniques for finding limits, tangents, derivatives and integrals.
- Demonstrate proficiency in sets and counting, permutations and combinations, probability of equally likely outcomes, and probabilities from data.

**Student Learning Outcomes:**
- Demonstrate proficiency in trigonometry, analytical geometry, functional analysis, and algebraic techniques needed in preparation for the study of calculus.
- Proficiently use the graphing calculator.

**Hours**

**Total Hours**

72.0

**Introduction to Academic Pathways and Programs**
HSOTH040:

72.0 Hours

Exploration of educational pathways with exposure to college resources and support services as students develop strategies for academic success. Information will be presented in academic format, and students will be required to demonstrate mastery through participation in student-centered, hands-on activities. Open Entry/Open Exit. 5 HS credits.

Requisites

None

Learning Outcomes

Course Objectives:
Identify and explain RSCCD/SCC policies and procedures as it relates to standards of academic success.

Plan activities and strategies for attaining an identifiable educational goal.

Identify the academic program options available through the SCC Division of Continuing Education.

Recall the free and low cost career technical pathways that are available through the SCC Division of Continuing Education.

Identify and utilize continuing education support services as needed.

Compare and contrast SCC degree and certificate program requirements.

Describe the available SCC pathways.

Identify and utilize tools for career planning and preparation.

Identify and locate campus services, programs, facilities, and other related resources.

Examine the different higher education institutions in California.

Describe self-development skills.

Identify techniques to enhance a positive self-esteem.

Use effective communication skills.

Evaluate team building.

Demonstrate techniques to effectively manage time inside and outside of school.

Identify stressors and utilize techniques to positively enhance overall well-being.

Student Learning Outcomes:

- Differentiate between academic and career technical pathways in credit and noncredit programs.
- Define educational options and available student support services.
- Assess goals and interests within the academic and career technical pathways.
- Demonstrate successful techniques for adapting to an educational or workplace setting.

Hours

Total Hours

72.0

Basics of Leadership Part 1

HSOTH050:

36.0 Hours

Introduces applied leadership and self-development skills. Information will be presented in academic format, and students will be required to demonstrate mastery through participation in student-centered, hands-on activities. Open Entry/Open Exit. 2.5 HS credits.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Demonstrate an understanding of self-development skills.

Demonstrate techniques designed to enhance a positive self-esteem.

Demonstrate understanding of the following group dynamics:
How groups exclude

Peer pressure

How groups create separate realities

How groups motivate

Demonstrate an understanding of the following communication skills:
Body language

Knowing your audience

Conversation styles

Pre-planning a presentation

Dressing for success

Listening skills

Gain a working understanding of parliamentary procedures through interactive practice sessions.

Resolve conflicts between and among working groups while participating in small group activities.

Demonstrate an understanding of how people move either up or down within a hierarchy of a large bureaucracy by participating in an interactive game.

Demonstrate effective techniques most commonly used by successful people to manage their time more effectively and efficiently.

Demonstrate an understanding and importance of conducting an effective meeting.

Student Learning Outcomes:

Demonstrate applied leadership skills.

Demonstrate applied self-development skills.

Hours

Total Hours

36.0

Supervised Tutoring

HSOTH153:

72.0 Hours

Supervised one-to-one and small group tutoring in academic subject, for students enrolled at Rancho Santiago Community College District in courses(s) for which tutoring is requested. Exam review sessions offered in some areas. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Show increased performance in the class or classes in which they are being tutored.
Read actively, reflect on ideas and concepts, and summarize material
Use critical thinking skills to ask higher-level questions
Identify concepts learned in one subject and apply those concepts other subjects
Apply study skills to all of their coursework

Student Learning Outcomes:
  Increase performance in classroom assignments in the class or classes in which the student is being tutored.
  Increase test scores in the class or classes in which the student is being tutored.

Hours
Total Hours
72.0

Basics of Leadership Part 2
HSOTH202:
36.0 Hours

Introduces applied leadership and self-development skills. Information will be presented in academic format, and students will be required to demonstrate mastery through participation in student-centered, hands-on activities. Open Entry/Open Exit. 2.5 HS credits.

Requisites
None

Learning Outcomes

Course Objectives:
Demonstrate an understanding of group dynamics.
Demonstrate an understanding of interpersonal communication.
Demonstrate a working understanding of the basics of parliamentary procedures through interactive practice sessions.
Demonstrate resolving conflicts between and among working groups while participating in small group activities.
Demonstrate brainstorming techniques.
Demonstrate knowledge of personal awareness.
Identify the basic purpose and role of lobbying
Demonstrate through active participation the five steps to successful lobbying to include a needs assessment and plan, targeting those with potential resources, requesting buy-in, and realizing partnerships
Identify the underlying causes of stress, its symptoms, and negative effects
Identify those specific areas of stress within each student’s personal life
Identify coping strategies to effectively deal with stress
Identify the five basic criteria of an effective public speech
Analyze and critique the speech of another speaker
Plan and write a two-minute speech
Give a speech before a live audience
Demonstrate an understanding of setting goals
Identify individual goals for school, family, and work both for the short term and for the long term
Demonstrate an understanding of effective techniques for goal realization
Student Learning Outcomes:
- Demonstrate an understanding of applied leadership skills.
- Demonstrate an understanding of self-development skills.

Hours
Total Hours
36.0

Spanish 2A
HSOTH505:

72.0 Hours

Further develops the student's control of the Spanish language through listening, speaking, reading, and writing activities with emphasis being placed upon listening and speaking. Develops the student's knowledge of cultural topics. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
- Reply to a series of statements/questions spoken at normal classroom speed
- State appropriate answer/response
- Respond to a given cue
- Speak with correct pronunciation, intonation, and rhythm
- Form and answer questions
- Participate in dialogue
- Give oral descriptions of pictures
- Write with accuracy from dictated materials
- Form and answer questions
- Write descriptions of pictures
- Complete controlled sentence patterns
- Use necessary vocabulary to complete language skills activities
- Describe cultural items
- Read, write, listen, and speak Spanish
- Past preterite of irregular verbs (future tenses, regular and irregular verbs)
- Imperfect tense of regular and irregular verbs

Student Learning Outcomes:
- Identify Spanish language grammar, vocabulary, idiomatic expressions in written and oral communication.
- Analyze Spanish speakers' culture in written and oral communication.

Hours
Total Hours
72.0

Spanish 2B
HSOTH510:

72.0 Hours

Further develops the student’s control of the Spanish language through listening, speaking, reading, and writing activities with emphasis being placed upon listening and speaking. Develops the student’s knowledge of cultural topics. Open Entry/Open Exit. 5 HS credits.

Requisites

None

Learning Outcomes

Course Objectives:
Reply to a series of statements/questions spoken at normal classroom speed
Give appropriate answer/response
Respond to a given cue
Speak with correct pronunciation, intonation, and rhythm
Form and answer questions
Participate in dialogue
Give oral descriptions of pictures
Read passages and give appropriate response to a series of questions
Write with accuracy from dictated materials
Form and answer questions
Write descriptions of pictures
Complete controlled sentence patterns
Use necessary vocabulary to complete language skills activities
Identify cultural items

Student Learning Outcomes:

Demonstrate understanding of Spanish language grammar, vocabulary, idiomatic expressions in written and oral communication.
Demonstrate understanding of Spanish speakers’ culture in written and oral communication.

Hours

Total Hours

72.0

Spanish 4A

HSOTH513:

72.0 Hours

Provides instruction in listening, speaking, reading, and writing skills. Students will express themselves using an ever-increasing vocabulary, present- and past-tense verbs, articles, and adjectives. Grammar is practiced with a variety of learning styles in mind. Throughout the course, students experience the culture, people, geographical locations, and histories of the Spanish-speaking world. Open Entry/Open Exit.

Requisites

None

Learning Outcomes
Course Objectives:

Use grammatical structures.

Formulate oral questions and answers on familiar topics.

Communicate with sufficient clarity.

Describe various textual patterns and formats.

Identify stated and implied meaning in textual assignments by drawing conclusions, detecting cause and effect, highlighting comparisons and contrasts, and judging soundness of ideas.

Improve reading, listening, and oral skills by direct emersion in the music, art, literature and food of the Hispanic culture.

Identify common rules of etiquette and other cultural practices of the Hispanic Community.

Apply this knowledge to the context of travel, work, or study in a Spanish speaking country through the use of Spanish language videos and/or language dealing with such topics.

Student Learning Outcomes:

Use Spanish language grammar, vocabulary, idiomatic expressions in written and oral communication.

Describe Spanish speakers’ culture in written and oral communication.

Hours

Total Hours

72.0

Spanish 4B

HSOTH514:

72.0 Hours

Provides instruction in listening, speaking, reading, and writing skills. Students will express themselves using an ever-increasing vocabulary, present- and past-tense verbs, articles, and adjectives. Grammar is practiced with a variety of learning styles in mind. Throughout the course, students experience the culture, people, geographical locations, and histories of the Spanish-speaking world. Open Entry/Open Exit.

Requisites

None

Learning Outcomes

Course Objectives:

Use grammatical structures.

Formulate oral questions and answers on familiar topics.

Communicate with sufficient clarity.

Describe various textual patterns and formats.

Identify stated and implied meaning in textual assignments by drawing conclusions, detecting cause and effect, highlighting comparisons and contrasts, and judging soundness of ideas.

Improve reading, listening, and oral skills by direct emersion in the music, art, literature and food of the Hispanic culture.

Identify common rules of etiquette and other cultural practices of the Hispanic Community.

Apply this knowledge to the context of travel, work, or study in a Spanish speaking country through the use of Spanish language videos and/or language dealing with such topics.

Student Learning Outcomes:

Use Spanish language grammar, vocabulary, idiomatic expressions in written and oral communication.

Describe Spanish speakers’ culture in written and oral communication.
Hours
Total Hours
72.0

Reading Proficiency Development
HSRDG089:

72.0 Hours

Enables students to become proficient in practical, content, and reference skills as well as improve general comprehension and vocabulary skills. This course provides preparation for the reading proficiency examination. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Understand that effective reading requires practice
Understand the objectives and requirements of the course
Understand that vocabulary is the basic foundation for reading
Develop word attack skills in phonics, vocabulary in context, word parts, compound words, and syllabication for vocabulary improvement
Utilize dictionary as a source for word knowledge
Develop comprehension skills (details, main idea, fact and opinion, sequence of events) for more efficient reading
Understand and interpret information from charts, tables, and schedules
Develop skills for studying and strategies for test taking
Understand literary elements such as tone, character, and figurative language

Student Learning Outcomes:
Improve reading comprehension skills.
Improve vocabulary and learn new words.

Hours
Total Hours
72.0

Reading Improvement
HSRDG090:

72.0 Hours

This course concentrates on two main approaches to improve reading skills: speed reading, which increases the number of words that can be read in a minute, and use of reading strategies to extract information from a text in the most effective way possible. Students will advance and adjust their individual reading rates appropriate to purpose. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Learn strategies for reading rate improvement and apply them to a variety of texts and materials

Apply strategies for vocabulary attack and acquisition

Apply specific methods for understanding and organizing information in selected readings

Discuss and evaluate reading materials, as well as their approaches to a reading task.

**Student Learning Outcomes:**

- Increase their reading speed.
- Use reading strategies to extract information from a text.

**Hours**

**Total Hours**

72.0

**Building Reading Skills 1**

**HSRDG093:**

72.0 Hours

Provides an opportunity for skill development in word recognition, comprehension, study and content reading skills which are necessary for success in the High School Subjects program. Computer-aided instruction is included. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an understanding of the reading process, the course objectives and requirements, and individual reading needs
- Analyze how reading ability is measured on standardized tests and the purpose of such tests
- Demonstrate an understanding of standardized reading scores and how they relate to the exercises necessary for reading improvement
- Utilize contextual analysis as an effective word attack skill
- Use a dictionary efficiently for word identification and meaning
- Increase vocabulary, improve phonic analysis, and improve structural analysis skills as a means to decode unknown words
- Improve general reading skills through practice with reading comprehension exercises at the appropriate level; improve a specific literal reading comprehension skill through practice with skill lessons at the appropriate level
- Improve interpretative inferential comprehension skills through practice with lessons focusing on inferential comprehensive skills
- Understand critical comprehension skills and apply that knowledge to the assigned exercises
- Learn basic study techniques and textbook skills

**Student Learning Outcomes:**

- Effectively apply reading skills in the comprehension and critical analysis of basic level readings.
- Effectively apply active reading strategies to basic level readings.

**Hours**

**Total Hours**

72.0

**Building Reading Skills 2**

**HSRDG094:**
72.0 Hours

Provides an opportunity for skill development in word recognition, general and inferential comprehension, critical thinking and content reading skills which are necessary for success in the High School Subjects program. Computer-aided instruction is included. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the course objectives and requirements and individual reading needs
Analyze how reading ability is measured on a standardized test and the purpose of such a test
Demonstrate an understanding of standardized reading scores and how they relate to the exercises necessary for reading improvement
Utilize contextual analysis as an effective word attack skill
Efficiently use a dictionary for word identification and meaning
Improve specific skill area(s) by participating in assigned activities
Improve general reading skills through practice with reading comprehension exercises at the appropriate level; improve a specific literal reading comprehension skill through practice with skill lessons at the appropriate level
Improve interpretative/inferential comprehension skills through practice with lessons focusing on inferential comprehension
Demonstrate an understanding of critical comprehension skills and apply that knowledge to the assigned exercises
Demonstrate an understanding of basic study techniques
Improve content reading skills through practice with appropriate content area comprehension exercises and pre-selected software

Student Learning Outcomes:
Identify the meaning of new words by using contextual analysis skills.
Demonstrate knowledge of the deeper meanings of reading passages by using interpretative, inferential, and critical reading and thinking skills.

Hours
Total Hours
72.0

Workforce Preparation
HSS338:
15.0 Hours

Provides instruction, exposure to career assessment tools, demonstration, identification, and discussion of topics that are critical for success in the 21st century workplace. Open Entry/Open Exit. 1 HS credit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Identify individual specific and transferable employment skills
Talk about their own likes and dislikes
Write goal statements that are realistic, honest and specific
Identify people who can help them find a job
Identify possible job opportunities in local businesses
Describe different employment services they could use in their job search
Identify the jobs that best match their skills
Know the steps in completing an application
Compile a pocket resume with all pertinent data for instant use in application and resume completions
Identify and use action verbs in resume
Write a resume
Utilize data of the pocket resume to complete an employment application
Identify and use action verbs in application
Compose application, cover letter, and thank you letter
Identify common types of interview questions
Give sample responses to common interview questions
Prepare questions to ask an interviewer
Identify proper interview etiquette including appropriate dress
Participate in face-to-face interview simulations
Identify positive work habits that lead to job success
Compare the roles of supervisor and employee
Practice presenting information to a supervisor using verbal and written forms.
Analyze how to solve problems with co-workers

Student Learning Outcomes:

Construct a resume with clear job objectives and evidence of personal knowledge, skills, and accomplishments.
Articulate career choices based on assessment of interests, values, skills and abilities.

Hours
Total Hours

15.0

High School Equivalency Test Preparation

HSS400:

180.0 Hours

Provides pre- and post-testing and individualized prescriptive instruction in preparation for a High School equivalency exam. Covers test-taking strategies and the essentials of reading, writing, mathematics, science, and social studies. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Understand restatements of information
Determine the meaning of words and phrases as used in the text
Analyze the impact of specific word choices on meaning and tone
Make inferences from the text

Draw conclusions or deduce meanings not explicitly in the text

Infer the traits, feelings, and motives of characters or individuals

Apply information

Interpret nonliteral language

Analyze multiple interpretations of a text

Determine the main idea, topic, or theme of a text

Identify the author’s or speaker’s purpose or viewpoint

Distinguish among opinions, facts, assumptions, observations, and conclusions

Recognize aspects of an author’s style, structure, mood, or tone

Recognize literary or argumentative techniques

Draw conclusions and make generalizations

Make predictions

Compare and contrast

Synthesize information across multiple sources

Select logical or effective opening, transitional, and closing sentences

Evaluate relevance of content

Analyze and evaluate paragraph structure

Recognize logical transitions and related words and phrases

Recognize appropriate subordination and coordination, parallelism, and modifier placement

Maintain consistent verb tense

Recognize effective sentence combining

Recognize verb, pronoun, and modifier forms

Maintain grammatical agreement

Recognize idiomatic usage

Recognize correct capitalization, punctuation, and spelling

Focus on central and supporting ideas

Explain supporting ideas

Compose introduction and conclusion

Sequence ideas

Organize thoughts into paragraphs

Use transitions effectively

Integrate and apply, analyze, evaluate and generalize

Interpretation of maps and other visual and technological tools

Analysis of case studies

**Student Learning Outcomes:**

Demonstrate High School Equivalency level knowledge in reading, writing, mathematics, science, and social studies.

Demonstrate proficiency in writing by recognizing and producing effective standard American written English both by editing and revising written text and generating and organizing ideas in writing.
Orientation to College
HSS770:

8.0 Hours

Introduces college services and programs. Identifies and explores programs and services designed to assist students entering college credit courses. Open Entry/Open Exit. 1.5 HS credits.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
- Find online and computer-assisted resources available to explore educational options
- Explain the need for higher education
- Describe how units work within the pyramid of education
- Identify the difference among the following: Community College, California State University, University of California, private college and university, and independent vocational school
- Analyze a current college catalog and become familiar with degree and certificate program opportunities
- Interpret a college class schedule
- Prepare a first semester college class schedule
- Discuss the differences between AA/AS and BA/BS degrees
- Describe certificate programs
- Distinguish the differences between transferable and nontransferable units, general education requirements and majors for a program
- Review checklist of college campus resources and locations
- Identify location of college programs and support services
- Identify various college campus online resources
- Use library resources
- Use Career Resource Center
- Use WebAdvisor to register online
- Complete college application and placement testing
- Research financial resources: BOGW (Board of Governors’ Fee Waiver), FAFSA, Scholarships
- Review online software and financial resources
- Recognize how the college assessment and placement process assists students in educational planning
- Identify which programs and services are beneficial upon college enrollment

Student Learning Outcomes:
- Develop and complete a first semester course plan utilizing computer software to register for first semester coursework.
- Demonstrate understanding of student support services that help students develop their individual educational goals.

Hours
Total Hours
180.0
Total Hours
8.0

Chemistry 1B
HSSCI100:

72.0 Hours
Extends the study of properties that can be used to identify matter and the techniques to measure those properties. Core topics include thermochemistry, gases, liquids and solids, solutions, chemical equilibrium, acids and bases, and organic chemistry. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSSCI184 - Chemistry 1A

or equivalent

Learning Outcomes
Course Objectives:
Explain and apply the concepts of liquids and solids.
Explain and apply the concepts of thermochemistry.
Explain and apply the concepts of gases.
Identify and apply the concepts of acids and bases.
Explain and apply the concepts of organic chemistry.
Explain and apply the concepts of solutions.
Recognize and be able to apply the concepts of chemical equilibrium.

Student Learning Outcomes:
Explain the process and concepts of thermochemistry, gases, liquids and solids, and solutions.
Explain the process and concepts of chemical equilibrium, acids and bases, and organic chemistry.

Hours
Total Hours
72.0

Life Science 1
HSSCI168:

72.0 Hours
Surveys the principles and concepts of life science, including the study of organisms and their environment. Cells, plants, protists, heredity, and diversity of life will be examined. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Demonstrate understanding of the features of living organisms and non-living things
List the steps in the scientific method
Identify parts of the cell and explain the function of each part
Identify the basic principles of heredity in plants, animals, and people
Identify the features of the protists
Identify the structure of viruses, bacteria and protozoa
Describe the major characteristics of algae and fungi
Explain how microbes cause disease
Describe how plants are classified
Identify each part of a plant and explain the function of each part
Demonstrate understanding of how plants reproduce

**Student Learning Outcomes:**
- Demonstrate knowledge of the structure and function of life.
- Demonstrate knowledge of the diversity of life including plants.

**Hours**

**Total Hours**
72.0

**Life Science 2**

**HSSCI169:**

72.0 Hours

Surveys the principles and concepts of life science, including the study of animals, ecology, and the human body. Open Entry/Open Exit.
5 HS credits.

**Requisites**

**Requisites:**

**Advisory**

HSSCI168 - Life Science 1

**Learning Outcomes**

**Course Objectives:**
Describe animal characteristics and classifications
Explain animal reproduction and development
Identify animal adaptations
Explain how ecosystems change
Identify factors that determine climate
Demonstrate knowledge of land and water biomes
Analyze major functions of the various systems in the human body
Explain reproduction and growth
Discuss the immune system

**Student Learning Outcomes:**
- Describe animal characteristics, classification, reproduction, development and adaptations.
- Demonstrate knowledge of the human body systems.
- Demonstrate knowledge of ecosystems and biomes.
Hours
Total Hours
72.0

Physiology 1A
HSSCI182:

72.0 Hours

Develops an understanding of the structure and functions of the systems of the body and their relationships. Fundamental topics include structural and functional organization of the human body, cell physiology, integration of skeletal, muscular and nervous systems. Study of other organisms is included to complement an understanding of the human body. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:

None

Learning Outcomes

Course Objectives:
Evaluate the orientation of the human body.

Distinguish between the principles types of tissue and understand the basic function of each tissue.

Recognize the generalized functions of the membranes and glands.

Recognize the four types of bones, give examples of each, and understand the structure and function of bones, joints and ligaments.

Explain and apply the concepts of the physiology of muscles.

Analyze the nervous system.

Student Learning Outcomes:

Identify the structure and functions of the systems of the body and their relationships.

Explain the concepts of cell physiology, integration of skeletal, muscular and nervous systems.

Hours
Total Hours
72.0

Physiology 1B
HSSCI183:

72.0 Hours

Develops an understanding of the structure and function of the systems of the body and their relationships. Fundamental topics include structural and functional organization of the human circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:

Advisory

HSSCI182 - Physiology 1A

Learning Outcomes

Course Objectives:
Identify the structure, function, and location of the various parts of the endocrine system.

Explain and apply the concepts of the various parts of the circulatory system.

Describe the anatomy and physiology of respiration system.

Describe the various components of the digestive system and understand the steps involved in digestion.

Describe the role of the components of the excretory system.

Describe:

The structure, function, and transmission of genes

Interactions among genes

The relationship between genes and the environment

Describe the location, structure, and function of the male and female reproductive organs.

Apply dissection techniques using a sheep heart

**Student Learning Outcomes:**

Explain and apply the concepts of the systems of the body.

Analyze the relationships between the various systems of the body.

**Hours**

**Total Hours**

72.0

**Chemistry 1A**

**HSSCI184:**

72.0 Hours

Presents the introduction to the study of properties that can be used to identify matter and the techniques to measure those properties. The process of science for obtaining and analyzing information will be stressed. Measurement and mathematics will be emphasized. Open Entry/Open Exit. 5 HS credits.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Identify class standards, materials and equipment in the chemistry classroom, procedures for lab reports, safety in the chemistry classroom.

Explain and apply the concepts of measurement and problem solving skills.

Explain and apply the concepts of energy and matter.

Apply the concepts of atomic structure.

Describe nuclear reactions.

Explain and apply the concepts of electron configurations and periodicity.

Identify and apply the concepts of bonding and chemical formulas.

Solve problems successfully involving equations, mole concept, and stoichiometry.

**Student Learning Outcomes:**

Explain the properties that can be used to identify matter and the techniques to measure those properties.

Analyze the process of science for obtaining and analyzing information.
Physical Science 1
HSSCI190:

72.0 Hours

Surveys the principles and concepts of physical science, including scientific method, energy and motion, the nature of matter, and the characteristics and properties of various kinds of substances. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Identify the steps in the scientific method

Identify the units used to measure length, volume, mass and temperature (using the International System of Units or SI)

Explain the characteristics of heat, energy, and its effects

Demonstrate understanding of conduction, convection, and radiation as methods of heat movement

Compare conduction and current as sources of electric charge

Define the behavior of magnets

Define matter and its four states

Identify the important elements

Explain how elements combine to form compounds

Analyze the characteristics of metals and the uses of important metals

Identify the properties of non-metals

Demonstrate knowledge of the properties of carbon and silicon and some uses of their compounds

Student Learning Outcomes:
Demonstrate knowledge of energy and motion.
Demonstrate knowledge of the nature of matter and the properties of various kinds of substances.

Physical Science 2
HSSCI191:

72.0 Hours

Surveys the principles and concepts of physical science, including interactions of matter; analysis of waves, light, and sound; and the examination of electricity and energy resources. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory
HSSCI190 - Physical Science 1

Learning Outcomes

Course Objectives:

Analyze solutions
Describe chemical reactions
Identify Acids, Bases, and Salts
Describe waves and sound
Analyze light
Examine mirrors and lenses
Describe electricity
Explain magnetism and its uses
Examine radioactivity and nuclear reactions
Identify energy resources

Student Learning Outcomes:

Demonstrate knowledge of the properties and interactions of matter.
Demonstrate knowledge of waves, electricity, and magnetism.

Hours

Total Hours
72.0

Basic Science 1
HSSCI192:

72.0 Hours

Surveys basic principles and concepts of general science including Earth, space, and physical science. Examines minerals, rocks, the atmosphere, weather, climate, and the earth in space. Discusses properties and classes of matter, Newton’s Laws of Motion, energy and energy resources. Open Entry/Open Exit. 5 HS credits.

Requisites

None

Learning Outcomes

Course Objectives:

Explain the Earth’s atmosphere
Explain scientific problem solving
Distinguish between substances and mixtures
Analyze weather patterns
Identify and describe rocks
Explain energy
Analyze Newton’s Laws of Motion
Identify physical and chemical properties of matter
Identify and describe minerals
Identify examples of physical and chemical changes
Analyze the Earth’s relationship in space
Evaluate matter
Examine the Earth’s climate

**Student Learning Outcomes:**
- Describe basic principles and concepts of general science including earth, space, and physical science.
- Classify the Earth’s energy resources.

**Hours**

**Total Hours**
72.0

**Basic Science 2**

**HSSCI193:**

72.0 Hours

Surveys principles and concepts of life and ecological science. Examines life structure and classification, cellular processes, heredity, evolution, body systems, plants, ecology, and conserving resources. Open Entry/Open Exit. 5 HS credits.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**
- Distinguish between living and nonliving things
- Identify what living things need to survive
- Describe how early scientists classified living things
- Explain the system of binomial nomenclature
- Demonstrate how to use a dichotomous key
- Describe the development of the cell theory
- Identify names and functions of each part of a cell
- Explain how important a nucleus is in a cell
- Compare tissues, organs, and organ systems
- Explain how a virus makes copies of itself
- Identify the benefits of vaccines
- Investigate some uses of viruses
- List the differences among atoms, elements, molecules, and compounds
- Explain the relationship between chemistry and life science
- Discuss how organic compounds are different from inorganic compounds.
- Describe the function of a selectively permeable membrane
- Explain how the processes of diffusion and osmosis move molecules in living cells
- Explain how passive transport and active transport differ
- List the differences between producers and consumers
Explain how the processes of photosynthesis and respiration store and release energy
Describe how cells get energy from glucose through fermentation
Explain why mitosis is important
Examine the steps of mitosis
Compare mitosis in plant and animal cells
List two examples of asexual reproduction
Describe the stages of meiosis and how sex cells are produced
Explain why meiosis is needed for sexual reproduction
Name the cells that are involved in fertilization
Explain how fertilization occurs in sexual reproduction
Identify the parts of a DNA molecule and its structure
Explain how DNA copies itself
Describe the structure and function of each kind of RNA
Explain how traits are inherited
Identify Mendel’s role in the history of genetics
Use a Punnett square to predict the results of crosses
Compare and contrast the difference between an individual’s genotype and phenotype
Explain how traits are inherited by incomplete dominance
Compare multiple alleles and polygenic inheritance and give examples of each
Describe two human genetic disorders and how they are inherited
Explain how sex-linked traits are passed to offspring
Evaluate the importance of advances in genetics
Sequence the steps in making genetically engineered organisms
Describe Lamarck’s hypothesis of acquired characteristics and Darwin’s theory of natural selection
Identify why variations in organisms are important
Compare and contrast gradualism and punctuated equilibrium
Identify the importance of fossils as evidence of evolution
Explain how relative and radiometric dating are used to estimate the age of fossils
List examples of five types of evidence for evolution
Describe the difference among living primates
Identify the adaptations of primates
Discuss the evolutionary history of modern primates
Identify the parts and functions of blood
Explain why blood types are checked before a transfusion
Give examples of diseases of blood
Compare and contrast arteries, veins, and capillaries
Explain how blood moves through the heart
Identify the functions of the pulmonary and systemic circulation systems
Describe functions of the lymphatic system
Explain the difference between an antigen and an antibody
Compare and contrast active and passive immunity
Describe the work of Pasteur, Koch, and Lister in the discovery and prevention of disease
Identify diseases caused by viruses and bacteria
Explain how HIV affects the immune system
Define noninfectious diseases and list their causes
Distinguish the difference between mechanical digestion and chemical digestion
Identify the organs of the digestive system and what takes place in each
Explain how homeostasis is maintained in digestion
Distinguish among the six classes of nutrients
Identify the importance of each type of nutrient
Explain the relationship between diet and health
Describe the function of the respiratory system
Explain how oxygen and carbon dioxide are exchanged in the lungs and in tissues
Identify the pathway of air in and out of the lungs
Explain the effects of smoking on the respiratory system
Distinguish between the excretory and urinary systems
Describe how the kidneys work
Distinguish between the epidermis and dermis of the skin
Identify the function of the skin
Explain how skin protects the body from disease and how it heals itself
Identify the major function of the muscular system
Compare and contrast the three types of muscles
Explain how muscle action results in the movement of body parts
Identify five functions of the skeletal system
Compare and contrast movable and immovable joints
Describe the basic structure of a neuron and how an impulse moves across a synapse
Compare and contrast the central and peripheral nervous systems
List the sensory receptors in each sense organ
Explain what type of stimulus each sense organ responds to and how
Explain how drugs affect the body
Define how hormones function
Identify different endocrine glands and the effects of the hormones they produce
Describe how a feedback system works in your body
Identify the function of the reproductive system
Compare and contrast the major structures of the male and female reproductive systems
Sequence the stages of the menstrual cycle
Describe the fertilization of a human egg
List the major events in the development of an embryo and fetus
Identify characteristics common to all plants
Explain which plant adaptations make it possible for plants to survive on land
Compare and contrast vascular and nonvascular plants
Distinguish between characteristics of seedless nonvascular plants and seedless vascular plants
Identify the importance of some nonvascular and vascular plants
Identify the characteristics of seed plants
Explain the structure and function of roots, stems, and leaves
Describe the main characteristics and importance of gymnosperms and angiosperms
Compare similarities and differences between monocots and dicots
Identify biotic and abiotic factors in an ecosystem
Describe the different levels of biological organizations
Explain how ecology and the environment are related
Identify the characteristics that describe populations
Examine the different types of relationships that occur among populations in a community
Determine the habitat and niche of a species in a community
Explain the difference between a food chain and a food web
Describe how energy flows through ecosystems
Examine how materials such as water, carbon, and nitrogen are used repeatedly
Compare renewable and nonrenewable resources
List uses of fossil fuels
Identify alternatives to fossil fuel use
Describe types of air pollution
Identify causes of water pollution
Explain methods that can be used to prevent erosion
Recognize ways to reduce the use of natural resources
Explain how to reuse resources to promote conservation
Describe how many materials can be recycled

**Student Learning Outcomes:**
- Describe principles and concepts of life and ecological science.
- Analyze the interactions of living organisms.

**Hours**

**Total Hours**

72.0

**Health Science**

**HSSCI196:**

72.0 Hours
Provides a basic foundation in personal health, nutrition, body functions, first aid and community health. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:

None

Learning Outcomes

Course Objectives:

Explain that one's health is a personal responsibility

List steps for improving self-esteem

Explain how health and well-being are affected by one's decisions

Identify the integumentary, skeletal and muscular systems

Analyze the nervous and endocrine systems

Explain the cardiovascular, lymphatic, and respiratory systems

Diagram the reproductive systems

Describe personal hygiene and health

List the benefits of exercise and physical fitness

Explain how to avoid injuries while pursuing a fitness program

Identify responsible food choices

Report how one can avoid problems with food

List ways of being a wise consumer

Analyze food safety

Assess global environmental issues

Identify ways to reduce waste and protect the environment

Explain how your personal health is related to environment health

Define consumer health

Explain fraud in the marketplace

Identify ways to handle consumer problems

Describe health services

Analyze personal safety and well-being

Demonstrate first aid

Analyze procedures to handle various emergencies

Student Learning Outcomes:

Recognize human body systems, personal hygiene, fitness, and nutrition.

Assess the following issues: environmental protection, health services, safety, first aid, and emergency preparedness.

Hours

Total Hours

72.0

Introduction to Economics

HSSOC215:
72.0 Hours

Introduces the basic concepts of economics. Explores the basic questions of every economic system. Examines money, the role of consumers, workers, businesses, and governments. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Describe basic economic concepts
Explain economic systems and decision making
Identify forms of business organizations
Define supply and demand
Evaluate factors affecting demand
Explain the theory of production
Analyze prices and decision making
Evaluate employment, labor, and wages
Identify sources of government revenue
Analyze government spending
Examine financial markets
Analyze macroeconomic performance
Describe economic instability
Explain money, banking and the Federal Revenue System
Identify economic stabilization policies
Assess international trade
Analyze the economies of developing countries
Describe global and economic changes

Student Learning Outcomes:
Examine microeconomics decision-making pertaining to prices and the market forces of supply and demand.
Analyze macroeconomics decision-making pertaining to national economic performance and governmental stabilization policies.

Hours
Total Hours
72.0

World Cultures 1A
HSSOC216:

72.0 Hours

A general survey of world history and culture from the fourteenth century Italian Renaissance to the nineteenth century and the Industrial Age. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Analyze how the Renaissance shaped European art, thought, and religion
Explain how European voyages of exploration lead to European empires in the Eastern Hemisphere
Describe how European colonization of the Americas shaped global economies and societies
Analyze the events that led to the rise of absolute monarchies and the development of centralized nation-states in Europe
Explain how the Enlightenment thinkers inspired revolutionaries to push for radical changes in government and society
Analyze the causes and effects of the French Revolution, and how the revolution lead to the Napoleonic era
Identify the technological, social, economic, and cultural changes that occurred as the Industrial Revolution took hold
Outline how the revolutionary ideal in Europe and Latin America ignited uprisings in the first half of the nineteenth century
Describe the technological, social, and economic effects of the Industrial Revolution
Explain the effects that nationalism and the demand for reform had in Europe
Outline the growth of western democracies
Evaluate how Western industrial powers gained global empires
Analyze how political and economic imperialism influenced nations around the world

Student Learning Outcomes:
Illustrate how enlightenment thinkers inspired revolutionaries to advocate for radical changes in government and society.
Describe the technological, social, and economic effects of the Industrial Revolution.

Hours
Total Hours
72.0

World Cultures 1B
HSSOC217:

72.0 Hours
A general survey of world history and culture from World War I to the present including modern industrialization and globalization. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Explain what caused World War I and the Russian Revolution, and what effect did they have on world events
Outline how nationalism and the desire for change shaped world events in the early 1900s
Evaluate the political and economic challenges that the Western world faced in the 1920s and 1930s, and how various countries reacted to those challenges
Analyze how aggressive world powers emerged, and the cost it took to defeat those powers in World War II
Explain how the Cold War developed, and how it shaped political and economic life in individual nations and how it ended
Describe how former European colonies gained independence, and the challenges they faced after independence
Explain why deadly conflicts plagued some regions of the world

Identify the challenges nations of the developing world have faced, and what steps they have taken to meet those challenges

Outline the major issues facing the world today

**Student Learning Outcomes:**
- Illustrate how the effects and outcomes of World War I (WWI) led to World War II (WWII).
- Recognize and describe various worldviews pertaining to regional conflicts and the developing world from 1945 until present times.

**Hours**
**Total Hours**
72.0

**U.S. History 1: Colonization to Industrialization**

**HSSOC218:**

72.0 Hours

Surveys events, movements, and personalities in United States history from the colonial period through reconstruction, westward expansion, and industrialization. Includes immigration, plight of Native and African Americans, reform movements, and geographical influences in the history of the United States. Open Entry/Open Exit. 5 HS credits.

**Requisites**
**Requisites:**
None

**Learning Outcomes**
**Course Objectives:**
- Analyze the contributions made by the native people living in the Americas
- Describe the impact made by the first Europeans who explored the Americas
- Identify why the Europeans established colonies in North America
- Recognize geographical influences on the exploration of the Americas by Europeans
- Describe the American Revolution, its causes, and aftermath
- Explain the challenges faced by the new American government
- Survey the growth and change of the United States from 1820-1860
- Examine the causes and effects of the Civil War
- Examine Reconstruction

**Student Learning Outcomes:**
- Identify causes and outcomes of the Revolutionary War.
- Identify causes and outcomes of the Civil War.

**Hours**
**Total Hours**
72.0

**U.S. History 2: The Shaping of Modern America**

**HSSOC219:**

72.0 Hours
Examines United States history from the beginning of industrialization to present. Emphasizes the emergence of America on the international, economic, geographical, social, and political scene. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
Advisory

HSSOC218 - U.S. History 1: Colonization to Industrialization

Learning Outcomes
Course Objectives:
Analyze the growth that took place in the late 1800's and early 1900's in the United States
Describe the developments on the western frontier
Evaluate the growth of industry
Examine immigration and the growth of cities
Identify the changes brought to the United States by WWI, progressive reform, and geographical expansion
Explain the progressive movement, imperialism, and overseas expansion
Analyze the causes of WWI and the United States' role in the war
Identify the challenges and changes of the early 1900's
Describe society in the 1920's
List the causes and effects of the Great Depression
Explain the causes of WWII
Examine the changes made to the United States after WWII
Evaluate the Cold War
Describe the administration of Dwight Eisenhower
Analyze the Kennedy administration and the Vietnam War
Describe the Civil Rights Era
Examine the last three decades of the twentieth century
Address the issues that surfaced during the presidential terms of Richard Nixon
Analyze the administrations of Ronald Reagan, George H.W. Bush, and Bill Clinton
Describe the early months of the George W. Bush administration and examine the war on terrorism

Student Learning Outcomes:
Examine United States history from the beginning of industrialization to present.
Analyze the emergence of America on the international, economic, geographical, social, and political scene.

Hours
Total Hours
72.0

Government 1: United States Federal Government and Politics
HSSOC222:

72.0 Hours
Examines the development of the federal government from colonial times and the structure of contemporary government. Explores the economic, social, and political influence on American citizens and their civic duties and responsibilities. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:

None

Learning Outcomes

Course Objectives:
Survey principles of government
Analyze the beginnings of American government
Evaluate The Constitution
Describe Federalism
Compare political parties
Describe elections and campaigns
Analyze political participation and voter behavior
Evaluate public opinion and mass media
Analyze congress and the legislative branch
Describe the office of the Presidency
Evaluate the executive branch and bureaucracy
Examine the courts and the judicial branch
List 1st amendment freedoms
Describe rights of due process
Examine civil rights
Describe public policy
Compare economic and political systems
Examine structure of state and local government
Analyze policies and finances of state and local government

Student Learning Outcomes:

Examine the development of the federal government from colonial times and the structure of contemporary government.
Analyze the economic, social, and political influence on American citizens and their civic duties and responsibilities.

Hours

Total Hours

72.0

World History, Geography, and Culture 1

HSSOC229:

72.0 Hours

Presents multiple perspectives on specific historical events in the context of a broad world view. Begins with the fourteenth century Italian Renaissance and continues on to the nineteenth century and the Industrial Age. Open Entry/Open Exit. 5 HS credits.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
- Describe the characteristics of the Renaissance and understand why it began in Italy
- Identify Renaissance artist and explain how new ideas affected the arts of the period
- Understand European motivations for exploring the seas
- Analyze early Portuguese and Spanish explorations
- Explain how Spain ruled its empire in the Americas
- Analyze the major features of Spanish colonial society and culture
- Explain the development of English constitutional government
- Explain how science led to the Enlightenment
- Summarize the events and significance of the American Revolution
- Understand why Parisians stormed the Bastille
- Understand Napoleon's rise to power and why the French strongly supported him
- Analyze why life changed as industry spread
- Explain the significance of the transportation revolution
- Understand laissez-faire economics and the beliefs of those who supported it
- Summarize the theories of socialism
- Understand how revolution ignited South America
- Describe the impact of new technology on industry, transportation, and communication
- Analyze the basic political organization of the new German empire
- Understand why the problems of industrialization contributed to the outbreak of revolution
- Summarize how the Liberal and Conservative parties helped bring a new era to British politics
- Summarize how American democracy grew before and after the Civil War
- Analyze the causes of the new imperialism
- Explain the problems the Ottoman empire faced
- Explain the internal problems Chinese reformers tried to solve

Student Learning Outcomes:
- Demonstrate knowledge of critical events and movements from the Renaissance through the age of absolutism.
- Analyze events from the Enlightenment through the new global age.

Hours
Total Hours
72.0

World History, Geography, and Culture 2
HSSOC230:

72.0 Hours
Relates the human story by reviewing perspectives on specific historical events in the context of a broad world view. The historical time frame begins with World War I and continues through to the present including modern industrialization and globalization. Open Entry/Open Exit. 5 HS credits.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Describe how international rivalries and nationalism pushed Europe toward World War I.
Summarize events that led to the end of World War I.
Explain how many people were dissatisfied with the treaty of Versailles and other peace settlements.
Explain the cause and effects of the Mexican revolution.
Analyze the effects of nationalism in Latin America.
Analyze how Mohandas Gandhi influenced the independence movement.
Analyze how western society changed after WWI.
Describe how conditions in Italy favored the rise of Mussolini.
Describe the effects of Stalin's five-year plan.
Describe the Nazi party's political, social, economic, and cultural policies.
Summarize the ways in which continuing Nazi aggression led Europe to war.
Explain how Allied victories began to push back the Axis power.
Understand how two sides faced off during the Cold War.
Explain how independence grew in South Asia, India, Pakistan Africa.
Analyze the diversity of the Middle East and the political challenges it has faced.
Explain the complex causes of ethnic and religious conflicts in Eastern Europe.
Understand South Africa's struggle for freedom.
Understand conflicts in the Middle East.
Understand the paths that nations in Asia, Africa, and Latin America have taken in developing strong economies.
Analyze how China has reformed its economy but limited freedom.
Understand how India faced poverty, but built a stronger economy.
Describe Latin America's difficult road to democracy.

Student Learning Outcomes:
Illustrate the effects and outcomes of World War I that led to World War II.
Recognize and describe various world views pertaining to regional conflicts and the developing world from 1945 until present times.

Hours

Total Hours
72.0

Humanities

ART100H - Honors Introduction to Art Concepts
ART101H - Honors Survey of Western Art History I: Prehistory Through the Middle Ages
ASL110 - American Sign Language I
ASL111 - American Sign Language II
ASL210 - American Sign Language III
DNCE100 - Dance History and Appreciation
FREN194 - Conversation and Composition I
HIST132 - Modern African History
HIST142 - History of the Modern Middle

Human Sexuality
IDS155:

3.0 Units

An interdisciplinary review of the biological, historical, social, and psychological influences on human sexuality across the lifespan. This course will more closely focus on the gender spectrum, anatomy, sexual orientations, attraction, love, reproduction, conception, contraception, sexually transmitted infections, sexual coercion, and overall sexual health.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area D: Social Sciences
Area E1: Lifelong Learning

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Explain sexual diversity in a historical context and list the values of various cultures and subcultures.

Identify relevant features of female anatomy and physiology and determine how they contribute to the development of female identity.

Identify relevant features of male anatomy and physiology and determine how they contribute to the development of male identity.

Distinguish the differences between sex and gender and describe their relationship to one another.

Examine the physical and social factors underpinning sexual orientations.

Outline the physical and social changes of human sexuality throughout the lifespan.

State the mechanisms of sexual response and arousal and assess their impacts on sexual behavior.

Discuss the process of conception, the stages of pregnancy, and the steps towards childbirth.

Analyze the ways couples can share responsibility for birth control and navigate possible barriers to contraception.

Evaluate the biological, emotional, and social influences of attraction and predict the likelihood of romantic love.

Appraise effective communication patterns relative to sexuality in relationships.
Cite which sexual behaviors are considered deviant, determine which paraphilia they are connected to, and explain why they are classified as such.

List the major categories of sexually transmitted infections and outline their prevalence, transmission methods, and treatments.

Distinguish between the different types of sexual aggression and violence and examine the potential causes and warning signs.

**Student Learning Outcomes:**
- Explain and critically evaluate biological, historical, interpersonal, and socio-cultural dimensions of human sexuality.
- Critically assess the rewards and risks of various sexual behaviors and decisions.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours**
54.0

**Library Research Fundamentals**

INFO100:

1.0 Units

This course is an introduction to academic level research skills for effective use of traditional and electronic library resources. Instruction includes print and non-print information sources such as reference books, scholarly material, online subscription databases, and the Internet. Former Title: LIBI 100, Library Research Fundamentals (Fall 2020)

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**

Area F1: Lifelong Understanding and Self-Development

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**
- Explain ways in which information is created, organized, and disseminated.
- Explore using information ethically and legally including plagiarism, copyright, creative commons, and open source.
- Outline the steps in the research process.
Describe how information is organized in academic libraries.

Identify the characteristics of different types and uses of sources, including reference, periodicals, online, and other sources

Distinguish between scholarly and popular sources.

Distinguish between primary, secondary, and tertiary sources.

Formulate an effective research topic, question or thesis statement.

Identify various search tools available in an academic library including online discovery interface, separate online catalog, individual databases, and the Internet.

Construct an effective search strategy, choosing search tools, search words, features, and filters to locate relevant results.

Analyze and evaluate sources using standard criteria: currency, relevancy, authority, accuracy, and purpose.

Use appropriate information sources to address information need.

Identify the elements of a citation for different types of sources.

Produce a Works Cited list (bibliography) using the Modern Language Association (MLA) or References page (bibliography) American Psychological Association (APA) documentation style.

Create an Annotated Bibliography for each source listed in the bibliography.

**Student Learning Outcomes:**

- Identify the types and uses of information sources available in an academic library.
- Construct a search strategy to locate and retrieve sources (book/ebook, periodical, Internet) relevant to a topic.
- Cite sources using a standard documentation style. Works Cited list (bibliography) using the Modern Language Association (MLA) or a References page (bibliography) American Psychological Association (APA) documentation style.
- Evaluate sources using standard criteria: currency, relevancy, authority, accuracy, and purpose.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

18.0

**Honors Library Research Fundamentals**

INFO100H:

1.0 Units

This course is an introduction to academic level research skills for effective use of traditional and electronic library resources. Instruction includes print and non-print information sources such as reference books, scholarly material, online subscription databases and the Internet.

**Requisites**

None

**Transferability & General Education Options**

Transferable:

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0
General Education Plan:
Local - Plan A
Area F1: Lifelong Understanding and Self-Development

Learning Outcomes

Course Objectives:
Explain ways in which information is created, organized, and disseminated.

Explore using information ethically and legally including plagiarism, copyright, creative commons, and open source.

Outline the steps in the research process.

Describe how information is organized in academic libraries.

Identify the characteristics of different types and uses of sources, including reference, periodicals, online, and other sources.

Distinguish between scholarly and popular sources.

Distinguish between primary, secondary, and tertiary sources.

Formulate an effective research topic, question or thesis statement.

Identify various search tools available in an academic library including online discovery interface, separate online catalog, individual databases, and the Internet.

Construct an effective search strategy, choosing search tools, search words, features, and filters to locate relevant results.

Analyze and evaluate sources using standard criteria: currency, relevance, authority, accuracy, and purpose.

Identify the elements of a citation for different types of sources.

Use appropriate information sources to address information need.

Produce a Works Cited list (bibliography) using the Modern Language Association (MLA) or a References page (bibliography) American Psychological Association (APA) documentation style.

Create an Annotated Bibliography for each source listed in the bibliography list.

Student Learning Outcomes:
Identify the types and uses of information sources available in a college library.

Construct a search strategy to locate and retrieve multiple sources (book/ebook, periodical, Internet) relevant to a topic.

Evaluate multiple sources using standard criteria, e.g.: currency, relevancy, authority, accuracy, and purpose.

Cite multiple sources using standard citation documentation style, e.g.: Modern Language Association (MLA) or American Psychological Association (APA).

Analyze and evaluate sources using standard criteria: currency, relevancy, authority, accuracy, and purpose.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Researching in the Digital Age
INFO103:

1.0 Units
Learn essential library research strategies for effectively locating and evaluating online information on the Internet. Core topics are designing and performing successful search strategies, evaluating online information using critical thinking skills, identifying the ethical and legal aspects of using online sources, and citing web sources using a standard documentation style. Former Title: LIBI 103, Advanced Internet Research (Fall 2020)

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Santa Ana College - Shared Course**
Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**
- Identify and define web conventions and terminology
- Outline the organization and characteristics of online information
- Distinguish between primary and secondary sources
- Distinguish between scholarly vs trade vs popular sources
- Locate scholarly online sources
- Analyze sources by subject and scope
- Apply the research process in locating relevant online information
- Design and implement search queries
- Use critical thinking skills to evaluate sources for currency, relevancy, authority, accuracy, purpose, and ownership
- Identify and use general, format-specific, and specialized databases and sources
- Access virtual libraries and digital archives with primary sources for academic research
- Explain and use meta-search tools and the deep web
- Use social media, blogs/wikis, and image/media search tools
- Identify and use emerging technologies that support personal and academic research
- Identify and define ethical issues related to using intellectual property for research
- Define plagiarism and identify ways to avoid it
- Explain copyright law and outline fair use principles
- Identify sources in the public domain or creative commons
- Identify issues related to privacy and security on the Internet
- Design a strategy to stay up-to-date about online privacy and security
Use the American Psychological Association (APA) or Modern Language Association (MLA) documentation style for citing online sources and creating annotations

**Student Learning Outcomes:**
- Design and perform successful search strategies.
- Evaluate online information using critical thinking skills.
- Identify the ethical, economic, social, and legal aspects of finding and using online sources.
- Cite online information sources using a standard documentation style.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours:**
18.0

**Elementary Italian I**

**ITAL101:**

5.0 Units

A college-level Italian course focusing on fundamentals of pronunciation, grammar, basic vocabulary, idioms, and simple conversation and composition, including supplementary cultural readings. Italian 101 is equivalent to two years of high-school Italian.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
5.0

**General Education Plan:**

**Local - Plan A**

Area C: Humanities

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**

Area 6: Language Other than English

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**
- Perform physical or verbal articulations to demonstrate listening comprehension skills.
- Produce variations of Italian pronunciation.
- Compare and contrast the sound system and structure of the language.
Share thoughts through guided composition and exercises.

Communicate in writing on a variety of meaningful beginning level topics integrating vocabulary, idiomatic expressions, and correct use of grammatical patterns.

Expand vocabulary and grammar to facilitate the development of the four skills: listening, speaking, reading and writing.

Communicate and engage in beginning level dialogues to internalize vocabulary.

Derive meaning of implicit and explicit beginning level written material.

Discuss characteristics of Italian culture such as: geography, food, traditions, customs, art, current events, daily life and music.

Control grammar sufficiently to communicate orally and in writing in a variety of meaningful real-life activities moving toward the advanced-beginning (novice high) level of proficiency.

**Student Learning Outcomes:**

- Demonstrate understanding of Italian language grammar, vocabulary, idiomatic expressions, and Italian speakers’ culture to communicate orally, using appropriate pronunciation on designated topics at the beginning level in public and in interpersonal situations.
- Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the beginning level.
- Effectively apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit written material at the beginning level.
- Effectively apply knowledge of vocabulary, grammar, idiomatic expressions and culture to accurately recognize and comprehend spoken messages in Italian at the beginning level.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

108.0

**Elementary Italian II**

**ITAL102:**

5.0 Units

A college-level Italian course focusing on further training in pronunciation, more extensive vocabulary development, conversation, grammar, reading and composition. Italian 102 is equivalent to the third year of high school Italian.

**Requisites**

**Requisites:**

**Prerequisite**

ITAL101 - Elementary Italian I or two years of high school Italian

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

5.0

**General Education Plan:**
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Outline characteristics of Italian speaking countries such as food, historical dates and sites, traditions and customs, daily life, music and art.

Distinguish meanings aurally with increased accuracy.

Verbalize variations of Italian pronunciation.

Compare and contrast the sound system and structure of the language.

Show ability to understand native speakers without resorting to translation and to respond appropriately.

Summarize and paraphrase without resorting to translation.

Derive meaning of implicit and explicit ideas within various written materials.

Communicate through dialogue to internalize vocabulary and structure.

Produce spoken and written language to obtain information.

Articulate language to present information, concepts and ideas on a variety of topics.

Control grammar sufficiently to communicate orally and in writing in a variety of meaningful real-life activities.

Comprehend written and spoken language.

Develop fluency by utilizing the four skills: Listening, speaking, reading and writing.

Student Learning Outcomes:

Demonstrate understanding of Italian language grammar, vocabulary, idiomatic expressions, and Italian speakers' culture to communicate orally, using appropriate pronunciation on designated topics at the advanced-beginning level in public and in interpersonal communication.

Integrate grammar, vocabulary, idiomatic expressions, and culture to communicate in writing at the advanced-beginning level.

Effectively apply knowledge of vocabulary, grammar, idiomatic expressions, and culture to synthesize, analyze, evaluate and derive meaning of implicit and explicit written material at the advanced-beginning level.

Effectively apply knowledge of vocabulary, grammar, idiomatic expressions and culture to accurately recognize and comprehend spoken messages in Italian at the advanced-beginning level.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
108.0

Conversation and Composition
ITAL194:

3.0 Units

Reinforcement of conversational and composition skills. Implementation of language structure through conversation, reading and composition. Discussions of Italian culture.

Requisites

Prerequisites:

Prerequisite

ITAL101 - Elementary Italian I

or two years high school Italian with grade of C or better

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area C: Humanities

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

Learning Outcomes

Course Objectives:

Describe aspects of Italian culture, life, and the people's unique ways of life and their contributions to the world.

Comprehend aural input without resorting to translation.

Identify key words and phrases to derive meaning and obtain specific information.

Identify relevant and non-relevant information.

Describe and interpret information provided through a variety of modalities.

Integrate vocabulary and structures to compose simple organized paragraphs.

Express and communicate simple facts and ideas on topics presented in class.

Demonstrate increased fluency and vocabulary acquisition.

Articulate with increased oral expression.

Student Learning Outcomes:

Integrate vocabulary, grammar and culture in oral communication at the beginning level for interpersonal and public audiences.

Recognize and comprehend spoken messages in Italian at the beginning level.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours
Advanced Conversational Italian
ITAL195:

3.0 Units
Further development of conversational skills. Review of language structures as well as reinforcement of new vocabulary and idioms through conversation, reading, and composition. Discussions of Italian culture.

Requisites
Prerequisite
ITAL102 - Elementary Italian II

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Apply appropriate grammar to communicate orally and in writing.
Articulate increased repertoire of vocabulary and grammatical structures.
Converse ideas through increased mastery of language structure and vocabulary.
Apply vocabulary and structures to narrate, explain, and state an opinion.
Articulate Italian in public and in interpersonal situations.
Identify speakers.
Determine purpose of conversation.
Decipher unfamiliar words using contextual clues.
Describe and interpret information in a variety of modalities.
Identify relevant and non-relevant information.
Describe various aspects of Italian culture.

Student Learning Outcomes:
Possess a functional command of spoken and written Italian.
Apply appropriate situational cultural behavior.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Intermediate Italian I
ITAL201:

5.0 Units

A college-level Italian class focusing on an expansive review of usage and grammar, discussions of interpretive readings, conversation, and composition.

Requisites

Requisites:

Prerequisite

ITAL102 - Elementary Italian II

or three years of high school Italian

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

5.0

General Education Plan:

Local - Plan A

Area C: Humanities

CSU GE - Plan B

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C

Area 3B: Humanities

Area 6: Language Other than English

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Review, refine, and improve application of challenging grammatical concepts and structures.

Internalize grammar and reproduce language responses, both orally and in writing, to linguistic, structural, and cultural situations at the low intermediate level.

Demonstrate thorough comprehension of grammar and verb tenses presented in the course.

Express complex thoughts and questions with wide-ranging vocabulary and grammar control and illustrating differences between formal and colloquial language.

Engage in conversations and discussions.
Apply appropriate vocabulary and structures to narrate, explain, and state an opinion.

Synthesize material covered in reading.

Demonstrate thorough comprehension of readings, without relying on translation.

Produce writing at the low intermediate level to narrate, describe, report, compare and contrast, summarize, and express personal opinion.

Examine and demonstrate awareness of Italian culture.

Compare and contrast cultural differences.

Develop and use all four skills: Listening, speaking, reading, and writing.

**Student Learning Outcomes:**
- Communicate written and spoken ideas in Italian in a clear and articulate manner.
- Demonstrate an understanding of attitudes, ideas, and values that shape Italian culture.

**Units & Hours**

**Minimum Units:**
5.0

**Maximum Units:**
5.0

**Total Hours:**
108.0

**Intermediate Italian II**

**ITAL202:**
5.0 Units

A college-level Italian class focusing on a specialized review of grammar and composition along with discussions in Italian of history and culture based on literary materials.

**Requisites**

**Requisites:**

**Prerequisite**

ITAL201 - Intermediate Italian I

or four years of high school Italian

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
5.0

**General Education Plan:**

**Local - Plan A**

Area C: Humanities

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**

https://scollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6f6b18
Area 3B: Humanities
Area 6: Language Other than English

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Review, refine and improve application of challenging grammatical concepts and structures.

Internalize and apply grammar to produce language responses, both orally and in writing, to linguistic, structural, and cultural situations at the intermediate level.

Demonstrate thorough comprehension of the grammar and verb tenses presented in the course.

Demonstrate oral skill, accuracy, and ease of expression in a higher level of fluency.

Apply vocabulary and expression into well organized discussions and debates.

Demonstrate precision, accuracy and speed in reading native-level and near native-level materials.

Synthesize and discuss material covered in readings.

Demonstrate thorough comprehension of readings without relying on translations.

Demonstrate awareness and understanding of period literature and associate it with events and socio-political movements of the time.

Produce writing at the intermediate level to narrate, describe, report, compare and contrast, summarize, and express personal opinion.

Produce compositions focusing on development of style and greater grammatical accuracy.

Compose coherent paragraphs and compositions which also demonstrate creativity and analytical thinking.

Demonstrate awareness of Italian culture.

Compare and contrast cultural differences.

Develop and use all four skills: Listening, speaking, reading, and writing.

Student Learning Outcomes:

Demonstrate understanding of other Italophones with minimal difficulty and speak and write in Italian in a clear and articulate manner.

Demonstrate an understanding of attitudes, ideas, and values that shape Italian culture.

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
108.0

Introduction to Kinesiology

KIN100:

3.0 Units

This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Course Identifier (C-ID)
Kinesiology

Learning Outcomes

Course Objectives:
Identify the basic concepts of Kinesiology.

Describe the historical, ethical and philosophical foundations of Kinesiology.

Identify the fundamental concepts of basic movements.

Identify the relationship between performance in the movement forms of sport, dance, and exercise and the conceptual foundations of the sub-disciplines.

Identify the pathways and requirements for career opportunities.

Student Learning Outcomes:

Demonstrate knowledge of the movement of the body and how it relates to physical activity, exercise, sport and health and disease.

Demonstrate understanding of vocational opportunities in the areas of sport, fitness, and physical education.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

First Aid and CPR

KIN101:

3.0 Units

The theory and detailed demonstration of first aid care for the injured, centered on assessing a victim’s condition and incorporating proper treatment. Standard first aid, CPR, and automated external defibrillator (AED) certification(s) will be granted upon successful completion of the requirements.
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Course Identifier (C-ID)
Kinesiology

Learning Outcomes
Course Objectives:
Identify differences in body systems and differences in emergency responses to infants, children and adults in all aspects of the course.
Set personal goals for achieving a safe and healthy lifestyle.
Identify and explain legal issues associated with dealing with medical emergencies.
Apply an emergency action plan.
Identify and describe the signs and symptoms associated with common medical emergencies.
Demonstrate the first aid care that is needed in common medical emergencies including cardiopulmonary resuscitation and the use of AED.
Assess victims of injury and medical emergencies.
Demonstrate first aid care for such injuries.
Demonstrate an understanding of emergency rescue moves.
Identify and explain differences in emergency responses to people with special needs.
Evaluate their lifestyle for health and safety concerns.
Recognize the signs and symptoms associated with common internal/soft tissue injuries, burns, and musculoskeletal injuries.

Student Learning Outcomes:
Demonstrate understanding of emergency first aid procedures and be able to apply the information effectively.
Demonstrate understanding of cardiopulmonary resuscitation techniques.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Nutrition and Fitness
KIN102:

2.0 Units

An applied nutrition course designed to help improve the nutrition and health of active individuals. The course focuses on the prevention of disease, weight control, and improved physical and mental performance.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

2.0

General Education Plan:

Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Learning Outcomes

Course Objectives:
Describe the link between nutrition, health, and total well being
Identify best practices in eating prior to exercise
Identify the role of fats in disease and energy
Describe the value of plant protein and eating less animal protein
Identify the role of basic fuel sources
Identify the role of carbohydrates in energy levels and on physical performance
Describe the value of reducing refined sugars
Identify the effect of training on fuel foods used
Identify the role of vitamins and minerals
Identify the positive effects of nutrition on performance both mentally and physically
Identify foods high in vitamins and minerals
Determine the best nutritional sources of energy compared to the least effective
Identify the risks and benefits of eating foods containing additives
Describe the value of food additives in the athlete’s diet
Identify best practices in weight control and performance
Identify how to make the correct selection of the various foods available in the marketplace to optimize performance
Describe the effect of dehydration on physical performance
Describe the effect of vitamins and minerals on supplementation

Student Learning Outcomes:
Demonstrate understanding of the link between nutrition and fitness with health, and total well being in order to be in a position to make positive change in themselves and others. Demonstrate understanding of how to make the correct selection of the various foods available in the marketplace to optimize performance.

**Units & Hours**

**Minimum Units:**
2.0

**Maximum Units**
2.0

**Total Hours**
36.0

**Healthful Living**

**KIN104:**

3.0 Units

A comprehensive look at factors that impact people's health, longevity, and lifetime wellness. Areas covered will be personal fitness, nutrition, drugs, alcohol and tobacco, AIDS and sexually transmitted diseases, and degenerative diseases including cancer, heart disease, strokes, and diabetes.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
Area F1: Lifelong Understanding and Self-Development

**CSU GE - Plan B**
Area E1: Lifelong Learning

**UC Comparable Transfer Courses**
UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**
Develop a philosophy of health.

Demonstrate an understanding of how people deal with bereavement.

Define health in a multi-dimensional context; through identification of stress, both positive and negative.

Define fitness, and understand the benefits of exercise in relationship to cardiovascular disease risk factors.

Explain anabolic steroids in relationship to muscle building; use and abuse; negative side effects and health risks.

Demonstrate understanding of body composition, fitness testing, and evaluation of lean muscle mass to body fat percentage.
Demonstrate understanding of the physiology of sleep, relaxation techniques.

Demonstrate understanding of the concepts of nutrition

Demonstrate understanding of aspects of weight control.

Demonstrate understanding of the psychological and physical factors of eating disorders and their implications to health.

Demonstrate an understanding of the discussion surrounding legal and illegal drugs and the definition of legal and illegal drugs.

Demonstrate an understanding of the definition of addiction and identify some reasons for substance abuse.

Demonstrate an understanding of the physiological effects of narcotics, alcohol and tobacco.

Survey historical health practices and how they impact today’s health practices, both public and personal.

Demonstrate an understanding of some of the challenges of intimate relationships.

Demonstrate an understanding of some of the common characteristics in successful relationships.

Demonstrate an understanding of how to identify some STD’s, including how they are contracted, symptoms, short and long term effects, treatment and prevention.

Demonstrate an understanding of autoimmune diseases, vaccinations, immunizations.

Demonstrate an understanding of Human Immunodeficiency Virus (HIV) and AIDS, including how it is contracted, symptoms and progression of HIV to AIDS, treatment and prevention.

Demonstrate an understanding of the predominant degenerative diseases.

Demonstrate an understanding of prevention and protective health practices as well as keys to early detection and warning signs of degenerative diseases.

Demonstrate an understanding of common sources of stress and the relationship between stress and disease.

Demonstrate an understanding of techniques for managing stress.

Define psychological health and demonstrate an understanding of psychological disorders.

Demonstrate an understanding of the aging process including an analysis of life in Aging America.

Demonstrate an understanding of the diseases, accidents, and the negative personal and social consequences associated with substance abuse.

**Student Learning Outcomes:**
- Demonstrate understanding of the factors that influence human health and wellness.
- Demonstrate knowledge to be able to modify current health behaviors and attitudes in order to achieve increased long-term potential for quantity and quality of life.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Sport in US Society**

**KIN109:**
3.0 Units
A comprehensive look at sport in US society and how various, ethnic and minority groups have influenced sport at the local, state and national levels. The influences of other cultures outside of the US will be reviewed and analyzed. A review of sport history will be conducted with communication and media influences also examined.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area D: Cultural Breadth

**CSU GE - Plan B**

Area D: Social Sciences

**IGETC - Plan C**

Area 4: Social and Behavioral Sciences

**Learning Outcomes**

**Course Objectives:**

- Explain what sociologists study about social worlds and identify the key concepts they use as they study social worlds.
- Identify the factors that influence relationships between sports journalists and athletes today.
- Explain what it means to say that sports are social constructions.
- Define “ideology” and explain the connection between sports and ideologies related to gender, race, and social class.
- Identify the major spheres of social life and give one example of how sports are connected with each one of those spheres.
- Explain the similarities and differences between the cultural, interactionist, and structural theories used by sociologists when they study social worlds.
- Know what it means to say that sports are more than reflections of society.
- Explain the differences between using a quantitative approach and a qualitative approach when doing research, and explain when it would be best to use one rather than the other.
- Know the most important features of a “critical approach” to producing knowledge in the sociology of sport.
- Explain why the meaning, purpose, and organization of sports vary by time and place through history.
- Explain the major differences between the characteristics of sport forms that have existed in past times and places and the characteristics of what we describe today as organized, competitive sports.
- Identify how power relations have influenced how sports were defined, played, organized, and sponsored in the times and places described in the chapter.
- Identify the major changes that occurred in the meanings, purpose, and organization of sports as the United States changed from an agricultural to an industrial society.
- Identify the connections between organized, competitive sports in the 20th Century and emerging ideas about character development, masculinity and femininity, skin color and ethnicity, age, and disability.
- Identify a few key events in the history of sports between 1920 and 2000, and explain how they are related to others changes in US society.
- Define socialization and explain why it is important to study socialization as an interactive learning process.
Provide research examples to explain how people become involved and stay involved in sports.

Provide research examples to explain how people change or drop out of sport participation.

Explain the ways that a person's identity is connected with a person's decisions about sport participation.

Identify problems associated with ending a competitive sport career, and the conditions under which such problems are most likely to occur.

Explain why sport participation does not have the same socialization effects for everyone who plays sports.

Identify the conditions under which sport participation is most likely or least likely to have positive socialization effects on those who play sports.

Identify the major differences between pleasure and participation sports and power and performance sports, and explain why it is important to know about these differences when studying sports and socialization.

Use research examples to explain why we must understand the social context in which sport participation occurs if we wish to explain how participation affects people's lives.

Define the concept social world, and use research examples to explain how athletes define and make decisions about sports in their lives.

Explain why sport participation does not automatically lead to physical fitness and well-being and why it may not reduce obesity rates in a society.

Identify the connections between sports, socialization, and ideology.

Explain why organized youth sports emerged in the 20th Century and how social changes related to family and childhood have influenced the growth of organized youth sports in the United States since 1950.

Identify the sponsors of organized youth sports today and explain why children's sport experiences may vary depending on who sponsors their sport programs.

Explain how the trend toward privatization in youth sports affects youth sport experiences.

Explain why alternative sports have become increasingly popular among many young people today.

Identify the major differences between formally organized, adult controlled youth sports and informally organized, player controlled sports.

Discuss the findings in developmental research and explain how they can be used to organize youth sports in ways that would lead to a combination of excellence and greater long term interest in sport participation.

Identify the main access issues that exist in youth sports as they are currently organized in the United States.

Discuss the main developmental issues that must be taken into account when organizing youth sports for children at different ages.

Identify important sociological issues associated with family dynamics and why youth sports have become so important to many parents today.

Identify major recommendations for changing informal games, alternative sports, and organized sports, including high performance sports for children.

Explain the major advantages and possible problems with coaching education programs as sources for positive changes in youth sport programs.

Discuss how deviance is defined in sports and whose interests are represented in the process of defining and controlling deviance in sports.

Distinguish between deviant overconformity and deviant underconformity.

Define the sport ethic, and identify the norms of the sport ethic.

Explain the group dynamics associated deviant overconformity in power and performance sports, and indicate how deviant overconformity might be connected with deviant underconformity among elite athletes.

Outline the major strategies that could be used to control deviant overconformity among athletes.

Summarize research on deviance among athletes, on the field and off the field, especially in connection with delinquency rates, academic cheating, alcohol use, binge drinking, and felony rates.
Identify examples of deviance that do not involve athletes and explain why they do not attract the same interest that is given to athletes who engage in deviance.

Explain why performance enhancing substance use is so prevalent among athletes today.

Identify the problems faced when trying to define, ban, and control the use of performance enhancing substances in sports today.

Identify the major arguments for and against drug and substance testing in sports.

Outline the strategies that might be used in controlling substance use in sports today.

Define violence and distinguish it from related behaviors such as aggression and intimidation.

Understand the two different approaches to defining sports and explain the pros and cons of using each when studying sports in society.

Explain the conditions under which violence in sports involves deviant overconformity.

Explain when and how athletes learn to use violence as a strategy in sports.

Identify strategies that might be used to control on-the-field violence among athletes.

Define violence and distinguish it from related behaviors such as aggression and intimidation.

Identify the relationship between violence in sports and gender ideology in society.

Know when spectator violence is most likely to occur at sport events.

Identify the crowd dynamics and situational factors related to spectator violence.

Discuss past cases of terrorism at sport events, and explain how terrorist threats influence sport events today.

Identify the reasons why there has been a dramatic increase in sport participation rates among women of all ages since the mid-1970s.

Identify the legal definitions and history of gender equity in connection with Title IX.

Identify reasons why people should be cautious when predicting future sport participation increases among girls and women.

Provide examples showing that sports and sport organizations today are male-dominated, male-identified, and male-centered.

Know the extent to which gender inequities continue to exist in sport participation opportunities, support for athletes, and jobs for women in sports.

Identify effective strategies to promote gender equity in sports and sport organizations.

Identify the major challenges faced by gay men, lesbians, bisexuals, and transsexuals in sports today.

Identify strategies that might be used in changing ideology and culture so that gender equity might be achieved in sports.

Define race, ethnicity, and minority group, and distinguish between them.

Explain how the concept of race is a social construction and how racial categories are grounded in social meanings rather than in a valid biological classification system.

Explain how the concept of race has been defined in the United States, and how dominant racial ideology has influenced ideas about the relationship between skin color and human potential.

List some of the ways that whiteness influences the choices that people make about sport participation.

Outline major themes in the history of sport participation among

African Americans.

Native Americans.

Latinos/as.

Asian Pacific Americans.

Identify the conditions under which the use of Native American images for team names, logos, and mascots are expressions of bigotry.

Identify the major challenges related to race and ethnic relations in sports today, and explain how they are different from the challenges faced through most of the 20th Century.

Define social class
Give examples of how economic inequality, class relations, and power are manifested in sports today, especially in connection with sport participation, attendance at sport events, and sport programs for people with disabilities.

Describe the prevailing class ideology in the United States today and how it is related to the American Dream and the notion of meritocracy.

Identify who has power in sports today, and the interests that are served by that power.

Explain how sports have become cultural vehicles for establishing ideological outposts in the minds of people around the world.

Critically assess the argument that professional sports franchises create jobs in a city.

Identify the major challenges faced by retiring athletes.

Identify the conditions under which commercial sports emerge and grow in a society.

Identify economic and ideological reasons why sports have become so popular in society today.

Explain how the corporate branding of sports is related to the establishment of ideological outposts around the world today.

Explain how commercialization affects the rules, culture, and organization of sports.

Distinguish differences between aesthetic orientations and heroic orientations, and explain how these orientations are influenced by the commercialization of sports.

Explain how the owners and sponsors of commercial sports have benefited from their ability to establish cartels, monopolies, and monopsonies within the business of sports.

Identify the major sources of income for the owners of professional sport teams.

Identify the major forms of the media, what they provide to people, and the influence of commercial forces on media content.

Discuss how the newer media, including the Internet, change spectator experiences, and what many people find attractive about playing sport video games and virtual sports.

Discuss how sports and the media depend on each other for commercial success.

Critically assess the notion that the media have corrupted sports.

Identify major trends in televised sports and media rights fees.

Explain why corporations that sell alcohol, tobacco, soft drinks, confectionary products (candy), and fast food are likely to sponsor sports in the media.

Identify ideological themes around which the media coverage of sports is constructed.

Describe the major differences in the ways that men and women and blacks and whites are represented in media images and narratives.

Identify historical trends in on-the-field violence and spectator violence.

**Student Learning Outcomes:**

Critique and explain why sport faces challenges as regards to sportsmanship and deviance.

Analyze and contrast the role of sport in US society from varied perspectives including youth/parent; participant/fan; recreational/professional sports; high school/college sports; and by considering issues of race/gender/religion.

Describe the role of sport in a broader context than their own experience, through understanding the perspectives of local community groups; local, national and international media groups, and by contrasting sport in the US with sport in other nations.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Women's Health Issues**
KIN110:

3.0 Units

This course is designed to address health concepts as they apply to women. The topics range from personal fitness and nutrition habits to substance abuse; female reproductive structure and function; intimate and abusive relationships; disease transmission, prevention and aging.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area D: Cultural Breadth

Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B

Area E1: Lifelong Learning

Learning Outcomes

Course Objectives:

Recognize healthy eating patterns

Identify aspects of women's health connected to aging

Cultivate awareness of fitness with unique considerations for women, total fitness, exercise and aging

Recognize trends, effects, and issues in alcohol

Employ informed decision making for women regarding alcohol

Recognize trends and issues in drug use

Determine physiological effects of drug use and drug dependency

Evaluate informed decision making for women regarding drugs

Recognize trends and issues in smoking and health consequences

Evaluate smoking as a health behavior

Employ informed decision making for women regarding smoking

Analyze the impact weight has upon health, body image, and disordered eating

Distinguish between perspectives on sexual health and sexuality

Appraise epidemiology

Discover gender identity

Analyze the biological basis of sexual health and sexuality through the lifespan

Employ informed decision making regarding sex

Identify contraception methods
Make informed decisions about contraception and abortion
Demonstrate knowledge of pregnancy and childbirth
Illustrate knowledge of reproductive tract infections
Identify steps in informed decision making
Identify and analyze the different forms of violence

Student Learning Outcomes:
Analyze varying health topics, as they relate to women, so that they may make informed choices about their health and lifestyle. Critically analyze how choices regarding their health impact their quality of life.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Sports Psychology
KIN111:

3.0 Units
An academic and practical examination of the psychological aspects of sport. Specific methods will be taught to enhance athletic performance through mental preparation and practice.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Learning Outcomes
Course Objectives:
Demonstrate an understanding of theories and methods applied in sport psychology.

Demonstrate an understanding of how to identify recent and current trends that may serve as predictors for future developments in the field of sport psychology.

Demonstrate an understanding of how competition is defined and the aspects involved in youth sport.
Demonstrate an understanding of how to assess team cohesion.

Demonstrate an understanding of the role of social dimensions of sport in influencing athletic behavior.

Access the role of psychological factors influencing athletic behavior.

Analyze the role of planning, preparation and mental activity in competitive athletic situations.

Demonstrate an understanding of the aspects behind individual and group motivation and performance.

Demonstrate an understanding of the various aspects of aggression in sports.

Demonstrate an understanding of the basic aspects of sport psychology.

Demonstrate an understanding of audience and crowd effects.

Evaluate various coaching styles and their effects on individual and team performance.

Apply methods of measuring and assessing athletic performance as it is effected by the various psychological dimensions of sport.

Demonstrate an understanding of the various theories regarding stress and coping strategies.

Demonstrate an understanding of banned substances.

Describe methods/suggestions for combating drug abuse at all levels.

Demonstrate an understanding of the roles of psychological predictors of athletic injuries and the response of athletes to injuries and rehabilitation.

Demonstrate an understanding of leadership development, behavior, and attributes.

**Student Learning Outcomes:**

- Learn, and then apply the scientific concepts of sport psychology to athletic performance.
- Evaluate the complex nature of sport psychology and the effects it has on performance as an individual and a team.
- Describe the role of sport psychology in their own experience and the role it plays at a universal level.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Personal Fitness Evaluation**

**KIN119:**

0.5 - 1.0 Units

Personal evaluation of your fitness level. Each student completes appointments that evaluate flexibility, strength, blood pressure, body composition, pulmonary function, resting electrocardiogram, and a graded exercise test. Students are required to record 24 hours of instructor supervised exercise. Designed for healthy individuals with no heart problems.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU
Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
   Area F2: Physical Activity

CSU GE - Plan B
   Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Demonstrate an understanding of fitness principles and how to manage current level of fitness.

Design an instructor approved fitness regimen based upon individual goals and needs.

Demonstrate understanding of the concepts relating to personal fitness through the implementation of individual fitness programs.

Analyze progress through fitness testing to determine the effectiveness of the program and the modifications that need to be made.

Student Learning Outcomes:
   Critically analyze the meaning of the test results and establish an instructor approved conditioning program.
   Demonstrate understanding of how the science and knowledge of fitness can be used to make effective decisions regarding lifestyle changes which result in an improved quality of life.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Basic Step Aerobics
KIN121A :

0.5 - 1.0 Units

An aerobic exercise program that improves flexibility, aerobic conditioning, muscular strength and endurance by utilizing a platform for stepping up and down. Includes a variety of stepping routines and upper body strength training exercises in controlled rhythmic patterns set to music.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Gain an understanding of the class rules and safety procedures.

Demonstrate knowledge of aerobic training and be able to relate the height of the step to performance intensity.

Demonstrate an understanding of the stepping technique as well as being able to measure and demonstrate understanding of the importance of reaching your target heart-rate to improve aerobic fitness.

Apply basic acquired skills to the more advanced stepping techniques.

Recognize and incorporate intermediate concepts to gain increased cardiovascular fitness, muscular strength, flexibility and coordination.

Student Learning Outcomes:
- Analyze and assess correct ways to incorporate step routines into work out routines to build strength, aerobic capacity, to prevent injuries, and maintain proper body alignment.
- Demonstrate the proper sequences of movement and how to synchronize their movements to music from different cultural backgrounds.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Basic Cardio Kickboxing

KIN125A :

0.5 - 1.0 Units

A series of combative boxing and kickboxing maneuvers designed to improve muscle tone, cardiovascular endurance, and self defense.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity
CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the rules and regulations needed to maintain a safe and healthy environment.

Discover the application of proper boxing/kickboxing stance and how that impacts basic combative maneuvers.

Experiment with basic combative movements through shadow box drills individually and with partners.

Actively participate in an aerobic based combative exercise program designed to teach the basic skills of punching and kicking through repetition.

Practice striking movements in conjunction with the addition of a cardiovascular element.

Apply safety techniques while using focus pads and thai pads with a partner.

Demonstrate an understanding of the importance of technique in order to advance to more difficult combinations/rounds.

Student Learning Outcomes:
- Learn to critically analyze the use of basic combative movements to be incorporated into both a safe and healthy exercise regimen.
- Demonstrate cooperative learning while demonstrating coordinated movements aimed at basic personal safety.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Intermediate Cardio Kickboxing

KIN125B :

0.5 - 1.0 Units

This intermediate level Cardio Boxing class will emphasize combative maneuvers that will enhance the cardiovascular fitness level as well as the personal safety of the students at an enhanced level of instruction.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the rules and regulations of the course including proper use of equipment.

Apply techniques previously learned with regard to combative maneuvers including stance, footwork, basic punching and kicking.

Use basic techniques for more complex combinations.

Experiment with basic self-defense movements through shadow box drills individually and with partners.

Master basic and apply an intermediate level of kickboxing techniques with an emphasis on expanding cardiovascular fitness levels and personal safety.

Practice techniques through repetitions with a partner.

Apply safety techniques while using boxing gloves, focus pads, and thai pads.

Employ progressions based upon individual level.

Student Learning Outcomes:

Critically analyze the use of intermediate level striking techniques used in various circumstances with a view to improving their cardiovascular fitness and personal safety.

Demonstrate proper technique through the practice of routines.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Basic Spin

KIN126A :

0.5 - 1.0 Units

Students will be guided through workout phases on the bike with a basic introduction to warm ups, up-tempo cadences, sprints, climbs and cool downs.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Operate the spin bikes in a safe and effective manner.
Perform the varying postures used throughout a spin class.
Control the resistance through RPM's.
Describe the importance of cadence and pedal rate in conjunction with their cardiovascular fitness level.
Participate in varying spin routines that encompass hills, sprints, muscular, and cardiovascular endurance designed at a basic level.
Evaluate their progress throughout the course through fitness testing protocols.
Demonstrate mastery of basic spin requirements that build upon their cardiovascular and muscular endurance.

Student Learning Outcomes:
Demonstrate an understanding of cycling technique and the value of proper form in receiving maximal benefits.
Critically analyze heart rate and cadence in determining their individual fitness level.

Units & Hours

Minimum Units:
1.0

Maximum Units:
1.0

Total Hours:
54.0

Intermediate Spin

KIN126B:

0.5 - 1.0 Units

Students will be guided through intermediate level spin routines that challenge the cardiovascular and muscular endurance through varying cadence, resistance, and revolutions per minute (RPMs) set to up-tempo music.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity
Course Objectives:
Operate the equipment in a safe manner.
Set up their bike to individual specifications as well as previously learned postures.
Manipulate their posture to maximize muscular work.
Demonstrate proper usage of the fly wheel in individualizing their workout.
Perform diverse spin routines that include the usage of various postures, speeds, cadence, RPM’s, and the fly wheel.
Monitor their progress through the performance of varying fitness tests.
Demonstrate the mastery of intermediate spin in order to prepare for a more advanced class.

Student Learning Outcomes:
Critically analyze principles of conditioning and how they can be applied within the spin class.
Analyze how the manipulation of the bikes fly wheel allows the student to achieve the maximal workout at an individual level.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Basic Yoga
KIN127A :

0.5 - 1.0 Units

This basic yoga class is an exercise program that emphasizes the practice of postures that strengthen the body, improve flexibility and create a feeling of well-being.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Demonstrate understanding of the rules and regulations of the course and the inherent safety issues that exist when taking a fitness course.
Implement basic standing and sitting postures while incorporating breathing control.

Experiment with different yoga poses and identify how their body reacts to the pose.

Demonstrate different movements in yoga poses.

Memorize and perform the various yoga poses.

Utilize basic concepts and movements demonstrating awareness of more advanced yoga sequences.

**Student Learning Outcomes:**

- Analyze and assess how yoga can be incorporated into their lifestyle with a view to long-term physiological and psychological benefits.
- Demonstrate flexibility, muscular strength, and co-ordinate body movement, maintaining body alignment against gravity.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units:**

1.0

**Total Hours:**

54.0

**Intermediate Yoga**

**KIN127B:**

0.5 - 1.0 Units

This intermediate level yoga class is an exercise program that emphasizes the practice of postures that strengthen the body, improve flexibility and create a feeling of well-being.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Local - Plan A**

Area F2: Physical Activity

**CSU GE - Plan B**

Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**

- Demonstrate correct unji and one nostril breathing techniques for controlled breathing and focus.

- Perform Sun Salutations A-C for improved strength, flexibility and concentration.

- Perform twisting poses to increase flexibility in spine, shoulders and hips.
Perform focused poses to increase upper body strength.
Perform poses to increase flexibility in spine, strength in back muscles.
Perform poses to improve balance and alignment, as well as demonstrate focus and concentration.

**Student Learning Outcomes:**
- Demonstrate understanding of techniques for relaxation through focusing on breathing.
- Demonstrate understanding of intermediate level yoga poses for increased strength, and improved flexibility and balance.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours:**
54.0

**Advanced Yoga**

**KIN127C:**

0.5 - 1.0 Units

This advanced yoga class is an exercise program that emphasizes the practice of postures that strengthen the body, improve flexibility and create a feeling of well-being.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**
- Area F2: Physical Activity

**CSU GE - Plan B**
- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
Demonstrate understanding of the rules and regulations of the course and the inherent safety issues that exist when taking a fitness course.

Perform controlled breathing techniques while in challenging poses to increase flexibility in spine, hips and shoulders while simultaneously building upper body strength.

Perform various repeated guided movements through a series of poses in rhythm with inhalations/exhalations.

Hold poses for extended periods to increase flexibility and still the mind.
Analyze and interpret westernized perspectives and interpretations of yoga to highlight the value of traditional yoga ideals and practices in pursuit of improved individual and collective physical and mental health.

**Student Learning Outcomes:**
- Demonstrate improved flexibility, muscular strength, and coordinated body movement, while maintaining body alignment against gravity through participation in varied challenging poses.
- Analyze and assess how yoga practice can be incorporated into lifestyle with a view to long-term physiological and psychological benefits.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours:**
54.0

**Basic Tai Chi**

**KIN128A:**

0.5 - 1.0 Units

This course is designed to give instruction in the ancient Chinese art of Tai Chi. Students will learn movement patterns designed to generate, circulate and harmonize internal energy flows for mental and physical health enhancement.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**
Area F2: Physical Activity

**CSU GE - Plan B**
Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
- Explore the origins, history and ethos of Tai Chi.
- Perform 20 basic movements safely and correctly.
- Incorporate relaxation techniques to improve concentration skills and memory function.
- Demonstrate an understanding of how to breathe correctly to increase lung capacity and breathe to increase energy.

**Student Learning Outcomes:**
- Increase flexibility, coordinate body movement and regulate breathing for increased energy flow.
Analyze and assess how Tai Chi can be incorporated into their lifestyle with a view to long term physiological and psychological benefits.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Basic Circuit Weight Training
KIN140A :

0.5 - 1.0 Units

This course introduces the basic principles related to the acquisition of muscular strength and endurance. Students will explore training techniques through the use of body weight and light weight equipment. Instruction is provided in the areas of functional fitness and the physiological adaptation process that occurs as a result of circuit training.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Define the functional relevance of circuit weight training

Discuss strategies for achieving or maintaining optimal personal weight and body composition

Illustrate basic safety protocol within the fitness center facility

Demonstrate proper body posture, proper breathing technique, and general lifting technique during the use of selective weight-stack resistance equipment

Analyze past exercise and fitness history along with current personal fitness goals

Identify current physical health ailments and develop appropriate exercise program modifications

Identify personalized heart rate training zone

Explain the difference exercise components of a comprehensive health-promoting fitness program

Develop a personalized low intensity circuit training program based on initial baseline assessment and personal fitness goals
Explain how to appropriately use each of the different pieces of weight-stack resistance equipment

Identify basic muscle groups and planes of movement that each exercise is designed to work

Record circuit training activities and track physical fitness progression

Develop competency in the use of selectorized weight-stack resistance equipment

Analyze pre- and post-exercise recovery nutrition and hydration

Explain how to effectively use training heart rate to monitor exercise intensity, maximize cardiovascular health benefits, and minimize cardiovascular risk during exercise

Student Learning Outcomes:
- Design an effective personal lifetime fitness program utilizing a variety of resistance and weightbearing exercises and equipment.
- Identify proper resistance training techniques and the physical adaptations that result from a consistent weights and conditioning fitness program.

Units & Hours
Minimum Units: 1.0

Maximum Units: 1.0

Total Hours: 54.0

Intermediate Circuit Weight Training
KIN140B:

0.5 - 1.0 Units

This course is designed for students with prior resistance training experience. Principles and training techniques for the development of muscle tone, muscle strength, and muscular endurance will be taught, as well as the use of weightbearing exercises to promote cardiovascular health benefits. Students will utilize weights, variable resistance machines, and other resistance equipment to advance their total body fitness.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
  Area F2: Physical Activity

CSU GE - Plan B
  Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Discuss fitness center laboratory procedures, course credit requirements, facility rules, and exercise etiquette.
Develop competency in the use of resistance training equipment and techniques.

Review proper body posture, breathing technique, and general lifting technique for injury prevention during resistance exercise.

Formulate a fitness center workout card to record circuit training activities and track physical fitness progression.

Describe muscle physiology including muscle fiber types, muscle hypertrophy/atrophy, types of muscle contractions.

Describe differences in training used to develop muscle mass vs. muscular strength vs. muscular endurance.

Demonstrate additional modes of resistance training including the use of kettlebells, stability balls, BOSU balance trainers, core strength equipment, and exercises that utilize individual body weight for resistance.

Combine traditional resistance circuit training activities to produce a more comprehensive moderate intensity circuit training program.

Analyze initial baseline performance on the newly introduced resistance exercises.

Identify basic safety protocols within the fitness center facility.

Discuss any pertinent health issues or limitations that may require accommodation.

Discuss proper warm-up and cool-down before and after a resistance training session.

Discuss specificity of training.

Discover overload principle and when to increase resistance.

Recognize rest intervals.

Identify relationship of sets/repetitions to specific training goals.

Illustrate range of motion and angular strength.

Discuss personal fitness goals and design a personalized moderate intensity circuit training program to achieve those goals.

**Student Learning Outcomes:**

Integrate the principles of resistance training into an effective, personalized lifetime fitness program utilizing a variety of exercises and equipment.

Identify the specific exercise equipment and techniques utilized to develop muscular strength and muscular endurance in the various major muscle groups of the human body.

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**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

54.0

**Advanced Circuit Weight Training**

**KIN140C**:

0.5 - 1.0 Units

This course is designed for students possessing advanced knowledge and experience with resistance training exercises. Students will utilize weights, variable resistance machines, and a wide variety of weight-bearing activities and equipment to perform high intensity exercise. Muscular development will be achieved through implementation of a resistance training program built upon advanced modes of training and the principles of exercise physiology.

**Requisites**

None
Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Discuss fitness center laboratory procedures, course credit requirements, facility rules, and exercise etiquette.

Formulate functional knowledge of the many facets of resistance training and how those different facets can be modified and/or combined in order to achieve specific training effects.

Describe best practices for injury prevention during circuit training exercise.

Develop a fitness center workout card to record circuit training activities and track physical fitness progression.

Appraise the initial baseline performance on the newly introduced resistance exercises.

Discuss the students' personal fitness goals.

Identify basic safety protocol within the fitness center facility.

Discuss any pertinent health issues or limitations that may require accommodation.

Demonstrate the use of additional higher intensity modes of resistance exercise.

Describe advanced resistance training theory and concepts.

Develop competency in the use of newly introduced resistance training equipment and techniques.

Construct a personalized high intensity circuit training program.

Student Learning Outcomes:
Evaluate various resistance training programs and equipment and adapt their use to accommodate the specific, individualized fitness needs of a variety of populations.

Analyze a resistance exercise routine to ensure that it is a balanced program that addresses all major muscle groups including the major opposing agonist/antagonist muscle groups.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Intermediate Strength Training
KIN146B:
0.5 - 1.0 Units

This high intensity strength training course is designed for students who possess significant experience in the use of free weight equipment. Students will apply proper weight lifting techniques and training periodization to develop muscular strength and power through the use of dumbbells and Olympic bar weights. Instruction is provided in advanced strength training theory.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Local - Plan A**

Area F2: Physical Activity

**CSU GE - Plan B**

Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**

- Recall strength lab organization, procedures, and etiquette
- Explain advanced concepts in strength training program design
- Recall partner “spotting” techniques and general body posture, breathing, and free weight lifting techniques for injury prevention
- Demonstrate the use of Olympic barbells, Olympic weight plates, and barbell clips
- Discuss the importance of having an attentive partner to spot when lifting Olympic weights
- Integrate basic techniques of the most common Olympic lifts
- Discuss initial baseline performance in the major Olympic lifts that will be performed
- Repeat periodic maximal tests in the major Olympic lifts
- Recall basic safety protocols within the strength laboratory
- Discuss pertinent health issues or limitations that may require accommodation
- Use appropriate warm-up, stretching, and warm-down exercises to stimulate appropriate blood flow and core muscle temperature changes
- Defend the importance of proper warm-up and warm-down in both injury prevention and efficient exercise recovery
- Analyze improved body awareness
- Evaluate knowledge of strength training technique
- Evaluate positive physical health adaptations and progress in muscular strength and hypertrophy through active participation utilizing Olympic weight equipment
- Discuss personal fitness goals and design a personalized exercise program to achieve those goals

**Student Learning Outcomes:**

Effectively evaluate and adjust an individualized strength training program through the application of free weight training principles in order to optimize progression in muscular strength, hypertrophy, and endurance.

Understand and be able to demonstrate the proper partner spotting technique and proper weightlifting technique (including body posture and breathing) for all of the major Olympic and free weight strength training exercises.
Units & Hours
Minimum Units: 1.0
Maximum Units: 1.0
Total Hours: 54.0

Advanced Strength Training
KIN146C:

0.5 - 1.0 Units
This course is designed for students with advanced knowledge and extensive experience in free weight strength training. Instruction will focus on training methods applicable to multi-joint powerlifting, Olympic lifting, and sport strength and conditioning. Students will develop individualized workout programs that emphasize the development of muscular strength, power, agility, and explosiveness.

Requisites
Requisites: None

Transferability & General Education Options
Transferable: Transferable to both UC and CSU

Weekly Lecture Hours: 1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Discuss strength lab organization, procedures, and etiquette
Employ advanced program design concepts in strength training
Review partner "spotting" techniques and general body posture, breathing, and free weight lifting techniques for injury prevention
Discuss recommendations and rationale in regards to the selection and use of weight training safety equipment
Demonstrate proper performance technique of each of the major Olympic lifts
Analyze how multi-joint compound movement exercises maximize functional fitness gains
Discuss power lifting training concepts and challenges
Describe plyometric and explosive training techniques for the development of functional power and agility
Review basic safety protocols within the strength laboratory
Analyze baseline performance in the major Olympic lifts in order to evaluate progressions
Employ periodic maximal tests in the major Olympic lifts
Discuss personal fitness goals and design a personalized exercise program

Discuss any pertinent health issues or limitations that may require accommodation

Use appropriate warm-up, stretching, and warm-down exercises to stimulate appropriate blood flow and core muscle temperature changes

Analyze the importance of proper warm-up and warm-down in both injury prevention and efficient exercise recovery

Formulate improved muscle hypertrophy, strength, power, agility, and explosiveness for athletic performance and/or personal fitness

Discuss the increased injury risks and recovery time demands associated with high intensity training techniques

**Student Learning Outcomes:**

- Evaluate the demands of a sporting activity and design an individualized sport-specific strength and conditioning program that is appropriate to that activity.
- Possess a functional knowledge of strength training program terminology and be able to explain and differentiate between the common terms used.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units:**

1.0

**Total Hours:**

54.0

**Basic Basketball**

**KIN160A :**

0.5 - 1.0 Units

To introduce and establish basketball fundamentals with a view to encouraging life-time fitness.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Local - Plan A**

Area F2: Physical Activity

**CSU GE - Plan B**

Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**

Demonstrate fundamental basketball skills of basic passing, dribbling, and shooting techniques in practice exercises and small-group play.
Demonstrate basic rebounding techniques in practice exercises and small-group play.

Demonstrate basic 1v1 defending techniques and 1v1 attacking skills in practice exercises and small-group play.

Demonstrate techniques to improve their physical conditioning levels and basic skills through activities with a ball.

Demonstrate understanding of the basic rules of basketball through application in game settings and written evaluation.

**Student Learning Outcomes:**

- Demonstrate understanding of the skills required for basketball and knowledge of the positive lifetime health impacts of practicing the sport.
- Demonstrate understanding of the rules of basketball.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

54.0

**Intermediate Basketball**

**KIN160B:**

0.5 - 1.0 Units

Intermediate level course to further develop passing, dribbling and various types of shooting. Emphasis will be placed on small group defense, small group offense, rules, special situations and strategies.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Local - Plan A**

- Area F2: Physical Activity

**CSU GE - Plan B**

- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**

- Demonstrate a variety of shooting techniques appropriate in 1v1 and small group situations.
- Demonstrate small group offensive strategies such as the pick and roll, and how and where to implement them.
- Demonstrate defensive footwork and defensive systems in small-group situations such as man-to-man marking, zonal marking or a combination.
- Develop the mental strength and physical capacity to transition from offense to defense and defense to offense quickly and effectively.
Apply strategies to small-group games.

**Student Learning Outcomes:**
- Demonstrate skill development through a progression of fundamentals.
- Critically analyze game scenarios and utilize appropriate strategies.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours:**
54.0

**Basic Indoor Soccer**

**KIN163A:**

- 0.5 - 1.0 Units

A basic level soccer course to develop fundamental soccer skills in an indoor facility.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**
- Area F2: Physical Activity

**CSU GE - Plan B**
- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
- Demonstrate proper basic passing, dribbling, and shooting techniques in practice exercises and small-group play.
- Demonstrate basic ball control techniques in practice exercises and small-group play.
- Demonstrate basic 1v1 defending techniques and 1v1 attacking skills in practice exercises and small-group play.
- Improve their physical conditioning levels and basic skills through activities with a ball.
- Demonstrate understanding of the basic rules of indoor soccer (Futsal) through application in game settings and written evaluation.

**Student Learning Outcomes:**
- Demonstrate knowledge and practice of basic skill development activities which aim at positive lifetime health.
- Demonstrate understanding of the rules of indoor soccer.

**Units & Hours**
Minimum Units:
  1.0

Maximum Units
  1.0

Total Hours
  54.0

Basic Volleyball
KIN168A:

0.5 - 1.0 Units

This course introduces the fundamental strategies and skills of volleyball, including setting, passing, spiking, blocking and serving, as well as the beginning concepts of team and tournament play.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
  Area F2: Physical Activity

CSU GE - Plan B
  Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Demonstrate proper passing, setting, and spiking techniques in practice drills and tournament play.
Choose proper hand positioning on underhand serves and play appropriate serve placement
Analyze and apply the appropriate blocking strategies utilizing proper hand and feet positions.
Analyze the situation and demonstrate appropriate positioning on the court.
Analyze and articulate performance elements of the game essentials.

Student Learning Outcomes:
Demonstrate understanding of the skills required for volleyball and knowledge of the positive lifetime health impacts of practicing the sport.
Demonstrate understanding of the rules of volleyball.

Units & Hours

Minimum Units:
1.0

Maximum Units
Intermediate Volleyball  
KIN168B:  

0.5 - 1.0 Units  
An intermediate volleyball class to improve volleyball skills, in the areas of passing, setting, hitting, serving and blocking, as well as basic offensive and defensive systems of play. The course includes discussions of rules and strategy.

Requisites  
Requisites:  
None  

Transferability & General Education Options  
Transferable:  
Transferable to both UC and CSU

Weekly Lecture Hours:  
1.0

General Education Plan:  
Local - Plan A  
Area F2: Physical Activity  

CSU GE - Plan B  
Area E2: Physical Activity

Learning Outcomes  
Course Objectives:  
Perform underhand passes, overhand passes, sets, and spikes.  
Perform serves, blocks and falls.  
Appraise each game situation by utilizing appropriate strategy, both offensive and defensive.  
Identify and apply the United States Volleyball Association rules.  
Analyze a volleyball match for application of skills, techniques and strategies.

Student Learning Outcomes:  
Demonstrate skill development through a progression of fundamentals.  
Critically analyze game scenarios and utilize appropriate strategies.

Units & Hours  
Minimum Units:  
1.0  

Maximum Units  
1.0

Total Hours  
54.0

Basic Golf
KIN170A:

1.0 Units

This course provides golf instruction and practice. Emphasis is placed on the fundamentals of the grip, stance, alignment, and the techniques and practice of the short game strokes of pitching, chipping and putting. Topics include the rules, terminology, safety procedures, values, etiquette, equipment, and history of golf. This course is designed for all students interested in playing golf as part of a fitness lifestyle or kinesiology majors.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
To understand the physiological, psychological, and social benefits of golf.

To learn basic terms, rules, history, and etiquette related to the game of golf.

To learn about the equipment and attire used in golf (different clubs and uses, shoes, clothing).

To understand and perform the basic mechanics involved in the set-up, swing, and contact point for each area of golf (driving, chipping, putting).

To be able to recognize the cause and correction of common errors (i.e.; slicing, topping).

To develop the cooperative skills necessary for preparing and playing a round of golf on a course (i.e.; keeping score, location of courses).

To recognize the various emotions involved with golf and identify how they can be helpful or detrimental to the game and one's concentration.

To gain an appreciation for the game and how adults and their families can enjoy golf and the lifetime benefits it provides.

Student Learning Outcomes:

Demonstrate understanding of the skills required for golf and knowledge of the positive lifetime health impacts of practicing the sport.

Demonstrate understanding of the rules of golf.

Units & Hours

Minimum Units:
1.0

Maximum Units:
1.0
Total Hours
54.0

Basic Swimming
KIN185A :
0.5 - 1.0 Units
Introductory basic swimming skills, with an emphasis on water safety.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Demonstrate the basic skills of floating on front and back.
Demonstrate the basic skills of treading water.
Demonstrate the basic skills of rotary breathing.
Demonstrate the basic skills of underwater swimming.
Apply rules of safe swimming.
Apply strategies to maintain safe swimming of self and others.
Perform entering and exiting of water environment in a safe manner.
Coordinate arms and legs to incorporate into freestyle stroke.

Student Learning Outcomes:
Perform introductory swimming skills and techniques, such as treading water and floating.
Critically analyze the need for increased safety measures necessary for demands of an intermediate level swim class.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0
Intermediate Swimming
KIN185B :

0.5 - 1.0 Units

Intermediate swim skills, emphasizing the four competitive swim strokes. Speed and endurance swimming will also be emphasized in a training environment.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
  Area F2: Physical Activity

CSU GE - Plan B
  Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Demonstrate intermediate swim skills in the following four competitive strokes: freestyle, backstroke, breaststroke, and butterfly.

Apply endurance swimming techniques, with a goal of swimming for thirty minutes continuously.

Apply speed swimming techniques, with a view to completing a set for each stroke of 100 yards on 2:30 minute intervals.

Demonstrate competitive starts and turns for freestyle, backstroke, breaststroke and butterfly.

Develop and demonstrate fundamental swim skills: streamline, stroke count, breath control, and turnover (intermediate focus)

Demonstrate understanding of strategies to maintain safe swimming of self and others.

Student Learning Outcomes:
Demonstrate knowledge of how to incorporate swimming into their lifestyle to promote lifelong health.
Use critical thinking skills to evaluate water safety criteria and apply these safety rules to the swim environment.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Advanced Swimming
KIN185C :
0.5 - 1.0 Units

Advanced swim skills developed with emphasis on the five competitive swim strokes. Advanced speed and endurance training will be emphasized in a training environment.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Refine fundamental swim skills: streamline, stroke count, breath control, and turnover (advanced focus)

Refine advanced swim skills in the following competitive strokes: freestyle, backstroke, breaststroke, and butterfly.

Practice advanced endurance swim technique, with a goal of swimming for forty-five minutes or completing a mile swim.

Practice advanced speed swim technique, swimming sets of 100's on the 1:30 and 1:45 pace clock.

Perform the individual medley and include starts and turns.

Perform starts and turns for swim relays.

Appraise swim competition techniques and determine strategies to successfully include in your individual swim workout to improve advanced swimming skills.

Student Learning Outcomes:
Use critical thinking skills to refine fundamental swim skills including streamline, stroke count, breath control, and turnover. Assess, and incorporate individual swim workouts that include speed, distance, and interval training and with a view to moving closer towards personal targets.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Basic Aqua Aerobics

KIN189A:

0.5 - 1.0 Units
A class designed to improve muscle tone, flexibility and cardiovascular endurance through exercises using water as a means of resistance.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**
Area F2: Physical Activity

**CSU GE - Plan B**
Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
Demonstrate understanding of water safety and class policies.

Identify and demonstrate an understanding of the basic principles of aqua aerobics including buoyancy, resistance in water and the importance of nutrition.

Apply their target heart-rate as a measure of their performance level.

Demonstrate understanding of the importance of warming up and cooling down and apply these principles at the beginning and end of every class.

Demonstrate an understanding of the benefits of aqua aerobics when looking to improve general fitness levels.

**Student Learning Outcomes:**
- Demonstrate knowledge of aqua-aerobics fitness concepts.
- Demonstrate knowledge of water safety criteria and apply that safety knowledge to the pool environment.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
54.0

**Conditioning for Athletes-Men**

**KIN200:**

0.5 - 1.0 Units

An instructor supervised exercise program designed for athletes who participate in men's sports. Emphasis will be on the development of speed, endurance, flexibility, and strength.

**Requisites**
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Measure and document fitness levels at the beginning of the course to monitor fitness levels over the duration of the course.
Measure and document fitness levels midway through the course to realize increased fitness levels over the course.
Continue to measure and document fitness levels to realize the increased fitness levels over the course.
Demonstrate knowledge of more advanced techniques of running and weight lifting.
Measure and document fitness levels at the end of the course to realize the increased fitness levels over the duration of the course.

Student Learning Outcomes:
Use critical thinking skills to learn and apply the appropriate exercise techniques to increase their athletic performance.
Demonstrate knowledge of how to incorporate exercise into their lifestyle to promote lifelong health.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Conditioning for Athletes-Co-Ed
KIN201:

0.5 - 1.0 Units
An instructor supervised exercise program designed for athletes who participate in sports. Emphasis will be on the development of speed, endurance, flexibility, and strength.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU
Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Measure and document fitness levels at the beginning of the course to monitor fitness levels over the duration of the course.
Measure and document fitness levels midway through the course to realize increased fitness levels over the course.
Continue to measure and document fitness levels to realize the increased fitness levels over the course.
Demonstrate knowledge of more advanced techniques of running and weight lifting.
Measure and document fitness levels at the end of the course to realize the increased fitness levels over the duration of the course.

Student Learning Outcomes:
Use critical thinking skills to learn and apply the appropriate exercise techniques to increase their athletic performance.
Demonstrate knowledge of how to incorporate exercise into their lifestyle to promote lifelong health.

Units & Hours
Minimum Units:
1.0

Maximum Units:
1.0

Total Hours:
54.0

Conditioning for Athletes-Women
KIN202:

0.5 - 1.0 Units

An instructor supervised exercise program designed for athletes who participate in women’s sports. Emphasis will be on the development of speed, endurance, flexibility, and strength.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A  
Area F2: Physical Activity

CSU GE - Plan B  
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Measure and document fitness levels at the beginning of the course to monitor fitness levels over the duration of the course.
Measure and document fitness levels midway through the course to realize increased fitness levels over the course.
Continue to measure and document fitness levels to realize the increased fitness levels over the course.
Demonstrate knowledge of more advanced techniques of running and weight lifting.
Measure and document fitness levels at the end of the course to realize the increased fitness levels over the duration of the course.

Student Learning Outcomes:
- Use critical thinking skills to learn and apply the appropriate exercise techniques to increase their athletic performance.
- Demonstrate knowledge of how to incorporate exercise into their lifestyle to promote lifelong health.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Speed and Agility-Men  
KIN203:

0.5 - 1.0 Units

This class is designed for male athletes to increase running speed. This class includes instruction on linear speed, non-linear speed, and jumping ability using state of the art plyometric training and speed specific training tools.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A  
Area F2: Physical Activity

CSU GE - Plan B  
Area E2: Physical Activity
Learning Outcomes

Course Objectives:
Identify the rules, regulations and safety procedures of the course.

Improve physical conditioning and fitness levels.

Apply techniques to improve linear speed.

Apply techniques to improve non-linear speed.

Identify and demonstrate sport specific drills to improve speed and fitness levels.

Demonstrate an understanding of the base physiology of speed training and cool down techniques.

Student Learning Outcomes:
Understand how to evaluate fitness levels, and speed results, and how to improve training techniques. Participate in fitness and skill development activities that will promote positive lifetime health.

Units & Hours
Minimum Units: 1.0

Maximum Units: 1.0

Total Hours: 54.0

Speed and Agility-Women

KIN204:

0.5 - 1.0 Units

This class is designed for female athletes to increase running speed. This class includes instruction on linear speed, non-linear speed, and jumping ability using state of the art plyometric training and speed specific training tools.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable: Transferable to both UC and CSU

Weekly Lecture Hours: 1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Identify the rules, regulations and safety procedures of the course.
Improve physical conditioning and fitness levels.

Apply techniques to improve non-linear speed.

Apply techniques to improve non-linear speed.

Identify and demonstrate sport specific drills to improve speed and fitness levels.

Demonstrate an understanding of the base physiology of speed training and cool down techniques.

**Student Learning Outcomes:**

- Understand how to evaluate fitness levels, and speed results, and how to improve training techniques.
- Participate in fitness and skill development activities that will promote positive lifetime health.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

54.0

**Basketball Team - Men**

**KIN240:**

3.0 Units

A high-level competitive program in Basketball for male athletes with exceptional athletic talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to competing.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area F2: Physical Activity

**CSU GE - Plan B**

Area D: Social Sciences

Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**

- Demonstrate understanding of the need for proper physical fitness and an awareness of how to prevent injuries.
- Incorporate sport psychology techniques with a view to improving individual and collective performance.
- Utilize a variety of basketball skills to improve execution in practice and games.
Demonstrate an understanding of the laws of the game, and develop individual and collective strategies to improve performance.

Manage the stress of competition and perform to their highest capability.

Evaluate their performance.

**Student Learning Outcomes:**
- Critically evaluate their own performance, and all aspects of the basketball program with a view to improving themselves as individual players and improving the program as a whole.
- Demonstrate a commitment to the local community through activities that provide a personal and team connection with local groups and in doing so, help raise the profile of the college.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
162.0

**Basketball Team Off-Season Men**

**KIN242:**

0.5 - 1.0 Units

A high-level, competitive practice and skills program in basketball for male students with exceptional athletic talent.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**
- Area F2: Physical Activity

**CSU GE - Plan B**
- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
- Demonstrate knowledge of the rules, basic skills and safety concerns regarding basketball.
- Practice and apply basic basketball techniques in game situations.
- Demonstrate knowledge of the different strategies and principles of play related to basketball.
- Apply individual techniques in games.
- Analyze game situations.
Select appropriate skills and apply them in the game.

Utilize teamwork to gain success towards a common goal.

**Student Learning Outcomes:**
- Demonstrate critical thinking by choosing appropriate skills and techniques in game-like situations.
- Demonstrate understanding of the benefits of exercise for fitness and wellness and for life-long health.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
54.0

**Volleyball Team- Men**

**KIN245:**

3.0 Units

A high-level competitive program in Volleyball for male athletes with exceptional athletic talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to competing.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area F2: Physical Activity

**CSU GE - Plan B**
- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
- Demonstrate understanding of the need for proper physical fitness and an awareness of how to prevent injuries.
- Incorporate sport psychology techniques with a view to improving individual and collective performance.
- Practice a variety of volleyball skills to improve execution in practice and games.
- Demonstrate an understanding of the laws of the game, and develop individual and collective strategies to improve performance.
- Identify and apply techniques to manage the stress of competition and perform to their highest capability.
- Demonstrate an ability to evaluate their performance.

**Student Learning Outcomes:**
Critically evaluate performance and all aspects of the volleyball program with a view to improving themselves as individual players and improving the program as a whole.

Demonstrate a commitment to the local community through activities that provide a personal and team connection with local groups and in doing so, help raise the profile of the college.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
162.0

Volleyball Team- Women

KIN246:

3.0 Units

A high-level competitive program in Volleyball for female athletes with exceptional athletic talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to competing.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Demonstrate understanding of the need for proper physical fitness and an awareness of how to prevent injuries.

Incorporate sport psychology techniques with a view to improving individual and collective performance.

Practice a variety of volleyball skills to improve execution in practice and games.

Demonstrate an understanding of the laws of the game, and develop individual and collective strategies to improve performance.

Learn to manage the stress of competition and perform to their highest capability.

Demonstrate an ability to evaluate their performance.

Student Learning Outcomes:

Critically evaluate their own performance, and all aspects of the volleyball program with a view to improving themselves as individual players and improving the program as a whole.
Demonstrate a commitment to the local community through activities that provide a personal and team connection with local groups and in doing so, help raise the profile of the college.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
162.0

Volleyball Team Off-Season - Men
KIN247:

0.5 - 1.0 Units
A high-level, competitive practice and skills program in volleyball for male students with exceptional athletic talent.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Demonstrate knowledge of the rules, basic skills and safety concerns regarding Volleyball.

Practice and apply basic volleyball techniques in game situations.

Demonstrate knowledge of the different strategies and principles of play related to volleyball.

Apply individual techniques in games.

Analyze game situations.

Select appropriate skills and apply them in the game.

Utilize teamwork to gain success towards a common goal.

Student Learning Outcomes:
Demonstrate critical thinking by choosing appropriate skills and techniques in game-like situations.

Demonstrate understanding of the benefits of exercise for fitness and wellness and for life-long health.
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Volleyball Team Off-Season - Women
KIN248:

0.5 - 1.0 Units
A high-level, competitive practice and skills program in volleyball for female students with exceptional athletic talent.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
Local - Plan A
   Area F2: Physical Activity

CSU GE - Plan B
   Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Demonstrate knowledge of the rules, basic skills and safety concerns regarding Volleyball.
Practice and apply basic volleyball techniques in game situations.
Demonstrate knowledge of the different strategies and principles of play related to volleyball.
Apply individual techniques in games.
Analyze game situations.
Select appropriate skills and apply them in the game.
Utilize teamwork to gain success towards a common goal.

Student Learning Outcomes:
Demonstrate critical thinking by choosing appropriate skills and techniques in game-like situations.
Demonstrate understanding of the benefits of exercise for fitness and wellness and for life-long health.

Units & Hours
Minimum Units:
1.0
Maximum Units
1.0

Total Hours
54.0

Cross Country Team-Men
KIN255:

3.0 Units

A high-level, competitive program for male students with exceptional cross country talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to participation.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Promote physical adaptation of the cardiovascular, respiratory, and musculoskeletal systems to maximize competitive potential.
Discuss past performances in order to identify errors and areas of improvement.
Discuss visualization techniques and effective goal setting.
Discuss motivational techniques and positive self-talk.
Discuss ways to effectively channel pre-performance anxiety into positive racing outcomes.
Demonstrate mastery of efficient running biomechanics and breathing techniques.
Demonstrate understanding of training periodization and the specific training effects achieved by different modes of training.
Discuss effective use of athletic training techniques in the prevention and management of overuse injuries.
Discuss team running tactics and strategies for effectively overcoming the various obstacles and terrains encountered during competition.
Demonstrate understanding of the NCAA and CCCAA Rules of Competition for the sport of cross country.
Demonstrate understanding of pace and the anaerobic performance threshold.
Discuss mental techniques for overcoming the acute fatigue and pain of high intensity running.
Discuss proper sports nutrition and its influence on physical performance.

Student Learning Outcomes:
Demonstrate the ability to evaluate and effectively adjust racing strategies in response to the physical course conditions and unique human dynamic that develops during a long-distance running race. Learn the concept of training periodization and how to apply it to the achievement of a chronologically planned peak in physical performance. Learn how to recognize and modify running pace based on the distance and intensity goals established for a running session.

Units & Hours
Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 162.0

Cross Country Team-Women
KIN256:

3.0 Units
A high-level, competitive program for female students with exceptional cross country talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to participation.

Requisites
Requisites: None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours: 3.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Promote physical adaptation of the cardiovascular, respiratory, and musculoskeletal systems to maximize competitive potential.
Discuss past performances in order to identify errors and areas of improvement.
Discuss visualization techniques and effective goal setting.
Discuss motivational techniques and positive self-talk.
Discuss ways to effectively channel pre-performance anxiety into positive racing outcomes.
Demonstrate mastery of efficient running biomechanics and breathing techniques.
Demonstrate understanding of training periodization and the specific training effects achieved by different modes of training.
Discuss effective use of athletic training techniques in the prevention and management of overuse injuries.
Discuss team running tactics and strategies for effectively overcoming the various obstacles and terrains encountered during competition.

Demonstrate understanding of the NCAA and CCCAA Rules of Competition for the sport of cross country.

Demonstrate understanding of pace and the anaerobic performance threshold.

Discuss mental techniques for overcoming the acute fatigue and pain of high intensity running.

Discuss proper sports nutrition and its influence on physical performance.

Student Learning Outcomes:
- Demonstrate the ability to evaluate and effectively adjust racing strategies in response to the physical course conditions and unique human dynamic that develops during a long-distance running race.
- Learn the concept of training periodization and how to apply it to the achievement of a chronologically planned peak in physical performance.
- Learn how to recognize and modify running pace based on the distance and intensity goals established for a running session.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
162.0

Cross Country Team-Off Season

KIN257:

0.5 - 1.0 Units

This course teaches the fundamental principles and techniques of efficient, high intensity distance running. The course helps develop and improve physical fitness and performance in terms of both running endurance and running speed. Optional field trips may be offered.

Requisites

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
- Area F2: Physical Activity

CSU GE - Plan B
- Area E2: Physical Activity

UC Comparable Transfer Courses
- UC Comparable Transfer Courses

Learning Outcomes
**Course Objectives:**
Understand the rules, regulations, basic skills, and safety procedures for the course.
Identify individual goals and implement a strategy for success.
Discuss proper sports nutrition and its influence on physical performance.
Promote physical adaptation of the cardiovascular, respiratory, and musculoskeletal systems to maximize running efficiency and performance.
Demonstrate understanding of training periodization and the specific training effects achieved by different modes of training.
Employ proper running technique (arm movement, breathing, and stride cadence/length) to achieve optimal running performance.
Discuss National Collegiate Athletic Association and California Community College Athletic Association rules and regulations for the sport of cross country.
Discuss effective use of basic athletic training techniques in the prevention and management of overuse injuries.
Discuss team running tactics and strategies for effectively overcoming the various obstacles and terrains encountered within a race environment.
Identify mental techniques for overcoming the acute fatigue and pain of high intensity running.
Discuss visualization techniques, effective goal setting, and positive self-talk.
Demonstrate understanding of pace and the anaerobic performance threshold.

**Student Learning Outcomes:**
- Incorporate running and exercise into their daily lifestyle in order to promote lifelong health and fitness.
- Apply critical thinking skills to exercise theory in the areas of running biomechanics, training periodization, sports nutrition, and injury care and prevention.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours**
54.0

**Soccer Team- Men**

**KIN270:**

3.0 Units

A high-level, competitive program in soccer for male athletes with exceptional athletic talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to participation.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0
General Education Plan:
Local - Plan A
   Area F2: Physical Activity

CSU GE - Plan B
   Area E2: Physical Activity

Learning Outcomes
Course Objectives:
Exhibit an understanding of the need for proper fitness and how to prevent injuries.
Display an understanding of the mental attitude needed for competition.
Show the appropriate habits and understanding to build technical skills effectively.
Demonstrate an understanding of the rules and regulations of the game, as well as individual, small group and team tactics.
Demonstrate an understanding of how to integrate technique, tactics, physical fitness and mental conditioning into effective performance during competition.
Evaluate individual and team performance over the course of the season.

Student Learning Outcomes:
   Critically evaluate their own performance, and all aspects of the soccer program with a view to improving themselves as individual players and improving the soccer program as a whole.
   Demonstrate a commitment to the local community through activities that provide a personal and team connection with local groups, and in so doing, help raise the profile of the college.

Units & Hours
Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 162.0

Soccer Team- Women

KIN271:

3.0 Units

A high-level, competitive program in soccer for female athletes with exceptional athletic talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to participation.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Exhibit an understanding of the need for proper fitness and how to prevent injuries.
Display an understanding of the mental attitude needed for competition.
Show the appropriate habits and understanding to build technical skills effectively.
Demonstrate an understanding of the rules and regulations of the game as well as individual, small group and team tactics.
Demonstrate an understanding of how to integrate technique, tactics, physical fitness and mental conditioning in to effective performance during competition.
Evaluate individual and team performance over the course of the season.

Student Learning Outcomes:
- Critically evaluate their own performance, and all aspects of the soccer program with a view to improving themselves as individual players and improving the soccer program as a whole.
- Demonstrate a commitment to the local community through activities that provide a personal and team connection with local groups, and in so doing, help raise the profile of the college.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
162.0

Soccer Team Off Season-Men

KIN272:

0.5 - 1.0 Units

A high-level, competitive practice and skills program in soccer for male students with exceptional athletic talent.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity
CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the rules, basic skills and safety concerns for the course.

Apply basic soccer techniques in small-sided games.

Demonstrate knowledge of the different strategies and principles of play related to soccer.

Apply individual techniques in games.

Analyze game situations, choose appropriate skills and apply them in the game.

Utilize teamwork to gain success towards a common goal.

Student Learning Outcomes:

Demonstrate critical thinking by choosing appropriate skills and techniques in game-like situations.

Demonstrate knowledge of the benefits of exercise for fitness and wellness, and for lifelong health.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Soccer Team Off Season-Women
KIN273:

0.5 - 1.0 Units

A high-level, competitive practice and skills program in soccer for female students with exceptional athletic talent.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Local - Plan A
Area F2: Physical Activity

CSU GE - Plan B
Area E2: Physical Activity

Learning Outcomes

Course Objectives:
Demonstrate a basic understanding of the rules, basic skills and safety concerns for the course.

Apply basic soccer techniques in small-sided games.

Demonstrate knowledge of the different strategies and principles of play related to soccer.

Apply individual techniques in games.

Analyze game situations, choose appropriate skills and apply them in the game.

Utilize teamwork to gain success towards a common goal.

**Student Learning Outcomes:**
- Demonstrate critical thinking by choosing appropriate skills and techniques in game-like situations.
- Demonstrate knowledge of the benefits of exercise for fitness and wellness, and for lifelong health.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
54.0

**Theory of Soccer**
KIN274:

2.0 Units

A general overview of the history of the game, its rules, tactics, techniques, conditioning and overall preparation to understand, play and enjoy soccer.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**
2.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**
- Outline the history and evolution of soccer from its inception to the present day.
- Demonstrate understanding of the Fédération Internationale de Football Association (FIFA) Laws of the Game.
- Discuss the strengths and weaknesses of differing playing formations.
- Discuss general team tactics related to playing formations.
- Consideration of safety and injury prevention methods.
- Outline general individual and small group roles as they relate to the team.
- Target small group defending in relation to team tactics.
Target small group midfield play in relation to team tactics.

Target small group attacking play in relation to team tactics.

Demonstrate understanding of the importance of physical fitness.

**Student Learning Outcomes:**
- Critically evaluate teams and differing styles of play through discussions and video analysis to show an improved tactical understanding of the game.
- Show a greater appreciation for the game of soccer and the importance of being a role model to others through sport.

**Units & Hours**

**Minimum Units:**
2.0

**Maximum Units**
2.0

**Total Hours**
36.0

**Softball Team-Women**

**KIN281:**

3.0 Units

A high-level, competitive program in softball for female student athletes with exceptional athletic talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to participation.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area F2: Physical Activity

**CSU GE - Plan B**
- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
- Demonstrate proper mechanics and situational awareness
- Demonstrate a mental edge by always being prepared before competition
- Produce an improved level of fitness that will aid in a reduction of injuries
- Appraise mastery of game situations, team cooperation, and decision making
- Demonstrate performing at a high level while under stress
Critique performance from an objective standpoint

**Student Learning Outcomes:**
- Learn to think critically through evaluation of their individual performance, their performance as a team, and through analyzing competition from other teams with the ultimate goal of improving as a whole.
- Learn to communicate effectively with a diverse population in a clear, articulate manner in a cooperative team learning environment.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
162.0

**Softball Team Off Season-Women**

**KIN283:**

0.5 - 1.0 Units

Basic skills and fundamentals of catching, throwing, pitching, hitting and base running will be covered. Offensive and defensive techniques and strategies will be practiced.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Local - Plan A**
- Area F2: Physical Activity

**CSU GE - Plan B**
- Area E2: Physical Activity

**Learning Outcomes**

**Course Objectives:**
- Demonstrate knowledge of the rules, regulations and safety procedures of the course.
- Practice basic softball techniques (catching and throwing).
- Demonstrate knowledge of basic softball strategies.
- Analyze game situations and perform appropriate skills leading to successful game outcomes.
- Develop advanced softball skills.

**Student Learning Outcomes:**
- Demonstrate critical thinking by choosing necessary skills and techniques in both practice and game-like situations.
Learn the benefits of health and physical fitness that will help in their lifelong quest for wellness.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
54.0

Theory of Softball
KIN284:

2.0 Units

A general overview of rules, regulations, strategies, mental preparation, skill evaluation and the history of the sport of softball.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
2.0

General Education Plan:

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the rule and regulations of the game according to the National Collegiate Athletic Association Rule Book.

Demonstrate an understanding of how to apply different strategies of the game.

Demonstrate an understanding of where and how the game originated and evolved.

Demonstrate an understanding of the importance of team rules and promote team cohesiveness through application of good communication skills.

Demonstrate an understanding of mental preparation through visualization and self-talk.

Develop skills through application and practice.

Student Learning Outcomes:

Critically analyze game strategies through the use of compiling data on opposing teams using methods such as charting and video.

Act as a responsible member of the community through treating others with respect, dignity, honesty, and empathy.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0
Total Hours
36.0

Language and Rationality - E1. English Composition

Library & Information Studies*

Mission

The mission of the Santiago Canyon College Library is to make available a variety of information resources and services in support of the instructional and service goals of the College. The library strives to stimulate the use of library resources for intellectual and personal development of the students, faculty, the staff of SCC, and the community.

Department Chair
Seth Daugherty
(714) 628-5015

Course

Programs
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Intermediate Algebra
MATH080:

5.0 Units

A second course in algebra that includes systems of equations, inequalities, graphs and functions, radicals, quadratics, polynomials, rational expressions, exponential and logarithmic functions, conics, and problem solving. This course meets the prerequisites for Math 140.

Requisites

Requisites:
Prerequisite

Recommendation from qualifying profile from the Mathematics placement process

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency

Learning Outcomes

Course Objectives:

Solve equations involving rational, absolute value, quadratic, radical, and literal equations; variation, and applications
Evaluate functions using proper function notation
Determine the domain and range of a function
Determine whether a graph or equation is a function
Perform operations on functions
Solve systems of two and three linear equations in two and three variables, respectively, by substitution, elimination by addition, and graphing
Solve systems of non-linear equations
Solve systems of linear inequalities in two variables
Construct systems for application problems and solve using the appropriate methods.
Apply the laws of exponents
Apply arithmetic operations on polynomials
Divide polynomials by synthetic and long division
Factor polynomial expressions by greatest common factor (GCF) and grouping
Obtain the zeros of a polynomial
Solve quadratic equations by factoring, completing the square, and substitution
Evaluate quadratic and polynomial functions
Graph a quadratic function by its properties, and transformations
Solve quadratic equations with complex roots
Solve application problems involving quadratic equations and functions
Apply algebraic operations to simplify rational expressions
Solve rational equations
Construct rational equations for application problems and solve using the appropriate methods.
Determine the domain of a rational function
Graph a rational function
Manipulate and simplify expressions containing radicals and exponents
Apply arithmetic operations on radical expressions and expressions with rational exponents
Rationalize denominators by using the conjugate
Rewrite expressions with rational exponents in radical form and vice versa
Determine the domain of a radical function
Graph a radical function
Solve applications involving radical equations and functions
Compute and simplify composed functions
Find the inverse function of a given one-to-one function
Graph a one-to-one function and its inverse
Determine the domain and range of a function and its inverse
Simplify logarithmic and exponential expressions
Solve logarithmic and exponential equations including equations with the natural and common logarithm, base e, and change-of-base formula
Graph logarithmic and exponential functions
Solve application problems involving logarithmic and exponential equations and functions
Obtain the vertex and intercepts to graph a parabola
Apply the distance formula to find the distance between two points
Obtain the center and radius/radii to graph circles and ellipses
Obtain the center, intercepts and asymptotes to graph a hyperbola
Rewrite non-standard equations to the standard equations for a circle, parabola, ellipse and hyperbola

Student Learning Outcomes:
- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.
- Graph equations, functions, and conics by applying different graphing techniques and transformations.

Units & Hours
Minimum Units: 5.0
Maximum Units 5.0
Total Hours 90.0

Intermediate Algebra with Integrated Support
MATH085:
5.5 Units

A second course in algebra that includes systems of equations, inequalities, functions and graphs, radicals, quadratics, polynomials, rational expressions, exponential and logarithmic functions, and problem solving, together with an ongoing review of basic algebraic concepts. This course meets the prerequisites for Math 140 and 160.

Requisites
Requisites: None

Transferability & General Education Options
Transferable: Not transferable

Weekly Lecture Hours: 5.5

General Education Plan:
Local - Plan A
- Area E2: Communication/Analytical Thinking
- Area G1: Mathematics Proficiency

Learning Outcomes
Course Objectives:
- Solve linear, quadratic, rational, absolute value, radical, and linear equations, and applications of these equations.
- Evaluate functions using proper function notation.
Determine the domain and range of a function.

Determine whether the graph of a relation represents a function.

Perform algebraic operations on functions.

Solve systems of linear equations in two and three variables by using substitution, elimination, and graphing.

Solve systems of non-linear systems.

Solve systems of linear inequalities in two variables.

Model real-world applications with systems of linear equations

Apply the laws of exponents

Apply arithmetic operations on polynomials.

Divide polynomials by synthetic and long division.

Factor the greatest common factor (GCF) from a polynomial.

Factor polynomials by grouping.

Factor polynomials with difference of squares, sum and difference of cubes, perfect square patterns, and reverse distributive property.

Find the zeros of a polynomial.

Solve quadratic equations by factoring.

Solve quadratic equations by completing the square.

Solve quadratic equations by the quadratic formula.

Solve equations that are quadratic in form.

Graph quadratic functions using transformations.

Graph quadratic functions using properties.

Solve real-world applications modeled with quadratic equations or functions.

Apply algebraic operations to combine and simplify rational functions.

Solve rational equations.

Solve real-world applications modeled with rational equations.

Determine the domain of a rational function.

Sketch the graph of a rational function.

Manipulate and simplify expressions containing radicals and exponents.

Apply algebraic operations to combine and simplify radical expressions and expressions with rational exponents.

Rationalize denominators by using the conjugate.

Rewrite expressions with rational exponents in radical form and vice versa.

Determine the domain of a radical function.

Sketch the graph of a radical function.

Solve real-world applications using radical equations and functions.

Compute and simplify composed functions.

Find the inverse of a given one-to-one function.

Sketch the graph of a one-to-one function and its inverse.

Determine the domain and range of a function and its inverse.

Simplify logarithmic and exponential expressions.
Solve logarithmic and exponential equations.

Sketch the graph of logarithmic and exponential functions.

Solve real-world applications modeled with exponential and logarithmic equations or functions.

Apply the distance formula to find the distance between two points.

Find the center and radius and sketch the graph of a circle given its equation.

Identify the vertex, focus, and directrix of a parabola, and use them to sketch the graph.

**Student Learning Outcomes:**
- Identify different types of equations and solve by applying appropriate algebraic methods.
- Solve a variety of real-world applications using different types of functions and/or equations.
- Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

**Units & Hours**

**Minimum Units:**
5.5

**Maximum Units:**
5.5

**Total Hours**
126.0

**Intermediate Algebra for Statistics and Liberal Arts**

**MATH086:**

4.0 Units

An intermediate algebra course for students who are planning to take Statistics or Math for Liberal Arts Students. Topics include equations, inequalities, graphs and functions, radicals, quadratics, polynomials, rational expressions and equations, exponential and logarithmic functions, data analysis, and probability. Emphasis will be on modeling and solving applications. This course is designed as a refresher for students planning to take Math 105 or Math 219. Students planning to take Math 140, 170 or 171 should take Math 080.

**Requisites**

**Requisites:**

**Prerequisite**
Recommendation from the Mathematics placement process.

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
4.0

**General Education Plan:**

**Local - Plan A**

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency

**Learning Outcomes**

**Course Objectives:**

Determine the intercepts and slope of a line using its graph and equation
Manipulate and simplify expressions containing radicals and exponents
Apply the laws of exponents
Solve absolute value equations and inequalities
Calculate probabilities using counting and conditional probability methods
Graph linear functions
Factor polynomial expressions
Solve application problems involving rational equations and functions
Determine whether a linear regression model is appropriate for the given data
Determine the union and intersection of sets
Model sets with Venn diagrams
Apply algebraic operations to simplify rational expressions
Solve application problems involving zeros or min/max of quadratic functions
Solve systems of two linear equations in two variables
Present solutions to inequalities using interval notation
Perform operations on functions
Determine a linear regression model given a set of data
Determine the domain and range of a function
Construct linear equations and inequalities
Solve equations by factoring and the quadratic formula
Graph solutions to linear inequalities
Evaluate functions using proper function notation
Construct linear models to obtain solutions to applications
Use linear models to describe real-life situations
Solve logarithmic and exponential equations
Solve application problems involving logarithmic and exponential equations and functions
Solve applications involving radical equations and functions
Determine whether a graph or equation is a function
Identify elements of a given set
Calculate z-scores and find probabilities using the empirical rule
Organize and summarize data by representing it graphically and numerically
Simplify logarithmic and exponential expressions
Represent solutions in interval notation
Graph and interpret data from a given standard normal distribution
Solve application problems involving systems of equations
Solve rational equations
Solve linear equations and inequalities

**Student Learning Outcomes:**

Solve an application problem by constructing a mathematical model and interpret the results in context of the problem.
Solve various types of equations by applying the appropriate method.

Units & Hours
Minimum Units: 4.0
Maximum Units: 4.0
Total Hours: 72.0

Mathematics for Liberal Arts Students
MATH105:
4.0 Units

An overview of mathematics for the liberal arts student. Topics include problem solving, financial management, probability, statistics, and selected other topics such as set theory, geometry, logic, mathematical modeling, and the history of mathematics. Includes integrated review.

Requisites

Prerequisite: MATH080 - Intermediate Algebra

Outcomes
Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

OR

Prerequisite: MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Solve a variety of real-world applications using different types of functions and/or equations.

OR

Prerequisite: MATH086 - Intermediate Algebra for Statistics and Liberal Arts

Outcomes
Solve an application problem by constructing a mathematical model and interpret the results in context of the problem. Solve various types of equations by applying the appropriate method.

OR

Qualifying profile from the mathematics placement process.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**
4.0

**General Education Plan:**

**Local - Plan A**
- Area E2: Communication/Analytical Thinking
- Area G1: Mathematics Proficiency

**CSU GE - Plan B**
- Area B4: Mathematics/Quantitative Reasoning

**IGETC - Plan C**
- Area 2: Mathematical Concepts and Quantitative Reasoning

**Santa Ana College - Shared Course**
- Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**
- Apply inductive and deductive reasoning to critical-thinking problems
- Solve applications using inductive and deductive reasoning
- Calculate and interpret interest, installment payments, home mortgages, remaining loan balances, annuities, payout annuities
- Calculate probabilities using counting and conditional probability methods
- Calculate expected values
- Apply counting and conditional probability methods to solve applications
- Construct frequency distributions and graphs
- Calculate measures of central tendency and variation
- Define lines, angles, polygons, and other basic geometric shapes
- Apply perimeter, area, and volume formulas to calculate the perimeter, area, and volume of basic geometric shapes
- Rewrite units in the U.S. customary system and metric system
- Solve applications using using Venn diagrams, unions, and intersections of sets
- Calculate the cardinality from given sets
- Obtain the union, intersection, or complement of a set(s) by applying definitions and properties
- Construct truth tables for given statements
- Apply truth tables and statements to logical arguments
- Obtain truth values of statements
- Determine whether a conclusion is valid by applying Euler circles
- Determine the logical fallacy from a given statement
- Define early numeration systems and numeration systems in various bases
- Apply basic arithmetic operations for expressions in early numeration systems and various bases
- Rewrite numbers from base ten to other various bases and vice versa

**Student Learning Outcomes:**
- Recognize mathematical applications in everyday life and demonstrate appropriate, relevant problem-solving skills.
Locate and utilize mathematical resources and technology while demonstrating numerical reasoning and literacy.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
72.0

College Algebra
MATH140:

4.0 Units

Survey of advanced topics in algebra: equations, inequalities and functions involving polynomials, rationals, exponentials, and logarithms with applications and graphing; sequences and series.

Requisites
Requisites:

Prerequisite
MATH080 - Intermediate Algebra

Outcomes
Identify different types of equations and solve them by applying the appropriate algebraic methods.
Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support

Outcomes:
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite
Qualifying profile from the Mathematics placement process.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2: Mathematical Concepts and Quantitative Reasoning

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Use graphing technology to represent data
Graph histograms, pie charts and linear equations
Apply the definition of a function
Sketch graphs of linear, quadratic, higher-degree polynomial, rational, absolute and piece-wise functions
Sketch graphs inverse and composite functions
Solve linear and quadratic equations and inequalities
Write solutions of inequalities in interval notation
Solve applications with linear and quadratic equations/functions
Apply graphing technology to represent linear and quadratic functions
Graph polynomial functions using appropriate windows
Divide polynomials using synthetic division
Obtain the zeros of a polynomial
Determine the upper and lower bounds of the zeros of polynomials
Apply the Remainder Theorem
Graph exponential and logarithmic functions
Apply graphing technology to graph and evaluate exponential and logarithmic functions
Apply the properties of logarithms to solve exponential and logarithmic equations
Solve applications with exponential and logarithmic functions, logistic functions and logarithmic functions with natural and common logarithms
Solve linear and non-linear systems of equations
Solve applications with linear and non-linear systems of equations
Define a sequence and series
Find the formula of a sum
Express a finite sum using sigma notation
Define and apply arithmetic and geometric sequences and series
Solve applications with arithmetic and geometric sequences and series
Apply graphing technology to represent arithmetic and geometric sequences and series
Recall various content of the course
Student Learning Outcomes:
- Apply algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships.
- Formulate and analyze mathematical models for a variety of real-world phenomena and use mathematical and technological tools to determine the veracity of the model.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
72.0

Calculus for Biological, Management, and Social Sciences
MATH150:

5.0 Units

Single and multi-variable calculus including limits, derivatives, integrals, exponentials and logarithmic functions, and partial derivatives. Applications are drawn from Biology, Social Science, and Business.

Requisites

Requisites:
Prerequisite
MATH140 - College Algebra

OR

Prerequisite
qualifying profile from the Mathematics placement process

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
Local - Plan A

Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

IGETC - Plan C

Area 2A: Mathematical Concepts and Quantitative Reasoning

CSU GE - Plan B

Area B4: Mathematics/Quantitative Reasoning

Course Identifier (C-ID)
Mathematics
Learning Outcomes

Course Objectives:
- Solve linear, quadratic, polynomial, rational, radical, exponential, and logarithmic equations
- Graph linear, quadratic, polynomial, rational, radical, exponential, and logarithmic functions
- Develop functions from verbal descriptions, analytic formulas, and numerical data
- Apply functions to solve common problems from biology (e.g. population analysis), management (e.g. cost, revenue, profit, supply and demand), and social science (e.g. poverty studies, job satisfaction, learning and memory)
- Use appropriate technology (e.g. graphing calculator, web applications) to aid in problem solving
- Build exponential growth/decal functions from verbal descriptions, numerical data, and analytic information, including the differential equation \( \frac{\Delta y}{\Delta x} = k \).
- Apply exponential and logarithmic equations to phenomenon from science (e.g. bacterial growth, radioactive decay), economics (e.g. present and future value), and social sciences (e.g. population models including logistic models)
- Describe limits of various functions in an intuitive setting
- Compute limits of functions using appropriate limit properties
- Apply limits to real-world phenomenon (e.g. economics, average cost analysis)
- Describe continuity of a function in an intuitive setting
- Demonstrate continuity using limits in a calculus setting
- Interpret the derivative as a slope and as a rate of change
- Evaluate a limit to find the derivative
- Estimate the instantaneous rate of change from data
- Compute derivatives of polynomial, rational, exponential, and logarithmic functions using rules for the derivatives of constant, sum, difference, power, product, quotient, and composed functions (e.g. chain rule)
- Apply chain rule to compute derivatives of implicitly defined functions
- Demonstrate incrementals (\( \Delta y/\Delta x \)) and the relationship to slope of the tangent line
- Write the equation of the tangent line at a point to the graph of a function
- Interpret derivatives as rates of change of various real-world phenomenon
- Analyze the marginal revenue, cost, and profit from functions and data
- Find critical values of a function
- Determine maxima and minima using the first or second derivative test
- Solve optimization problems from economics, business, biology, and social sciences
- Sketch the graph of functions using horizontal and vertical asymptotes, intercepts, and first and second derivatives to determine intervals of increase and decrease, extrema, intervals of concavity, and points of inflection
- Analyze antiderivatives in graphical and numerical environments
- Compute basic antiderivatives and indefinite integrals using rules/properties of integration
- Evaluate basic definite integrals using the Fundamental Theorem of Calculus
- Evaluate definite integrals using substitution
- Evaluate definite integrals using technology (e.g. graphing calculator) and web-based applications (e.g. Wolfram|Alpha)
- Apply the Fundamental Theorem of Calculus to find the total change of a function and interpret the result in a variety of applied settings
Calculate area between the graphs of functions

Use integration to obtain the original function from the marginal function (revenue, cost, and profit)

Write definite integrals to find the consumer and producer surplus, and interpret the results

Apply the fundamental theorem of calculus for definite integrals to solve applied problems in economics (e.g. total income, present and future value from a continuous income stream), biology (e.g. birth rates, drug diffusion in the bloodstream), and social

Evaluate function of several variables

Determine the domain of a function of several variables

Compute, evaluate, and interpret partial derivatives

Solve optimization problems with functions of several variables and use the Second Partials Test to determine extrema.

Student Learning Outcomes:

- Apply appropriate problem-solving techniques, including critical thinking and analytical reasoning, to model real world problems in the fields of Business, Economics, Social Sciences and Biology.
- Formulate problems in numerical, graphical, verbal, and analytical settings and use differentiation and integration techniques of single- and multi-variable calculus to analyze those problems.
- Interpret and communicate mathematical results in a clear, accurate and professional manner.

Units & Hours

Minimum Units: 5.0

Maximum Units: 5.0

Total Hours: 90.0

Trigonometry

MATH160:

4.0 Units

Angles and their measurement, trigonometric functions and their applications, including vector problems. Use of trigonometric identities. Graphing the basic functions and variations, solving trigonometric equations. Graphing using polar coordinates, and use of complex numbers.

Requisites

Prerequisite

MATH080 - Intermediate Algebra

Outcomes

- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Graph equations, functions, and conics by applying different graphing techniques and transformations.

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

4.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

Learning Outcomes
Course Objectives:
Identify special triangles and their related angle and side measures
Set up and calculate proportions in similar triangles
Define an angle as a rotating ray and measure angles in standard position
Draw angles in standard position
Convert between radians and degrees
Calculate arc length and area of a sector
Calculate linear and angular velocities
Define the six trigonometric functions according to the right triangle, the rectangular coordinate system, and the unit circle
Evaluate exact values for basic angles and their related angles
Given the value of one trigonometric function, find the value of the others
Solve trigonometric equations, right triangles and their applications
Graph trigonometric functions and apply period, amplitude, phase shift and asymptotes
Use technology both as a discovery tool and as an enhancement to graphing techniques
Identify basic trigonometric identities
Manipulate and simplify trigonometric expressions
Verify and prove trigonometric identities both analytically and graphically
Solve equations by applying identities
Evaluate and graph inverse trigonometric functions with respect to restricted domain and range
Solve trigonometric equations, including those with multiple angles both analytically and graphically
Solve triangles with law of sines and cosines
Solve application problems involving height, distance and bearing
Calculate area using Heron’s formula
Find direction and magnitude of resultants and equilibrants
Perform vector operations and find dot products
Identify real and imaginary parts of complex numbers in standard form
Write complex numbers in trigonometric (polar) form
Calculate and simplify products and quotients of complex numbers
Calculate powers and roots of complex numbers using DeMoivre’s Theorem
Calculate polar coordinates
Convert between rectangular and polar coordinates and equations
Graph polar equations
Use technology both as a discovery tool and to enhance graphing techniques

**Student Learning Outcomes:**

Analyze, sketch and apply the six trigonometric functions and polar equations using such principles as asymptotic, periodic, and reciprocal behavior, as well as plotting points generated by a table or by using technology.


State, verify and apply trigonometric identities, including but not limited to reciprocal, co-functional and Pythagorean identities, sum and difference identities, double- and half-angle identities.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units**

4.0

**Total Hours**

72.0

**Pre-Calculus Mathematics**

**MATH170:**

4.0 Units

Advanced algebraic topics. Study of rational, trigonometric, exponential and logarithmic functions, polar coordinates, and analytic geometry. Preparation for the Calculus sequence.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0

**General Education Plan:**

**Local - Plan A**

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency

**CSU GE - Plan B**

Area B4: Mathematics/Quantitative Reasoning

**IGETC - Plan C**

Area 2A: Mathematical Concepts and Quantitative Reasoning

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Analyze and graph rational functions
Convert between exponential and logarithmic expressions
Apply transformations to the graphs of functions and relations
Solve rational equations and inequalities
Model situations using degree two polynomials
Graph linear and absolute value functions
Evaluate the trigonometric function of an angle given in degree and radian measure
Analyze and identify characteristics of a function given algebraically, graphically, or verbally
Recognize the relationship between functions and their inverses graphically and algebraically
Identify, graph, and find equations
Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs
Apply functions to model real-world applications
Find the real and complex zeros of a polynomial
Solve equations and inequalities
Evaluate limits by graphical and algebraic techniques
Perform operations on functions
Solve logarithmic and exponential equations and applications
Develop an understanding of asymptotes as an intuitive limit
Identify special triangles and their related angle and side measures
Manipulate and simplify a trigonometric expression
Appropriately use the notation of sequences and series
Model situations using rational functions
Solve linear and absolute value equations
Graph polar functions
Rewrite expressions using properties
Graph and analyze polynomials using zeros, multiplicity, and end behavior
Convert between polar and rectangular coordinates
Solve systems of equations and inequalities
Solve trigonometric equations, triangles, and applications
Model situations using linear and absolute value functions
Solve linear and absolute value inequalities
Graph using basic shapes and transformations
Prove trigonometric identities

**Student Learning Outcomes:**

- Use algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships.
- Formulate and analyze mathematical models for a variety of real-world phenomenon and use mathematical and technological tools to determine the veracity of the model.

**Units & Hours**

**Minimum Units:**

4.0
Maximum Units
4.0

Total Hours
72.0

Precalculus and Trigonometry
MATH171:

5.0 Units

Study of polynomial, rational, absolute value, exponential, logarithmic, and trigonometric functions, their graphs and applications. Use of trigonometric identities. An introduction to polar coordinates, sequences, series, and analytic geometry. Preparation for the Calculus sequence.

Requisites
Requisites:

Prerequisite
MATH080 - Intermediate Algebra

Outcomes
Identify different types of equations and solve them by applying the appropriate algebraic methods.
Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.
Graph equations, functions, and conics by applying different graphing techniques and transformations.

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite
Qualifying profile from the mathematics placement process.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning
IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)
Mathematics

Learning Outcomes
Course Objectives:
Analyze and identify characteristics of a function given algebraically, numerically, graphically, or verbally
Perform operations on functions
Apply transformations to the graphs of functions and relations
Recognize the relationship between functions and their inverses graphically and algebraically
Model real-world situations using absolute value, polynomial (specifically linear and quadratic), rational, logarithmic and exponential functions
Solve application problems modeled with a right triangle or a circle, and involving height, distance and bearing
Solve absolute value, polynomial, rational, logarithmic and exponential equations
Solve trigonometric equations, including those with multiple angles, analytically, graphically and by applying identities
Solve absolute value, polynomial and rational inequalities
Solve nonlinear systems of equations and inequalities
Graph absolute value, polynomial (specifically using zeros, multiplicity and end behavior), rational, logarithmic and exponential functions using basic shapes and transformations
Graph the basic trigonometric functions and apply changes in the amplitude, period, vertical shift, phase shift, and asymptotes to generate new graphs
Use technology both as a discovery tool and as an enhancement to graphing techniques
Find the real and complex zeros of a polynomial
Develop an understanding of asymptotes as an intuitive limit
Convert between exponential and logarithmic expressions
Rewrite logarithmic expressions using the properties of logarithms
Draw angles in standard position
Find positive and negative coterminal angles
Find reference angles and use them to find the values of trigonometric functions
Convert between radians and degrees
Define the six trigonometric functions according to the rectangular coordinate system, the right triangle, and the unit circle
Evaluate the trigonometric function of an angle given in degree and radian measure
Identify special triangles and their related angle and side measures
Evaluate exact values of trigonometric functions for basic angles and their related angles
Identify basic trigonometric identities, and use them to manipulate and simplify trigonometric expressions
Verify and prove trigonometric identities both analytically and graphically
Solve triangles with law of sines and cosines
Evaluate and graph inverse trigonometric functions with respect to restricted domain and range
Convert between rectangular and polar coordinates and equations
Graph Polar Equations
Identify, graph, and find equations of conic sections
Appropriately use the notation of sequences and series
Identify arithmetic and geometric sequences and series

Student Learning Outcomes:
Use algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships. Formulate and analyze mathematical models for a variety of real-world phenomenon and use mathematical and technological tools to determine the veracity of the model.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
90.0

Single Variable Calculus I
MATH180:

4.0 Units
Limits and continuity, derivatives and integrals of algebraic, trigonometric, and other transcendental functions. Applications including extrema tests, related rates and areas.

Requisites
Requisites:
Prerequisite
MATH170 - Pre-Calculus Mathematics

OR

Prerequisite
MATH171 - Precalculus and Trigonometry

OR

Prerequisite
Qualifying profile from the mathematics placement process

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
  Area E2: Communication/Analytical Thinking
  Area G1: Mathematics Proficiency

CSU GE - Plan B
  Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
  Area 2A: Mathematical Concepts and Quantitative Reasoning

CSU Comparable Courses

Course Identifier (C-ID)
  Mathematics

Santa Ana College - Shared Course
  Shared Course with SAC

Learning Outcomes

Course Objectives:
Compute limits at a real number
Evaluate limits using numerical, graphical and algebraic approaches
Evaluate limits at infinity and infinite limits
Identify horizontal and vertical asymptotes from evaluating limits
Apply the precise definition of a limit to prove limits
Define continuity
Apply the definition of continuity to determine if a function is continuous at a real number
Construct a continuous function or continuous piecewise function from its graph
Graph functions and piecewise functions
Define the derivative as a limit
Apply the definition of the derivative as a limit to obtain the derivative of a function
Identify where a function is differentiable
Compute the derivatives of transcendental functions including trigonometric, exponential or logarithmic functions and inverse functions
Apply implicit and logarithmic differentiation to obtain the derivative
Apply differentiation formulas including constants, power rule, product rule, quotient rule and chain rule to compute derivatives
Interpret the derivative as slope of a tangent line and as a rate of change
Compute the tangent line
Apply the derivative to application problems for rates of change and related rates
Use technology to compare the numerical and graphical values of the derivative
Compute higher-order derivatives
Derive the differential and linear approximation formulas
Use the linear approximation and differential formula to estimate errors
Use differentiation to solve optimization problems
Apply differentiation to compute absolute and relative extrema, intervals of increasing and decreasing, point(s) of inflections and intervals of concavity
Apply Rolle's Theorem and the Mean Value Theorem

Apply L'Hospital's rule to evaluate limits

Graph functions using the methods of calculus

Use technology for geometric interpretations of relative extrema, increasing and decreasing intervals, point(s) of inflection and intervals of concavity

Compute antiderivatives

Calculate net area under a curve

Apply the limit of a Reimann sum to obtain area under a curve

Evaluate a definite integral as a limit

Apply the Fundamental Theorem of Calculus Part I to obtain the derivative

Apply the Fundamental Theorem of Calculus Part II to evaluate definite integrals

Apply integration to obtain net change or the area

Apply the integral properties to evaluate definite and indefinite integrals

Evaluate integrals using the method of substitution

Student Learning Outcomes:
  - Analyze functions and their graphs using limits, derivatives, definite and indefinite integrals.
  - Apply basic definitions, properties and theorems of first semester Calculus to formulate elementary proofs and model and solve problems.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
72.0

Honors Single Variable Calculus I
MATH180H :

4.0 Units

An in-depth honors level study of limits and continuity, derivatives and integrals of algebraic, trigonometric, and transcendental functions with the emphasis on theory and challenging problems. Applications include extrema tests, related rates and areas.

Requisites

Requisites:

Prerequisite

MATH170 - Pre-Calculus Mathematics

OR

Prerequisite

MATH171 - Precalculus and Trigonometry
Prerequisite

Equivalent course from the mathematics placement process.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

4.0

General Education Plan:

Local - Plan A

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency

CSU GE - Plan B

Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C

Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)

Mathematics

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Compute limits at a real number

Evaluate limits using numerical, graphical and algebraic approaches

Evaluate limits at infinity and infinite limits

Identify horizontal and vertical asymptotes from evaluating limits

Apply the precise definition of a limit to prove limits

Define continuity

Apply the definition of continuity to determine if a function is continuous at a real number

Construct a continuous function or continuous piecewise function from its graph

Graph functions and piecewise functions

Define the derivative as a limit

Apply the definition of the derivative as a limit to obtain the derivative of a function

Identify where a function is differentiable

Compute the derivatives of transcendental functions including trigonometric, exponential or logarithmic functions and inverse functions

Apply implicit and logarithmic differentiation to obtain the derivative

Apply differentiation formulas including constants, power rule, product rule, quotient rule and chain rule to compute derivatives

Interpret the derivative as slope of a tangent line and as a rate of change

Compute the tangent line
Apply the derivative to application problems for rates of change and related rates

Use technology to compare the numerical and graphical values of the derivative

Compute higher-order derivatives

Derive the differential and linear approximation formulas

Use the linear approximation and differential formula to estimate errors

Use differentiation to solve optimization problems

Apply differentiation to compute absolute and relative extrema, intervals of increasing and decreasing, point(s) of inflections and intervals of concavity

Apply Rolle’s Theorem and the Mean Value Theorem

Apply L’Hospital’s rule to evaluate limits

Graph functions using the methods of calculus

Use technology for geometric interpretations of relative extrema, increasing and decreasing intervals, point(s) of inflection and intervals of concavity

Compute antiderivatives

Calculate net area under a curve

Apply the limit of a Reimann sum to obtain area under a curve

Evaluate a definite integral as a limit

Apply the Fundamental Theorem of Calculus Part I to obtain the derivative

Apply the Fundamental Theorem of Calculus Part II to evaluate definite integrals

Apply integration to obtain net change or the area

Apply the integral properties to evaluate definite and indefinite integrals

Evaluate integrals using the method of substitution

Student Learning Outcomes:
  - Analyze functions and their graphs using limits, derivatives, definite and indefinite integrals.
  - Apply basic definitions, properties and theorems of first semester Calculus to formulate elementary proofs and model and solve problems.

Units & Hours

Minimum Units: 4.0

Maximum Units: 4.0

Total Hours: 72.0

Single Variable Calculus II

MATH185:

4.0 Units

Applications of integrals, including volumes, work, arc length, and surface area. Integration techniques, differential equations, conics, parametric equations, polar coordinates, improper integrals, sequences and infinite series.

Requisites
Requisites:
Prerequisite
MATH180 - Single Variable Calculus I

OR

Prerequisite
MATH180H - Honors Single Variable Calculus I

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)
Mathematics

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Compute area between curves, general volumes, and volumes of revolution
Apply integration to application problems for work
Compute the average value of a function
Apply integration techniques to compute arc length and surface area of revolution
Apply integration by parts, u-substitution, trigonometric substitution, and partial fraction expansion to evaluate integrals
Apply numerical methods including Simpson's Rule and Trapezoidal Rule to approximate integrals
Apply techniques of integration to determine the convergence of integrals on infinite intervals or for which the integrand becomes infinite
Use differential equations in mathematical models
Solve separable first-order differential equations
Identify parametric curves by eliminating the parameter in parametric equations
Graph, differentiate, and integrate functions in parametric form
Compute the slope of a tangent line
Compute arc length and area bounded by parametric curves
Apply definitions to convert between Cartesian coordinates and polar coordinates
Identify and graph common polar curves
Differentiate and integrate functions in polar form
Compute the slope of a tangent line, arc length, and area bounded by polar curves
Identify and sketch the graphs of the conic sections
Describe conic properties
Apply the standard tests for convergence of infinite sequences and series to determine the convergence or divergence
Compute the interval and radius of convergence of a power series
Generate the Taylor Series for appropriate functions
Analyze the error inherent in approximating an infinite series

Student Learning Outcomes:
- Evaluate and approximate integrals using a variety of techniques and apply integration to solve problems involving area, volume, work, and differential equations.
- Represent functions using parametric equations, polar equations, and Taylor series and apply calculus techniques to these representations.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
72.0

Mathematics Independent Study
MATH199:
1.0 Units

Students can increase their knowledge in particular areas of mathematics through individual study and/or in small groups under the direction of a mathematics professor. Science, Technology, Engineering and Mathematics (STEM) majors and future teachers are encouraged to enroll in independent study for mathematics. Divisional approval required.

Requisites
Requisites:
Prerequisite
MATH080 - Intermediate Algebra

Outcomes
- Identify different types of equations and solve them by applying the appropriate algebraic methods.
- Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support
Outcomes

- Identify different types of equations and solve by applying appropriate algebraic methods.
- Solve a variety of real-world applications using different types of functions and/or equations.
- Graph equations, functions, and conics using a variety of graphing techniques, including transformations.

OR

Prerequisite

Qualifying profile from the Mathematics placement process.

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:
1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

- Identify contemporary mathematical theories and techniques.
- Demonstrate an understanding of contemporary mathematical theories and techniques.
- Review main mathematical journals.
- Present results of research to supervising faculty.
- Integrate technology (Wolfram|Alpha, statistical software, Excel, Mathematica, Maple, etc.) with solving problems in mathematics.
- Solve problems involving mathematical concepts that are not presented in the regular curriculum at Santiago Canyon College.
- Explain the processes of solutions to problems in mathematics to the supervising faculty.

Student Learning Outcomes:

- Demonstrate increased knowledge and understanding in diverse areas of mathematics and/or applications in mathematics.
- Identify progress made towards understanding and mastering diverse topics in mathematics not presented in the regular curriculum at Santiago Canyon College.

Units & Hours

Minimum Units:
1.0

Maximum Units:
1.0

Total Hours:
18.0

Fundamental Concepts of Elementary Mathematics

MATH203:
4.0 Units
This course emphasizes problem solving techniques and mathematical structure associated with numeration, set theory, elementary number theory, the real number system, ratio, proportion and patterns. Designed for prospective elementary teachers, this course includes activity-based explorations implementing the common core state curriculum standards.

**Requisites**

**Requisites:**

**Prerequisite**

MATH080 - Intermediate Algebra

**Outcomes**

Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

OR

**Prerequisite**

MATH085 - Intermediate Algebra with Integrated Support

**Outcomes**

Solve a variety of real-world applications using different types of functions and/or equations.

OR

**Prerequisite**

MATH086 - Intermediate Algebra for Statistics and Liberal Arts

**Outcomes**

Solve an application problem by constructing a mathematical model and interpret the results in context of the problem.

Solve various types of equations by applying the appropriate method.

OR

**Prerequisite**

Qualifying profile from the Mathematics placement process

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0

**General Education Plan:**

**Local - Plan A**

Area G1: Mathematics Proficiency

**CSU GE - Plan B**

Area B4: Mathematics/Quantitative Reasoning

**Learning Outcomes**

**Course Objectives:**

Develop and reinforce conceptual understanding of mathematical topics through the use of patterns, problem solving, communication, connections, modeling, reasoning, and representation.
Use sets, logic, functions and Venn diagrams to solve problems.
Apply deductive reasoning and contradictions.
Compare numeration systems such as Hindu–Arabic, Roman, Egyptian and other systems including their historical development.
Analyze base-numeration systems using exponents, scientific notation and place values.
Simplify expressions.
Solve problems using basic properties of integers and operations.
Compare and contrast various computational algorithms.
Determine prime and composite numbers.
Apply number theory topics such as fundamental theorem of arithmetic and divisibility.
Use prime factorization to obtain greatest common factor (GCF) and lowest common multiple (LCM).
Perform binary operations on rational numbers.
Apply properties of fraction arithmetic.
Explain the concept of rational numbers, using both ratio and decimal representations, and analyze the arithmetic algorithms for these two representations, and justify their equivalence.
Use ratios, rates, proportions, and percents to solve applications.
Analyze arithmetic algorithms on rational and irrational numbers.
Use basic properties of real numbers.
Perform operations on decimals and apply to real-world problems.
Explain the concept of real numbers using decimal representation.
Use number lines to represent the real-number system.
Use patterns including arithmetic and geometric sequences to solve application problems.
Develop activities implementing common core state curriculum standards.
Write sets using brackets
Construct basic Venn diagrams to represent unions, intersections, and complements of sets
Write base-10 numbers in expanded form
Apply arithmetic operations to simplify expressions
Apply the order of operations to simplify expressions
Assign variables to unknowns
Construct a linear model to represent a real-world application
Solve linear equations
Organize and manage time appropriately
Prepare for exams and apply test-taking skills
Identify, evaluate, and utilize effective resources to improve one's own learning through peer study groups, computer resources, and tutoring resources
Analyze problems and select an appropriate problem-solving method
Communicate effectively through verbal and written communication
Reinforce writing, reading, and speaking skills
Express ideas and criticism in a professional written and verbal manner
Analyze problems and select an appropriate problem-solving method
Research via the internet
Use typesetting, presentation, and spreadsheet software
Apply professional written expression in email
Familiarize with various learning management systems
Apply appropriate rounding techniques to solve application problems
Estimate accordingly to solve problems
Apply arithmetic techniques to quickly solve problems

**Student Learning Outcomes:**
- Analyze the structure and properties of rational and real number systems including their decimal representation and illustrate the use of a representation of these numbers including the number line model.
- Evaluate the equivalence of numeric algorithms and explain the advantages and disadvantages of equivalent algorithms.
- Analyze multiple approaches to solving problems from elementary to advanced levels of mathematics, using concepts and tools from sets, logic, functions, number theory and patterns.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
90.0

**Statistics and Probability**

**MATH219:**

4.0 Units

Introduction course in statistical reasoning. Includes descriptive statistics, graphical displays of data, probability and sampling distributions, confidence intervals, hypothesis testing, regression, contingency tables, ANOVA, and non-parametric statistics. Includes the use of technology.

**Requisites**

**Requisites:**

**Prerequisite**

MATH080 - Intermediate Algebra

**Outcomes**

Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

**OR**

**Prerequisite**

MATH085 - Intermediate Algebra with Integrated Support

**Outcomes**

Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations.
OR

**Prerequisite**

**MATH086 - Intermediate Algebra for Statistics and Liberal Arts**

**Outcomes**

Solve an application problem by constructing a mathematical model and interpret the results in context of the problem.

Solve various types of equations by applying the appropriate method.

OR

**Prerequisite**

Qualifying profile from the Mathematics placement process.

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0

**General Education Plan:**

**Local - Plan A**

- Area E2: Communication/Analytical Thinking
- Area G1: Mathematics Proficiency

**CSU GE - Plan B**

- Area B4: Mathematics/Quantitative Reasoning

**IGETC - Plan C**

- Area 2A: Mathematical Concepts and Quantitative Reasoning

**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**

Mathematics

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Define types of data

Understand experimental design, data collection

Distinguish random sampling techniques, the difference between populations and samples

Critique the use and misuse of statistics for real-world applications including applications in the fields of business, social sciences, psychology, life science, health science, and education

Interpret data displayed in tables

Organize and summarize data by representing it graphically and numerically

Compute and interpret measures of central tendency, dispersion, and relative position
Distinguish among different scales of measurement and their implications

Apply the definition of probability to compute probabilities of simple and compound events

Apply the principles of addition, multiplication, independence, complements, and conditional probability to compute probabilities

Apply the multiplication principle for counting events

Calculate probabilities for permutations and combination problems

Identify a probability distribution

Compute binomial probabilities using the formula, a table, and technology

Calculate the mean and standard deviation of a discrete random variable

Interpret the mean of a discrete random variable as an expected value

Calculate the mean and standard deviation of a binomial random variable

Use a standard normal table, and technology to compute area of standard normal random variables

Interpret area under the normal curve as probability

Find the value of a random variable when given the probability or area

Analyze the Central Limit Theorem as it applies to distributions

Approximate binomial probabilities using the normal distribution

Compute probabilities of a sample proportion and mean

Calculate probabilities using the standard normal distribution and t-distribution

Distinguish the difference between sample and population distributions

Construct and interpret confidence intervals

Calculate a sample size necessary for estimating a population proportion, mean, variance and standard deviation

Use technology and distribution tables to calculate confidence intervals

Demonstrate an understanding of the vocabulary and theory behind the use of hypothesis testing

Explain Type I and Type II errors

Compute the probability of a Type II error

Compute the power of the test

Apply the appropriate method for testing a hypothesis and interpret the results from applications based on data from disciplines including business, social sciences, psychology, life science, health science and education

Verify any necessary conditions are satisfied

Calculate and interpret p-values and levels of significance

Conduct hypothesis tests for sample means, proportions, and standard deviations from one and two samples

Test for goodness-of-fit, independence of two variables, correlation and regression

Apply linear regression for testing categorical data

Apply ANOVA to compare three or more means

Interpret results and make conclusions based upon the results of these tests

Use technology to calculate parameters of hypothesis testing

Distinguish various non-parametric tests of hypotheses

Consider the benefits and drawbacks

Create and analyze graphical displays and descriptive statistics of data sets
Perform probability simulations
Calculate probabilities for various probability distributions (especially the binomial)
Create and interpret confidence intervals
Perform and interpret hypothesis tests
Apply and interpret concepts learned in the course

Student Learning Outcomes:
Analyze the validity of statistical statements by evaluating the statistical methods applied on collected data.
Represent data from a sample or population in an organized and visual manner.
Interpret data represented in a chart or graph in context of the scenario.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
72.0

Honors Statistics and Probability
MATH219H:
4.0 Units

This honors course is an enhanced format for an introduction course in statistics and probability by using a seminar approach, applying statistical software and presenting individual research. This course includes descriptive statistics, graphical displays of data, probability and sampling distributions, confidence intervals, hypothesis testing, regression, contingency tables, ANOVA and non-parametric statistics, with applications designed around the individual interests of students. Includes the use of technology.

Requisites

Requisites:
Prerequisite

MATH080 - Intermediate Algebra

Outcomes
Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

OR

Prerequisite

MATH085 - Intermediate Algebra with Integrated Support

Outcomes
Identify different types of equations and solve by applying appropriate algebraic methods.
Solve a variety of real-world applications using different types of functions and/or equations.
Graph equations, functions, and conics using a variety of graphing techniques, including transformations

OR

Prerequisite
MATH086 - Intermediate Algebra for Statistics and Liberal Arts

Outcomes
Solve an application problem by constructing a mathematical model and interpret the results in context of the problem.
Solve various types of equations by applying the appropriate method.

OR

Prerequisite
Qualifying profile from the Mathematics placement process.

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)
Mathematics

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Define types of data
Understand experimental design, data collection
Distinguish random sampling techniques, the difference between populations and samples
Critique the use and misuse of statistics for real-world applications including applications in the fields of business, social sciences, psychology, life science, health science, and education
Interpret data displayed in tables
Organize and summarize data by representing it graphically and numerically
Compute and interpret measures of central tendency, dispersion, and relative position
Distinguish among different scales of measurement and their implications
Apply the definition of probability to compute probabilities of simple and compound events
Apply the principles of addition, multiplication, independence, complements, and conditional probability to compute probabilities
Apply the multiplication principle for counting events
Calculate probabilities for permutations and combination problems
Identify a probability distribution
Compute binomial probabilities using the formula, a table, and technology
Calculate the mean and standard deviation of a discrete random variable
Interpret the mean of a discrete random variable as an expected value
Calculate the mean and standard deviation of a binomial random variable
Use a standard normal table, and technology to compute area of standard normal random variables
Interpret area under the normal curve as probability
Find the value of a random variable when given the probability or area
Analyze the Central Limit Theorem as it applies to distributions
Approximate binomial probabilities using the normal distribution
Compute probabilities of a sample proportion and mean
Calculate probabilities using the standard normal distribution and t-distribution
Distinguish the difference between sample and population distributions
Construct and interpret confidence intervals
Calculate a sample size necessary for estimating a population proportion, mean, variance and standard deviation
Use technology and distribution tables to calculate confidence intervals
Demonstrate an understanding of the vocabulary and theory behind the use of hypothesis testing
Explain Type I and Type II errors
Compute the probability of a Type II error
Compute the power of the test
Apply the appropriate method for testing a hypothesis and interpret the results from applications based on data from disciplines including business, social sciences, psychology, life science, health science and education
Verify any necessary conditions are satisfied
Calculate and interpret p-values and levels of significance
Conduct hypothesis tests for sample means, proportions, and standard deviations from one and two samples
Test for goodness-of-fit, independence of two variables, correlation and regression
Apply linear regression for testing categorical data
Apply ANOVA to compare three or more means
Interpret results and make conclusions based upon the results of these tests
Use technology to calculate parameters of hypothesis testing
Distinguish various non-parametric tests of hypotheses
Consider the benefits and drawbacks
Create and analyze graphical displays and descriptive statistics of data sets
Perform probability simulations
Calculate probabilities for various probability distributions (especially the binomial)
Create and interpret confidence intervals
Perform and interpret hypothesis tests
Student Learning Outcomes:

- Apply and interpret concepts learned in the course
- Analyze the validity of statistical statements by evaluating the statistical methods applied on collected data.
- Represent data from a sample or population in an organized and visual manner.
- Interpret data represented in a chart or graph in context of the scenario.

Units & Hours

Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
72.0

Statistics and Probability with Integrated Review
MATH220:

4.5 Units

First course in statistical reasoning. Includes descriptive statistics, graphical displays of data, probability and sampling distributions, confidence intervals, hypothesis testing, regression, contingency tables, ANOVA, and non-parametric statistics, and the use of technology. Includes integrated review of core mathematical skills needed to be successful in statistics and probability. Intended for students that prefer to supplement learning with prerequisite skills for statistics and probability.

Requisites

**Prerequisite**
MATH080 - Intermediate Algebra

**Outcomes**

Solve applications involving different types of functions and/or equations by applying the appropriate solving techniques.

OR

**Prerequisite**
MATH085 - Intermediate Algebra with Integrated Support

**Outcomes**

Solve a variety of real-world applications using different types of functions and/or equations.

OR

**Prerequisite**
MATH086 - Intermediate Algebra for Statistics and Liberal Arts

**Outcomes**

Solve an application problem by constructing a mathematical model and interpret the results in context of the problem. Solve various types of equations by applying the appropriate method.

OR
Prerequisite
Qualifying profile from the Mathematics placement process.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.5

General Education Plan:

Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)
Mathematics

Learning Outcomes

Course Objectives:
Interpret area under the normal curve as probability
Use a standard normal table, and technology to compute area of standard normal random variables
Verify all necessary conditions are satisfied for hypothesis tests
Organize categorical and quantitative data into their according graphical displays as part of integrated review
Find the value of a random variable when given the probability or area
Calculate the mean and standard deviation of a binomial random variable
Distinguish between the random sampling techniques, and the difference between populations and samples
Analyze the Central Limit Theorem as it applies to distributions
Distinguish among different scales of measurement and their implications
Apply the principles of addition, multiplication, independence, complements, and conditional probability to compute probabilities
Identify a probability distribution
Apply linear regression to data and analyze the correlations between bivariate data
Evaluate expressions, functions at a value, functions with exponents, mathematical models from data
Analyze scatter plots and identify patterns
Demonstrate an understanding of experimental design, data collection
Compute binomial probabilities using the formula, a table, and technology
Express inequalities in interval notation
Identify, evaluate, and utilize effective resources to improve one's own learning through peer study groups, computer resources, and tutoring resources
Apply the definition of probability to compute probabilities of simple and compound events
Define and interpret types of data, included data displayed in tables
Calculate probabilities for permutations and combination problems

Apply affective domain strategies

Compute and interpret measures of central tendency, dispersion, and relative position

Calculate a sample size necessary for estimating a population proportion, mean, variance and standard deviation

Create and analyze graphical displays and descriptive statistics of data sets

Compute the probability of a Type II error, and power of the test

Construct and interpret confidence intervals

Identify the intersection, union, complements of sets

Organize and manage time appropriately

Identify fractions and percentages that describe a part of a whole and the way one quantity impacts another

Apply the appropriate method for testing a hypothesis and interpret the results from applications based on data from disciplines including business, social sciences, psychology, life science, health science and education

Distinguish various nonparametric tests of hypotheses and consider the benefits and drawbacks

Explain Type I and Type II errors

Make meaningful conclusions in context of the scenario from the hypothesis tests’ results

Approximate binomial probabilities using the normal distribution

Calculate and interpret p-values and levels of significance

Perform order of operations, conversions from scientific notation to expanded form

Solve linear equations, inequalities, literal equations for a specified variable

Distinguish the difference between sample and population distributions

Calculate mean, standard deviation, variance, median, quartiles, percentiles as part of integrated review

Compare fractions, decimals, and percentages

Interpret the slope (constant rate of change) and y-intercept of a linear function in context of a scenario and as a mathematical linear model

Critique the use and misuse of statistics for real-world applications including applications in the fields of business, social sciences, psychology, life science, health science, and education

Demonstrate an understanding of the vocabulary and theory behind the use of hypothesis testing, and Type I and II errors

Interpret the mean of a discrete random variable as an expected value

Calculate the mean and standard deviation of a discrete random variable

Graph lines and ordered pairs on the Cartesian coordinate system, numbers on a number line

Conduct hypothesis tests regarding one and two sample means, proportions, and standard deviations; goodness-of-fit, independence between two variables, regression and correlation, samples with more than two means (ANOVA)

Organize and summarize data by representing it graphically and numerically

Apply the multiplication principle for counting events

Compute probabilities of a sample proportion and mean

Calculate probabilities using the standard normal distribution and t-distribution

Round to a specified decimal place

Student Learning Outcomes:

Analyze the validity of statistical statements by evaluating the statistical methods applied on collected data.

Represent data from a sample or population in an organized and visual manner.
Interpret data represented in a chart or graph in context of the scenario.

Units & Hours
Minimum Units:
4.5

Maximum Units
4.5

Total Hours
108.0

Intermediate Calculus
MATH280:

4.0 Units

Vectors and three-dimensional space, functions of several variables, partial derivatives and multiple integrals. Vector calculus, Green's Theorem, Stoke's Theorem, and the Divergence Theorem.

Requisites

Requisites:

Prerequisite
MATH185 - Single Variable Calculus II

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:

Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Mathematics

Learning Outcomes

Course Objectives:
Perform vector operations in two and three dimensions including sum, difference, dot product, cross product, magnitude, and triple product

Determine equations of lines and planes in rectangular, parametric, and vector form
Compute vector projections in two and three dimensions

Apply vector projections to problems from physics or engineering

Analyze relationships between lines and planes in three dimensions, including computation of the distance from a point to a plane and between two planes

Identify and sketch curves and surfaces

Differentiate and integrate vector-valued functions

Evaluate curvature and arc length of a space curve

Determine the tangent, normal, and binormal vectors of a space curve

Find velocity and acceleration

Analyze the relationship between acceleration vector and its tangential and normal components

Solve problems related to motion of a projectile

Determine the limit of a function of several variables at a point

Determine the continuity of a function of several variables at a point and over the domain of the function

Describe mathematically the level curves or level surfaces of a function of two or three variables, respectively

Determine differentiability of a function of several variables

Evaluate partial derivatives and higher-order partial derivatives

Compute the directional derivative and gradient

Find critical points and test for local extrema or saddle points

Solve constrained optimization problems using the method of Lagrange multipliers

Evaluate double (two-dimensional) integrals in various coordinate systems including rectangular and polar.

Evaluate triple (three-dimensional) integrals in various coordinate systems including rectangular, cylindrical, and spherical.

Compute area, volume, surface area, center of mass, and moments of inertia using multiple integrals over two- and three-dimensional domains

Use the change-of-variables theorem for multiple integrals to evaluate a double or triple integral

Sketch a vector field

Compute the curl and divergence of a vector field

Determine if a vector field is conservative and if so, find the potential function

Compute line integrals on parametrically defined curves in two- and three-dimensional space

Use Green’s theorem to determine a line integral around an appropriate domain

Compute surface integrals of real-valued integrands over functions and parametrically defined surfaces

Compute surface integrals in vector fields

Apply surface integrals to flow (flux) applications

Use Stokes’ theorem and the divergence (Gauss’) theorem to determine surface integrals in vector fields

**Student Learning Outcomes:**

State and apply basic definitions, properties and theorems of multivariable Calculus

Apply vector operations in two and three dimensions and use vector methods to analyze plane and space curves, and curvilinear motion.

Apply standard techniques of multivariable differentiation and integration to solve application problems

**Units & Hours**

**Minimum Units:**
Maximum Units
4.0

Total Hours
72.0

Introduction to Linear Algebra and Differential Equations
MATH287:

5.0 Units


Requisites

Requisites:

Prerequisite

MATH280 - Intermediate Calculus

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

5.0

General Education Plan:

Local - Plan A

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency

CSU GE - Plan B

Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C

Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)

Mathematics

Learning Outcomes

Course Objectives:

Create and analyze mathematical models using ordinary differential equations

Verify solutions of differential equations

Identify the type of a given differential equation and select and apply the appropriate analytical technique for finding the solution of first-order and selected higher-order ordinary differential equations

Apply the existence and uniqueness theorems for ordinary differential equations

Solve nonhomogeneous equations

Find solutions of systems of linear equations using various methods appropriate to lower division linear algebra

Solve systems of linear equations in matrix form and characterize the nature of the solution space
Formulate basic operations of matrix algebra including invertibility and the transpose

Identify identities and inverses and the relationship between coefficient matrix invertibility and solutions to a system of linear equations and inverse matrices

Perform the operations of vector algebra in \( \mathbb{R}^n \).

Calculate and categorize matrix-generated spaces including row space, column space, and null space

Determine linear independence and basis and dimension for real vector spaces and subspaces.

Solve problems in linear algebra using bases and orthonormal bases

Find the dimension of spaces such as those associated with matrices.

Prove basic results in linear algebra using appropriate proof-writing techniques including linear independence of vectors, properties of subspaces, linearity, injectivity, and surjectivity of functions

Find eigenvalues and eigenvectors and use them in applications

Prove basic results in linear algebra using appropriate proof-writing techniques including properties of eigenvalues, eigenvectors, and eigenspaces.

Find the dimension of spaces such as those associated with linear transformations.

Solve higher-order linear differential equations

Distinguish between solution techniques for homogeneous and nonhomogeneous linear differential equations

Apply solution techniques for higher-order differential equations to mathematical models for circuits and mechanical systems

Distinguish appropriate methods of solving differential equations including variation of parameters, Laplace transforms, and series solutions

Solve linear systems of ordinary differential equations

Determine the Laplace transform and inverse Laplace transform of functions

Find power series solutions to ordinary differential equations including solutions about ordinary points for ordinary differential equations

**Student Learning Outcomes:**

- Use matrices to solve systems of linear equations, analyze linear transformations and vector spaces, and solve systems of differential equations.
- Correctly choose and apply techniques to solve various types of differential equations.
- Model and solve applications involving differential equations and linear algebra.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

90.0

**Linear Algebra**

**MATH290:**

3.0 Units


**Requisites**
Requisites:
Prerequisite
MATH185 - Single Variable Calculus II
AND
Advisory
MATH280 - Intermediate Calculus
or concurrent enrollment

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking
Area G1: Mathematics Proficiency

CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)
Mathematics

Learning Outcomes

Course Objectives:
Find solutions of systems of linear equations using various methods.
Model situations with systems of linear equations and matrices.
Prove elementary statements concerning the theory of systems of linear equations using appropriate proof-writing techniques.
Perform the operations of addition, scalar multiplication, and multiplication.
Find the transpose and inverse of a matrix.
Solve systems of linear equations using inverse matrices.
Prove elementary statements concerning matrices, determinants, linearity, injectivity, and surjectivity using proof-writing techniques.
Find the kernel, range, and inverse of a linear transformation.
Prove statements about vector operations, inner products, projections, norms, orthogonal vectors, linear independence, spanning sets, subspaces, bases, and dimension for Rn, linearity of transformations, injectivity and surjectivity of functions, and abst
Use the Gram-Schmidt process to orthogonalize matrices.
Use bases and orthogonal bases to solve problems.
Find the matrix associated with a linear transformation with respect to a given base and be able to find a change-of-basis matrix.
Demonstrate an understanding of the relationship between operations on a linear transformation and the corresponding matrix.
Find the dimension of spaces such as those associated with matrices and linear transformations.
Use inner products to determine the length of a vector, the orthogonality of vectors, and the angle between vectors.
Find eigenvalues and eigenvectors and use them in applications.

Determine if a matrix is diagonalizable, and if so, diagonalize it.

Apply the theory of orthogonal diagonalization for symmetric matrices.

Prove elementary statements about the properties of eigenvectors and eigenvalues using proof-writing techniques.

**Student Learning Outcomes:**

State and apply basic definitions, properties and theorems of linear algebra

Perform operations on matrices in order to solve systems of linear equations, analyze linear transformations and apply matrix theory to model real-life situations

Identify vector spaces, apply properties and utilize concepts of vector spaces.

Compose clear and accurate proofs using the concepts of this course.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Differential Equations**

**MATH295:**

3.0 Units

Introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. Discusses both theoretical and practical aspects of solution techniques, including nth order linear equations, series solutions, Laplace Transform, and systems of first order linear equations.

**Requisites**

**Prerequisite**

MATH280 - Intermediate Calculus

**Outcomes**

State and apply basic definitions, properties and theorems of multivariable Calculus

Apply vector operations in two and three dimensions and use vector methods to analyze plane and space curves, and curvilinear motion.

Apply standard techniques of multivariable differentiation and integration to solve application problems

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

Local - Plan A

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency
CSU GE - Plan B
Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C
Area 2A: Mathematical Concepts and Quantitative Reasoning

Course Identifier (C-ID)
Mathematics

Learning Outcomes

Course Objectives:
Identify the type of given differential equation, select the appropriate analytical technique, and solve first-order differential equations.

Use numerical methods to approximate solutions.

Create and analyze mathematical models using ordinary differential equations and systems of differential equations.

Apply the existence and uniqueness theorems for ordinary differential equations.

Identify the type of given differential equation, select the appropriate analytical technique, and solve second and higher-order differential equations.

Determine the Laplace transform and inverse Laplace transform of functions.

Use the Laplace transform to solve initial value problems.

Find power series solutions to ordinary differential equations.

Solve linear systems of ordinary differential equations.

Student Learning Outcomes:

Identify differential equations by order, linearity, homogeneity, type of coefficient, etc., and choose an appropriate solution technique based on the classification.

Solve a variety of differential equations and systems of differential equations using geometric, numerical, analytic, and technological approaches.

Build differential equations to model real-world phenomena beginning with basic scientific principles.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Math Study Skills and Basic Skills Support
MATHCE100:
100.0 Hours

This course is designed to assist math students in developing positive attitudes, habits, and techniques including areas of problem-solving, test-taking strategies, study skills, time management, mindset, coping with math anxiety, and basic skills needed to be successful in a math course. This course is designed to assist math students to develop positive attitudes, habits, and techniques in application to their current credit math course. Includes areas of problem-solving, test-taking strategies, study skills, time management, mindset, coping with math anxiety, and basic skills needed to be successful in a math course. Open Entry/Open Exit.

Requisites

Requisites:
None
Learning Outcomes

Course Objectives:

- Develop daily and weekly schedules
- Establish short-term and long-term goals
- Evaluate progress of goals and make adjustments to be successful
- Prioritize tasks according to desired goals.
- Compare and contrast fixed mindset and growth mindset characteristics
- Apply short-term and long-term memory techniques to strengthen math skills
- Classify thinking according to six cognitive levels of complexity
- Explore methods to focus and develop self-discipline
- Analyze responsibility and choice
- Utilize proper math conventions such as mathematical terminology and symbolic notations
- Discuss mathematical thinking orally using math vocabulary with precision
- Express mathematical ideas and strategies precisely and coherently in written form
- Develop note-taking skills techniques during lectures
- Develop note-taking skills from textbooks
- Develop active listening skills and techniques during lectures
- Identify and practice problem-solving strategies
- Assess available resources to access when unable to solve a problem
- Prepare exam study plans
- Create test questions for review
- Develop test review techniques
- Utilize mind maps to organize information
- Utilize anxiety reduction techniques
- Evaluate attitudes towards math and the effect they have on test performance
- Assess test performance, learning from mistakes and developing strategies for growth and improvement in math
- Develop test taking strategies
- Utilize support resources such as office hours, study groups, private tutors, and supplemental instruction
- Recognize and interpret symptoms of math anxiety
- Identify and evaluate belief systems regarding math
- Reframe thoughts about learning that hinders academic growth
- Develop strategies to grow and improve math skills
- Identify individual learning styles and intelligences
- Identify areas that need improvement
- Identify and utilize various math study skills
- Adjust study skill techniques throughout semester to maintain proficiency in math topics
- Perform mathematical operations in a geometric context
- Perform basic operations with integers
Translate from English to math; devise and solve appropriate equations/formulas

Understand basic vocabulary of the real-number system

Solve appropriate applications

Demonstrate an understanding of basic vocabulary, properties, and definitions

Present work on an exam while maintaining a calm, confident and ethical approach to problem solving

Apply reason when making decisions or judgments about a problem

Apply a rule or definition with assessing relevance

Choose an appropriate way to represent a mathematical situation

Connect mathematics with personal lives and the world

Analyze responses and reactions to mathematical problems

**Student Learning Outcomes:**
- Develop and apply time-management, organizational, and note-taking skills for success in mathematics courses.
- Apply growth mindset characteristics to situations that can create mathematics anxiety.

**Hours**

**Total Hours**

100.0

**College Preparation Essential Mathematics**

**MATHCE206:**

144.0 Hours

This course includes operations of whole numbers, fractions, decimals, integers and working with percentages, ratio, proportion, measurement, mensuration geometry, basic algebra and applied word problems. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Identify number concepts including place value and rounding

Identify properties of real numbers

Calculate basic exponents

Solve word problems involving whole numbers

Identify prime factors and apply divisibility rules

Evaluate numerical expressions using the order of operations

Represent fractions and mixed numbers

Convert between improper fractions and mixed numbers

Identify types of fractions and reciprocals

Compare fractions

Perform arithmetic operations with fractions and mixed numbers

Solve word problems involving fractions

Read, writing and round decimals
Perform arithmetic operations with decimals
Solve word problems involving decimals
Convert fractions to decimals and decimals to fractions
Order fractions and decimals
Represent ratios in multiple ways
Solve proportion involving decimals or fractions
Find rates and unit rates that correspond to a contextual problem
Use unit rates to solve proportional problems
Verify that two figures are similar by finding scale factors
Use scale factors to determine missing sides in similar figures
Use similarity to solve proportional application problems
Perform fraction, decimal, percent conversion
Solve three main types of percent problems
Solve percent application word problems involving percents such as sales tax, commission, discounts, percent increase or decrease
Identify basic vocabulary in geometry such as point, line, segment, ray, angle, etc.
Recognize common plane geometric shape
Find the perimeter and area for common shape polygons
Calculate the circumference and area of a circle
Find surface area of common prism
Solve area, perimeter, and volume application word problems
Apply the Pythagorean Theorem to find a missing side of a right triangle or solve application problems
Identify terms used in measurement in both metric and U.S customary systems
Distinguish between 1, 2, and 3 dimensional measures
Convert U.S customary unit measurements
Convert metric unit measurements
Convert between U.S. and metric systems
Solve applications of unit measurements
Identify different types of numbers with the real number system
Represent application problems using integers
Perform basic operations with integers
Apply order of operations with integers
Solve word problems involving integers
Interpret different meaning of variables
Evaluate algebraic expressions
Identify properties of algebra: commutative, associative, identity, inverse and distributive
Solve multi-step equations
Identify functions
Graph ordered pairs, solutions and linear equations
Find the slope of a line
Solve inequalities

**Student Learning Outcomes:**
- Evaluate basic arithmetic expressions with whole numbers, fractions, and decimals by applying the order of operations.
- Perform operations with percentage, ratio, proportions and mensuration geometry.

**Hours**

**Total Hours**
144.0

**College Preparation Algebra**

**MATHCE255:**

144.0 Hours

This course includes an introduction to basic algebra concepts, properties of real numbers, factoring, exponents and radicals, solving and graphing linear equations, polynomials and rational algebraic expressions, and linear systems of equations, solving quadratic equations and applications. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

[HSMTH159 - Math Fundamentals 2](#)

**OR**

**Learning Outcomes**

**Course Objectives:**
- Apply basic vocabulary, operations with signed numbers, basic properties of exponents to integers and rational numbers
- Simplify algebraic expressions using order of operations
- Translate expressions from English to algebraic expressions
- Solve linear equations and inequalities by
  - Simplifying
  - Distributing
  - Using properties
- Apply methods of solving linear equations to appropriate applications
- Define and utilize basic vocabulary of the Cartesian Coordinate System
- Slope and intercepts
- Slope-Intercept form
- Point-slope form
- Plot (x,y) coordinates
- Graph a line using a table and the slope-intercept form, \( y = mx + b \)
- Determine the slope of a line given a graph, equation or two points
- Find intercepts given a graph or equation
- Graph linear equations with different methods
Apply basic properties and definitions to simplify polynomial expressions with exponents
Add, subtract, multiply and divide polynomial expressions using exponent properties
Factor polynomials with two, three and four terms by applying the appropriate methods
Recognize and factor out the greatest common factor from a polynomial expression
Factor by grouping
Factor the difference of two squares, sum and difference of cubes, perfect-square trinomials and general trinomials
Apply factoring strategies to solve polynomial equations and appropriate applications
Solve quadratic equations by factoring, square root property and completing the square
Apply the quadratic formula to solve quadratic equations
Apply solving strategies to solve appropriate applications with quadratic equations
Simplify rational expressions
Perform basic operations involving rational expressions
Obtain undefined value(s) of rational expressions
Apply factoring techniques to simplify rational expressions
Determine the lowest common denominator of rational expressions and equations
Solve rational equations and appropriate applications using the methods of solving rational equations
Solve a system of two linear equations in two variables by applying the graphing, elimination by addition, and substitution methods
Apply solving strategies to appropriate applications with two linear equations in two variables
Simplify, add, subtract and multiply radicals
Divide by using the quotient rule of radicals
Rationalize the denominator
Represent a given scenario using an appropriate algebraic equation(s)
Solve and interpret results in context of a given scenario
Review algebra concepts and algebraic operations and be advised about options for further study of mathematics

Student Learning Outcomes:
- Identify an equation as linear, quadratic or rational and solve the equation using an appropriate method.
- Simplify and perform operations on polynomials, rational expressions, or radical expressions at an introductory level.

Hours
Total Hours
144.0

Intermediate Algebra Support Course
MATHN40:

0.5 Units
Review of algebraic, geometric, and arithmetic techniques required in Math 080. Practice reading and identifying important information for solving application problems, and implementing study skills to promote success in Math 080. This course is designed to provide just-in-time remediation for students who did not place directly into Math 080, or for students that would like to supplement their learning with prerequisite skills needed for Math 080.

Requisites
Requisites:
Co-Requisite

MATH080 - Intermediate Algebra

OR

Co-Requisite

MATH085 - Intermediate Algebra with Integrated Support

OR

Co-Requisite

MATH140 - College Algebra

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes

Course Objectives:
Use precise mathematical vocabulary to describe the operations of intermediate algebra
Translate sentences from English to algebra
Analyze application problems using units
Identify appropriate operations to solve linear equations of all types
Apply the LCD to simplify equations and inequalities
Apply linear functions to model real-world phenomenon
Describe the role of slope and vertical intercept in a linear function model
Solve systems of equations with substitution and elimination
Interpret solutions of systems in a graphical environment
Use systems of equations to solve application problems
Factor by greatest common factor and grouping
Factor trinomial expressions by the difference of two squares, and the sum and difference of two perfect cubes
Solve polynomial equations by applying the ZPP
Simplify rational expressions by factoring
Multiply and divide rational expressions
Add and subtract rational expressions using the LCD
Solve rational equations by applying the LCD
Solve rational inequalities by comparing to zero
Practice solving quadratic equations by factoring, completing the square, and the quadratic formula
Recognize the relationship between the solutions of a quadratic equation and the x-intercepts (or lack thereof) of the corresponding quadratic equation
Interpret the vertex in an application problem

Graph exponential functions

Interpret the vertical intercept and horizontal asymptote of exponential functions

Simplify or expand logarithmic expressions using properties of logarithms

Graph logarithmic functions

Solve exponential and logarithmic equations using inverse properties

Write the equation of a conic section in standard form, beginning with either an expanded equation or the graph of a conic

Organize and manage time

Identify, evaluate, and utilize effective resources to improve one's own learning through peer study groups, computer resources, and tutoring resources

**Student Learning Outcomes:**

- Simplify expressions and solve equations as detailed in the Math 080 course content.
- Identify key concepts in application problems.
- Apply key concepts to solve application problems as detailed in the Math 080 course content.

**Units & Hours**

**Minimum Units:**

0.5

**Maximum Units**

0.5

**Total Hours**

36.0

**Precalculus Support Course**

**MATHN41:**

0.5 Units

A review of mathematics needed to be successful in Precalculus. Topics are drawn from Algebra and Trigonometry. Intended for students who did not directly place into Math 170, Math 171, or for students who would like to supplement their learning with prerequisite skills.

**Requisites**

**Requisites:**

**Co-Requisite**

MATH170 - Pre-Calculus Mathematics

OR

**Co-Requisite**

MATH171 - Precalculus and Trigonometry

OR

**Co-Requisite**

MATH180 - Single Variable Calculus I
Co-Requisite

MATH180H - Honors Single Variable Calculus I

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes

Course Objectives:
Given a basic equation, identify the shape of its graph
Graph trigonometric functions using amplitude, period, and shifts
Solve equations
Factor polynomials
Solve quadratic equations using factoring, completing the square, and quadratic formula
Convert angles from degrees to radians, and radians to degrees
Write equations of lines
Rewrite expressions using basic identities
Evaluate trigonometric functions at basic angles
Find domain and range and apply function notation

Student Learning Outcomes:
Manipulate expressions and solve equations using concepts in algebra and trigonometry.
Analyze functions graphically and algebraically.

Units & Hours

Minimum Units:
0.5

Maximum Units
0.5

Total Hours
36.0

Statistics and Probability Support Course

MATHN43:

0.5 Units

A review of core mathematical skills needed to be successful in Math 219, Statistics and Probability. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and critical thinking skills from descriptive statistics which supports introductory concepts of college-level statistics and probability. Intended for students who did not directly place into Math 219, or for students that would like to supplement their learning with prerequisite skills needed for Math 219.

Requisites
Requisites:

Co-Requisite

MATH219 - Statistics and Probability

OR

Co-Requisite

MATH219H - Honors Statistics and Probability

OR

Co-Requisite

MATH220 - Statistics and Probability with Integrated Review

OR

Co-Requisite

SOC125 - Introduction to Statistics in Sociology

OR

Co-Requisite

SOC125H - Honors Introduction to Statistics in Sociology

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

0.5

Learning Outcomes

Course Objectives:

Express inequalities in interval notation

Organize categorical data into bar graphs and pie charts

Compare fractions, decimals, and percentages

Identify the intersection and union of sets

Convert numbers between standard form and scientific notation

Graph on the Cartesian-coordinate system

Identify complements

Identify fractions and percentages that describe the impact of one quantity on another (conditional distributions)

Evaluate functions

Create and evaluate mathematical models from data

Calculate measures of central tendency and variation
Graph on a number line
Evaluate expressions
Organize quantitative data into histograms and boxplots
Evaluate functions with exponents
Perform order of operations
Interpret the slope and y-intercept of a linear function
Organize and manage time
Solve literal equations for a specified variable
Identify, evaluate, and utilize effective resources to improve one's own learning through peer study groups, computer resources, and tutoring resources
Calculate and interpret constant rate of change
Write equations of lines
Analyze data and select an appropriate mathematical model
Round to a specified decimal place
Solve linear equations and inequalities
Identify fractions and percentages that describe a part of a whole (marginal distributions)
Analyze scatter plots and identify patterns

**Student Learning Outcomes:**
- Formulate questions from data to organize, summarize, analyze, and apply mathematical reasoning to interpret results.
- Construct, apply, and interpret mathematical models to represent and interpret relationships with quantitative data.

**Units & Hours**

**Minimum Units:**
0.5

**Maximum Units**
0.5

**Total Hours**
36.0

**Math Review**

**MATHN73L:**
0.2 Units

Students requiring specific math knowledge in courses outside the math department (such as water science, surveying, physics, accounting, etc.) will receive individual instruction of mathematical topics based on their individual need. Not applicable to associate degree. Open Entry/Open Exit

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable
Weekly Lecture Hours:
0.2

Learning Outcomes

Course Objectives:
Classify and identify different problem types and select suitable problem solving techniques.

Identify and use applicable math study skills.

Develop and utilize appropriate questioning techniques.

Access technological resources to enhance mathematical acumen.

Student Learning Outcomes:

Classify and identify different problem types and select suitable problem solving techniques.
Model and solve class appropriate applications in a clear, organized and professional manner.

Units & Hours

Minimum Units:
0.2

Maximum Units
0.2

Total Hours
11.0

Principles of Management

MGMT120:

3.0 Units

Principles, methods, and procedures essential to the successful management of human and financial resources. Planning, decision making, staffing, directing, motivating, leading, communicating, controlling, and the application of managerial skills.

Requisites

Requisites:

Anti-Requisite

BUS120 - Principles of Management

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Describe the benefits and responsibilities of working in management.

Identify and discuss different management theories.

Explain and examine business ethics and social responsibility.

Describe the planning process, benefits of planning, setting goals, management by objective.
Examine the strategic planning process, including mission statements, grand strategies, SWOT analysis, forecasting, Porter’s competitive forces and strategies.

Contrast rational and non-rational decision making.

Interpret decision making styles and biases.

Recognize organizational culture and its impact on performance.

Identify different organizational structures and illustrate optimal industries for each structure.

Explain human resource management, including legal requirements, recruitment, selection, training, orientation, assessment, and compensation.

Discuss strategies for change and innovation within organizations.

Describe personality dimensions and traits that affect and influence employee motivation.

Compare extrinsic and intrinsic rewards.

Examine equity theory, expectancy theory, and reinforcement.

Describe the advantages and disadvantages of teamwork.

Identify characteristics of self-managed teams. Discuss methods for managing conflict.

Compare and contrast leadership and management.

Describe the communication process, including selection of effective communication channel.

Identify and describe communication barriers.

Describe techniques for effective reading, writing, speaking, and listening.

Explain the importance of measuring productivity and monitoring performance.

Identify and describe the four components of the balanced scorecard.

Discuss the importance of using measurable criteria for determining organizational success.

Describe the techniques used to ensure Total Quality Management (TQM).

**Student Learning Outcomes:**

- Recognize, identify, and understand the four management functions: Planning, Organizing, Leadership and Controlling.
- Recognize and identify management topics they need to know in order to succeed: customer focus, globalization, diversity, ethics, information technology, entrepreneurship, work teams, the service economy and small business.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Human Relations and Organizational Behavior**

**MGMT121:**

3.0 Units

The role of the manager and management’s relationship to employees. Includes the application of motivational theories, communications, leadership, and organizational structure.

**Requisites**
Requisites:

Anti-Requisite

BUS121 - Human Relations and Organizational Behavior

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Examine the role of a modern manager
Identify and describe behavioral and scientific approaches to management
Recognize and describe modern organizational theories
Summarize how managers approach setting objectives, decision making, communication, and controlling
Discuss the impact of technology on modern organizations
Recognize and illustrate motivation theories
Compare and contrast behavioral theories
Identify components of active listening
Illustrate the importance of active listening for managers
Recognize barriers to communications and describe methods for overcoming these barriers
Compare and contrast different leadership styles
Identify qualities of exceptional leaders
Describe myths about workplace leadership
Describe methods for identifying and addressing employee needs
Explain different methods for managing conflict
Discuss benefits and challenges of managing a diverse workforce

Student Learning Outcomes:
Describe how to survive, prosper, and be effective in the role of a manager within the organization.
Recognize organization principles and theory and explain how to apply them in developing an organizational structure.
Explain how organizational structure and dynamics affect the manager’s role.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Business Communications
MGMT122:

3.0 Units

Professional and conversational oral and written communication skills used in business. Emphasis on writing and speaking skills, solutions to communication problems, ethical issues, and techniques for communicating successfully in today's business environment. Designed for professionals seeking career advancement. Not intended for students seeking an AST in Business Administration.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Explain how communication skills fuel career success and understand why writing skills are vital in a digital workplace embracing social change.

Explain the importance of effective media choices, and understand how to overcome typical barriers to organizational communication.

Analyze the purpose of a message, anticipate its audience, and select the best communication channel.

Improve writing techniques by emphasizing important ideas, employing the active and passive voice effectively, using parallelism, and preventing misplaced modifiers.

Deliver complete business messages by revising for clarity and editing for conciseness.

Explain the importance of e-mail and the professional standards for its usage, structure, and format in the digital-era workplace.

Compose direct messages that request information or action, respond to inquiries, make direct claims, and respond to customer claims.

Describe the components of effective negative messages and create an effective bad news message.

Describe effective persuasion techniques and create effective persuasive messages that request action, make claims, and deliver complaints.

Create an effective resume and a powerful cover letter.

Describe what to do before, during, and after a job interview in order to be successful.

Identify and describe the components of effective listening.

Describe techniques for making meetings productive.

Create an effective presentation and deliver to a live audience.

Discuss strategies for enhancing intercultural communication and apply techniques for successful oral and written interactions across cultures.

Discuss effective practices and technologies for business communication, including social media.

Student Learning Outcomes:

Create business documents.
Complete and deliver oral and written business presentations.

Units & Hours

Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Supervision
MGMT123:
3.0 Units
A practical, skill-building approach to learning and understanding first-line management and supervision. Designed to provide beginning and experienced supervisors with a hands-on situational approach using supervisory skills.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Identify ways productivity can be improved.
Describe how supervisors can get groups to cooperate, and explain why teamwork is important.
Identify benefits of ethical behavior and challenges that make ethical behavior more difficult in the modern workplace.
Describe how the U.S. workforce is changing and its impact on the supervisor.
Discuss the supervisor’s role in the planning process.
Explain the purpose of using controls.
Identify steps in the process of organizing.
Explain how supervisors can maintain good relations with employees, managers, and peers.
Describe guidelines for making decisions.
Describe techniques for communicating effectively in the workplace.
Identify ways supervisors can motivate their employees.
Explain why and when supervisors should counsel employees.
Describe some effective time management techniques for supervisors.
Describe strategies for managing conflict.
Identify steps in the employee selection process.
Summarize reason for conducting an orientation for new employees.
Define major types of training.
Explain the importance of conducting performance appraisals.

**Student Learning Outcomes:**
- Recognize and identify the supervisory process including planning, organizing, delegating, and controlling the work of employees.
- Recognize and identify supervisory skills using a behavioristic/humanistic approach to first-line management.
- Recognize and identify how to develop employees and supervise employees using a situational approach.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Human Resource Management**

**MGMT135:**

3.0 Units

Introductory course covers the goals, activities, and challenges of human resources. Includes equal employment opportunity and diversity, recruitment and selection, leadership and motivation, training and development, compensation, employee and labor/management relations.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**
- Recognize and understand Human Resources Management environment.
- Define and describe processes involved in staffing an organization.
- Recognize and distinguish methods for developing and compensating employees.
- Analyze and explain employee and labor management/relations.

**Student Learning Outcomes:**
- Describe and explain the major functions of human resource management.
- Apply the principle of equal employment opportunity to the major functions of human resource management.
- Explain the strategic role that human resource management plays in an organization.

**Units & Hours**

**Minimum Units:**
3.0
Maximum Units
3.0

Total Hours
54.0

Principles of Advertising
MKTG112:

3.0 Units
A study of the impact of advertising on the American economy and how it fits within the broader disciplines of business and marketing and how it relates to journalism and the field of communication and the use of persuasive techniques with products, services, or ideas. Discover what advertising people do and how they do it, the artistic creativity and technical expertise required and career opportunities within the field.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Describe and summarize the advertising business
Identify and describe how advertising fits into the entire marketing strategy
Identify the creative aspects of advertising in both print media and electronic media
Identify and utilize the various advertising media
Identify and describe unique types of advertising

Student Learning Outcomes:
Describe how advertising is used to convey information, influence society and even shape cultural values.
Identify methods of market segmentation and how companies use this information to meet corporate goals.
Distinguish between wants and needs, recognize emotional “triggers” used in advertising and understand how persuasion is accomplished.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Principles of Marketing
MKTG113:

3.0 Units

An introduction to modern marketing concepts and issues in an organization as well as the effects of marketing on society. Content includes an overview of marketing in the global business environment, buyer behavior, target marketing, and the marketing mix.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Define marketing and list the major functions of marketing.

Demonstrate an understanding of the terminology within the field of marketing.

Identify and differentiate each major segment that a producer must utilize in the successful marketing of products or services.

Demonstrate an understanding of each promotional aspect of marketing and explain how each aspect is interrelated.

Identify and state all functions involved in the marketing process.

Student Learning Outcomes:

- Relate the importance of marketing to business success.
- Identify methods of market segmentation and describe how companies use this information to meet corporate goals.
- Identify marketing strategies and emotional 'triggers' used to entice consumers to buy products and distinguish between wants and needs.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Professional Selling

MKTG114:

3.0 Units

An introductory course covering sales presentations, communication styles, techniques, and practices. Includes using sales techniques during job interviews and other aspects of "Selling Yourself" for career enhancement. Covers objectives in selling from the perspective of the consumer, business, and society.
Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Define selling and what makes a professional sales representative.
Describe the potential of a career in sales to include both advantages and disadvantages.
List the qualities and characteristics of successful sales representatives.
Analyze the reasons why people buy products/services.
Explain the pre-approach and its purpose.
Define and describe the purpose of handling objections.
Define prospecting
Describe the methods of prospecting and the reasons for prospecting.
Describe the importance of effective communication skills, both oral and written.
Discuss the practicality of sales presentations.
Describe ways to use computer, internet and multimedia tools to improve sales.
Explain why time is such an important tool of effective and productive selling.
Describe why follow-up is so important to repeat sales.
Discuss the importance of selling one’s self.
Describe the “nuts and bolts” of selling.
List career paths in professional sales
Describe methods for managing the sales force.

Student Learning Outcomes:
Relate the importance of selling techniques to business and personal success.
Apply professional selling principles to a variety of settings and describe the attributes of a successful professional presentation.
Identify common strategies used to counter objections and distinguish between rational and emotional reasons for purchasing.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0
Consumer Behavior
MKTG115:

3.0 Units

The investigation and analysis of why consumers select, purchase, use, and dispose of goods and services to satisfy their personal and business needs.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Identify methods of consumer problem recognition

Determine possible methods to solve a consumer's problems

Explain the importance of consumer search

Describe the influences on consumer search

Identify the various aspects of consumer evaluation and decision making

Identify how consumer assessment can impact behavior

Explain how businesses use consumer research

Student Learning Outcomes:
Recognize and identify common purchase behaviors exhibited by consumers and which marketing strategies are geared to each.
Identify stages of purchase decisions and factors influencing those decisions.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Web Marketing and Promotion
MKTG135:

3.0 Units
How to include the Internet in a business marketing plan. Covers advertising and promoting products, services, or ideas on the Internet, audience identification, search engine strategies, and other basics of increasing business effectiveness with Internet usage.

**Requisites**

None

**Transferability & General Education Options**

Transferable: Transferable to CSU only

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Demonstrate using the Web for marketing.

Determine realistic objectives for Web marketing.

Use information tools to link visitors to information requests, transactions, and sales.

Describe how to determine where visitors come from and analyze how they move through the site.

Evaluate marketing and promotion response.

Describe methods for tracking customers and transactions, including order processing and credit cards.

Describe security and accountability techniques.

Analyze market segmentation techniques and determination of customer needs.

Describe how to deliver custom content, offers, and promotions.

Describe types of Web advertising.

Analyze costs and response rates.

Describe methods and pitfalls involved with email marketing.

Analyze advantages and methods for using search engines, links, and online public relations.

Analyze budget, timing, media mix, and tracking.

Identify promotional objectives such as branding, direct response, sales, or research.

Analyze proper media and media mix.

Describe various public relations and promotional activities.

**Student Learning Outcomes:**

Identify methods used in a typical online marketing environment and strategies for countering the associated challenges.

Identify opportunities for practical application of Internet marketing principles in a small business environment.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0
Small Business Marketing and Advertising
MKTG172:

3.0 Units

Techniques for small business marketing including planning, customer research, advertising, media selection, budgeting and scheduling, and the evaluation of marketing effectiveness.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Describe the purpose of promotion in a business.

Develop a customer profile.

Determine 'what is your customer worth' and identify effective and efficient promotions designed to reach your ideal customer.

Outline methods of marketing research.

Discover sources of information pertaining to a specific small business.

Describe how to budget for maximum effectiveness.

Develop a Marketing Calendar for your promotional efforts.

Evaluate promotional efforts.

Evaluate media options that are appropriate for a specific small business' budget and target market.

Determine the best medium or media combination for a specific small business marketing need.

Evaluate options to generate leads and ways to reach target markets including website design, reputation marketing, traffic generation, social media marketing, direct mail, public relations and other methods that may be appropriate to a specific small business.

Determine best combination of options that are appropriate for a specific small business' budget and target market.

Identify ways to integrate these options with traditional media.

Describe how to prepare an advertisement, sales presentation, and other promotional material.

Describe how to coordinate promotions.

Write a summary of the marketing plan developed.

Determine what 'next steps' are indicated and when the plan should be implemented.

Student Learning Outcomes:
Identify problems faced in a small business marketing environment and strategies for countering these challenges.

Identify target markets of a small organization and analyze ways to reach them.

Units & Hours
Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Basic Piano Skills
MUS061:

1.0 Units

Group instruction for beginners emphasizing note reading, basic keyboard skills, and sight reading. Practice outside of class required. Practice pianos available on campus.

Requisites
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.0

Learning Outcomes
Course Objectives:
Play and count rhythms accurately
Read lead sheet style notation
Improvise harmonization of melodies
Sight read
Play different musical lines simultaneously in the two hands
Clap and count rhythms from music notation
Use more difficult 2-handed playing
Understand the role of counting in keeping strict rhythm in ensemble playing
Find new 5-finger pattern and chords by whole and half step patterns
Prepare exam pieces with teacher assistance.
Count divided note rhythms
Finger 3rds and 5ths
Demonstrate basic 5-finger position in both hands
Identify basic notation symbols
Identify the importance of continuity
Play consecutive fingers when reading 2nds in score
Play two-handed in parallel and contrary motion
Play more complex pieces
Find keyboard hand positions for their study pieces
Find middle C on the keyboard
Perform under pressure
Integrate expressive techniques into their playing
Transpose keyboard patterns
Match music notation with correct notes on keyboard

**Student Learning Outcomes:**
- Demonstrate keyboard notation, rhythmic and sight reading skills at the beginning level.
- Identify and define basic musical terminology.
- Identify, read and play simple melodies in the keys of C major and G major.
- Perform selected solo pieces using techniques demonstrated and presented in class.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
36.0

**Music Appreciation**

**MUS101:**
3.0 Units

Designed to increase awareness and appreciation of music from the European classical tradition in relation to general culture and history. Develops basic understanding of musical elements and deepens students’ experience of music. Recommended for non music majors. Field trips may be required.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
Area C: Humanities

**CSU GE - Plan B**
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**
Area 3A: Arts

**UC Comparable Transfer Courses**
UC Comparable Transfer Courses

Course Identifier (C-ID)
Music

Learning Outcomes

Course Objectives:
Identify the many functions of music and gain an understanding of the general parameters of music.

Place music of the Middle Ages, Ars Nova and Renaissance into an historical time frame with antecedents from Jewish chant and other Middle Eastern sources.

Identify separate vocal, choral and instrumental styles and idioms.

Associate various composers with the musical styles of these periods through visual observations of scores and listening to various compositions.

Identify the important elements of musical styles and associate them with specific composers.

Distinguish from among various musical forms.

Associate the music of the composers with the appropriate musical styles.

Identify differences between the Classical and Romantic Periods.

Identify basic components of opera: Aria, recitative, overture, dramatic and aesthetic elements.

Identify themes which represent cultural ideas from European and non-European sources.

Identify important trends in contemporary music including sources in Far Eastern and African music.

Distill basic concepts of classical music from European tradition.

Student Learning Outcomes:

Demonstrate an understanding of basic significant western musical styles.

Aurally identify the most important composers' representative compositions from each major music era.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors Music Appreciation
MUS101H:

3.0 Units

An enriched approach designed for honors students. The European classical music tradition through study of musical elements, stylistic features, culture and history. Readings, guided listening assignments, required concert attendance and special projects. Recommended for non-music majors. Field trips may be required.

Requisites

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area C: Humanities

CSU GE - Plan B
   Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
   Area 3A: Arts

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Course Identifier (C-ID)
   Music

Learning Outcomes

Course Objectives:
Identify and recognize themes represented in cultural ideas from European and non-European sources.
Identify important trends in contemporary music including sources in Far Eastern and African music.
Identify the Far Eastern sources for Impressionistic music as well as black minstrel sounds and Romantic Periods.
Acquire an understanding of the general parameters of music.
Associate various composers with the musical styles of the periods through visual observations of scores and listening to various compositions.
Identify vocal, choral and instrumental styles and idioms.
Associate the music of composers with the appropriate musical styles.
Identify the important elements of musical styles and associate them with specific composers.
Identify basic components of opera (aria, recitative, and overture).
Place the music of the Middle Ages, Ars Nova and Renaissance into a historical time frame with antecedents from Jewish chant and other Middle Eastern sources.
Distill basic concepts of classical music from the European tradition.
Recognize the dramatic and aesthetic elements in an opera.
Identify the many functions of music.
Distinguish from among various musical forms.
Identify differences between the Classical and Romantic Periods.

Student Learning Outcomes:
Acquire an understanding and knowledge of basis significant western musical styles.
Acquire the ability to aurally identify the most important composers' representative compositions from each major music era.

Units & Hours
Minimum Units:
3.0

Maximum Units
Total Hours
54.0

World Music
MUS102:

3.0 Units
Music from the Far East, Southeast Asia, Africa, the Middle East, Europe and the Americas. Students are guided to enjoy and to understand music from diverse cultures. Investigation of the interconnections of cultural aesthetics and musical styles. Concert attendance and assigned listening required. Field trips may be required.

Requisites
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area C: Humanities
Area D: Cultural Breadth

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3A: Arts

Learning Outcomes

Course Objectives:
Understand pervasive Western influence in musical style.

Distinguish different purposes of music within a culture so that appropriate listening criteria are applied.

Identify sound of ancient Japanese and Korean court music and an aesthetic of restraint.

Discuss or write about music using accurate terminology.

Identify instruments commonly used in U.S. concerts of Indian classical music.

Understand participation and cooperation necessary to traditional African music performance circumstances.

Explain how various mixtures of European (particularly Iberian), African, and Native American cultures created rich and diverse music in Latin America.

Identify basic form and syncretic style of blues and gospel.

Identify general style features of traditional West African ensembles.

Explain how displaced populations use music to preserve culture and traditions.
Characterize the traditional Andean musical sound.

Explain how to listen to music, which achieves an altered state of consciousness in Hindu and Buddhist cultures.

Understand the complex, three-way syncretic blending in Latin American music.

Identify the sound of syncretic pop in south Asian cultures.

Demonstrate familiarity with musical instruments from all contributing cultures.

Understand the term “traditional culture”, basic elements of rhythm and melody as heard in class.

Explain how Indian music is organized into ragas and talas.

Identify general stylistic features of North American Indian traditional music and modern syncretic blends.

Identify common traditional East Asian instruments.

Understand how black African slave culture and musical background blended with Southern U.S. traditional European culture and musical features to create Black American music.

Identify timbre differences verbally and orally.

Recognize European and African elements in Black American music.

Classify African instruments and explain how they are used in an ensemble.

Recognize idiophones, membranophones, and aerophones as basic classifications of musical instruments.

Explain how folk music and pop/entertainment emerge from cultural roots.

Identify features of African-dominated South American music.

Explain what can happen to artists and tradition in a repressive political system.

Describe how the many folk music styles of Viet Nam reflect diverse cultures.

Identify basic style features of the Chinese opera orchestra.

Explain how to count asymmetric meters and scales with gaps.

Explain how myths represent cultural and spiritual aspirations.

Define music.

Characterize Northern Mexico’s European-dominated styles.

Explain how music motivates Asian dance and puppet dramas.

Understand that the great differences between Andean, Mexican, and Cuban or Brazilian music reflect patterns of colonization and importation of African slaves.

Identify physical characteristics and basic sound production in musical instruments.

Identify basic features of traditional European style, village culture, folk music and oral tradition.

Define and recognize the difference between monophonic and polyphonic textures in simple examples.

Understand the subjective nature of music perception.

Explain how a concert of Indian classical music is presented.

Understand that most of today’s chordophones come from Middle Eastern models.

Identify instruments of the Indonesian gamelan, and the colotomic organization of its music.

**Student Learning Outcomes:**

- Identify and define classical, popular, folk and cultural/ritual musical traditions in various regions around the world.
- Aurally identify musical styles connected to various regions around the world.

**Units & Hours**

**Minimum Units:**
Maximum Units
3.0

Total Hours
54.0

Jazz in America
MUS103:
3.0 Units

A historical survey of the development and evolution of jazz in America from its earliest roots in African and European music. The study will also include the social and economic conditions which influenced this art form. Field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area D: Cultural Breadth

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3A: Arts

UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Identify the classical influences in cool music.

Recognize and describe characteristics of the 60’s jazz movements.

Describe and distinguish between form, consonance and dissonance, the meter and texture when listening to new pieces of music.

Recognize aurally the traits of swing as they developed in the 1920’s with bands.

Identify those characteristics that were directly influenced by the African musical tradition when listening to new pieces of music.

Identify general musical characteristics of the main eras of jazz.

Identify aurally the bebop elements.

Recognize the formal and rhythmic elements which characterize the jazz influences from Cuba and Brazil.

Recognize aurally aspects of boogie woogie, which contributed to the swing era.

Develop an awareness of the big band style and important band leaders.
Appreciate the subtle differences between the styles of various bands and arrangers in the era by identifying specific characteristics that either match or deviate from the standard swing style.

Acquire an awareness of contemporary jazz styles and the connection of this music to past traditions as well as the popular culture of rock music.

Identify the characteristics of the African ritual and ceremonial ensemble as well as the talking drum.

Distinguish between ragtime and stride in early jazz piano playing.

Acquire an awareness of the factors leading to the earliest jazz of New Orleans.

Discuss specific aspects of the new technology, media and socio-economic of the 1920’s and explain how these conditions were manifest in the music and the lives of jazz musicians.

Identify the relationship between the social climate of the ”roaring twenties” and the jazz music which was played and recorded.

Distinguish the various African American musical traditions which led to the development of jazz.

Distinguish between rural and urban singers.

Listen to various examples and describe specific characteristics that lead to categorization.

Acquire the ability to aurally recognize various features of the blues.

Acquire an understanding of how the policies of the Spanish and the Catholic Church regarding the treatment of the slaves encouraged a different musical perspective in the islands of the Caribbean.

Identify various aspects of melody, texture, form, harmony, rhythm and instrumentation in Jazz Music.

Discuss how the American political and social climate of the 1960’s influenced the new jazz styles.

Acquire an awareness of the sociopolitical situation which continued the evolution of jazz from swing to bebop.

Distinguish aurally elements of the cool era.

Understand the manner in which this influence spread to America through the slave trade.

Student Learning Outcomes:

- Acquire an understanding and knowledge of the origins and development of the multi-faceted historical roots and diverse elements/styles associated in American jazz.
- Identify and distinguish the various jazz periods aurally.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Rock Music History and Appreciation

MUS104:

3.0 Units

Historical survey of rock music from its beginning in the ’50s to the present. All Rock and Pop styles will be discussed. Personalities and musical styles will be related to the sociology of the time period being studied. Field trips are required.

Requisites

Requisites:

None
Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area C: Humanities

CSU GE - Plan B
   Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
   Area 3A: Arts

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Describe early influences of rock and roll as they developed over time.
Classify the artists, terminology and stylistic elements of both the Blues, and Rhythm and Blues, as they develop into rock and roll.
Examine the relationship between slavery and the Blues.
Describe the various influences on rock and roll from Spirituals, Gospel, Doo-Wop, and Country.
Compare and contrast blues and country lyrics from both an expressive and sociological perspective.
Analyze the connection between rock and roll, rebellion and race during this era.
Analyze the differences between rock and roll with “pop” and “rock” as styles.
Analyze the roles Atlantic Records and Motown play in the music industry.
Examine the relationship between soul music and the Civil Rights movement.
Describe about the British Invasion as shown through the The Beatles and The Rolling Stones.
Identify other British styles, including The Mersey Sound, the Mods, and the British Blues Revival Bands, as well as the American Reaction to the British Invasion.
Examine the social, political and musical environment of the United States which made it open to the British Invasion, as well as the American reaction to it.
Examine the influences and sociological and political impact of Folk Music, particularly through the words and music of Bob Dylan.
Describe how it developed into Folk-Rock Music and a generation of Singer/Songwriters.
Analyze the role of the singer/songwriter as social commentator.
Examine the artists and development of The San Francisco Sound and Psychedelic Rock beyond San Francisco.
Analyze the role and effect of drug use on the music of this era, as well as examine how it relates to drug use and the music of the present.
Examine Country Rock, Southern Rock, and jazz influences on rock music.
Analyze the regional aspects of music and how they reflect their own cultural or regional identity.
Identify early influences on Hard Rock, and Heavy Metal, particularly as they develop through the music of Led Zeppelin.
Analyze the impact of the sound of music or song lyrics on individual behavior.
Examine the impact of Progressive Rock on the role of rock music in society.
Analyze the role of formal music training on rock music.
Identify Ska and Reggae influences and impact on rock music.
Analyze the impact of oppression and the political environment on popular music.
Examine the connections between Funk and Disco, as well as the differences in terms of race and society.
Examine the role that gender and style plays in the musical world.
Examine Hip-Hop Culture and early rap music, and compare them to the same genre today.
Analyze the role of race and rap music.
Examine the influence of MTV on music and artistic success in the Eighties.
Examine the impact of MTV on popular music, both positive and negative.
Examine other styles of the Eighties and Nineties, focusing on Alternative Rock from Britain, Gothic Rock, Postpunk in the United States, Industrial Rock and Grunge Rock.
Examine the relationships to mood and music as it relates to the current social climate.
Examine the concept that music separates generations.
Explore the developments in popular music throughout the class/text, particularly in relation to stylistic changes and the role of popular music in society.

**Student Learning Outcomes:**
- Identify various people important in the creation of rock music and identify the musical instruments they play(ed) and/or other important accomplishments by them.
- Demonstrate an understanding and knowledge of the origins and development of the diverse elements/styles associated in rock music and identify and distinguish the various style periods aurally.
- Identify sociological trends as reflected in musical styles and song lyrics.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Beginning Voice**

**MUS121:**
1.0 Units

Group instruction designed to develop basic principles of solo and choral voice production, diction, breath control, and posture. Practice outside of class required. Recommended for non-music majors and music majors not studying privately. Field trips are required.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU
Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Learn how to cope with uncertainty

Knowledge of basic musicianship skills in the areas of rhythm, pitch notation, tempo and dynamics.

Recognize and produce good consonant sounds

Acquire the ability to recognize and produce vowel and double vowel sounds

Know how to present a song required for midterm

Demonstrate an awareness of the proper attitude toward singing which includes desire, curiosity, persistence, and patience

Begin to develop a good conception of sound through a mental image of the singing tone

Development of a conception of the ideal singing tone. Learning to hear and evaluate tone qualities such as: pinched, closed, tight, deep, chesty, hollow. Ability to recognize and produce consonant sounds.

Acquire an understanding in the development of vocal practice techniques

Development of legato phrasing technique through breath control.

Gain an understanding of one's own unconscious fears, physical tensions, and self-consciousness

Know about legato phrasing technique through breath control

How to exude a sense of confidence through posture, breathing techniques, persistence and attitude. Ability to sing through a song from memory.

Acquire and discover one's own poised, balanced, and resilient singing posture

Understanding of basic components in the resonator, vibrator and breathing systems.

Use realistic expectations in developing singing goals

Begin to hear and evaluate tone qualities such as: pinched, closed, tight, deep, chesty, hollow

Development of a good conception of sound through a mental image of the singing tone. Ability of voice inflection to express feeling and meaning.

Utilize breath control as the automatic response to the impulse to sing

Practice pieces required for final

Recognize the symptoms of poor breathing habits

Awareness of the mechanics of diaphragmic costal singing. Awareness of the hazards to the breathing system: colds, allergies, smoking, chemical irritants, poor health.

Discover student's voice range

Acquire the ability of voice inflection to express feeling and meaning

Know the basic musicianship skills in the areas of rhythm, pitch notation, tempo and dynamics

Demonstration of vocal production knowledge acquired up to this point.

Demonstrate vocal production knowledge acquired up to this point
Gain an understanding of the mechanics of diaphragmatic costal singing

Begin to develop conception of the ideal singing tone

Develop good breathing habits

Acquire an understanding of basic components in the resonator, vibrator and breathing systems

Gain the ability to sing through a song from memory

Understanding of the voice ranges as well as the concepts of head tone, chest tone, and falsetto.

In class practice on pieces required for final.

Use of realistic expectations in developing singing goals. Continued practice in singing through memorized songs.

Awareness of proper attitude toward singing which includes desire, curiosity, persistence, and patience. Discovery of student’s voice range.

Assess how to exude a sense of confidence through posture, breathing techniques, persistence and attitude

Knowledge of proper positions of throat, jaw and mouth for effective tone production. Ability to recognize and produce vowel and double vowel sounds.


Continue to practice and gain more experience in singing through memorized songs

Development of a poised, balanced, and resilient posture. In-class practice on pieces required for midterm.

How to utilize breath control as the automatic response to the impulse to sing. Development of good breathing habits and ability to recognize the symptoms of poor breathing habits.

Acquire the knowledge of proper positions of throat, jaw and mouth for effective tone production

Gain an awareness of the hazards to the breathing system: colds, allergies, smoking, chemical irritants, poor health

Begin to use it in singing

Begin to understand voice ranges as well as the concepts of head tone, chest tone, and falsetto.

**Student Learning Outcomes:**

- Sing the following items from a given pitch: A major scale ascending and descending Major (M) 2 ascending (Asc) M 3 - Asc Perfect 4 - Asc Perfect 5 - Asc M 6 - Asc Octave - Asc
- Sing 3 solo songs in English and sing 1 solo song in a foreign language.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

36.0

**Intermediate Voice**

**MUS122:**

1.0 Units

Group instruction designed to develop intermediate principles of solo and choral voice production, diction, breath control and posture. Vocal analysis of each student emphasized. Practice outside of class required. Song literature matched to student level II. Designed for both music majors and non music majors. Field trips are required.
Requisites
Requisites:
Prerequisite

MUS121 - Beginning Voice

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:

Breath control

Gain an ability to produce the ten basic vowel sounds. Discover strategies for musical singing of the diphthongs.

Legato phrasing technique

Acquire further development of a good conception of sound through a mental image of the singing tone. Ability to distinguish good tone from bad tone.

Demonstrate vocal production knowledge acquired up to this point

Develop strategies for musical singing of the diphthongs

Gain an intermediate level understanding of a good conception of sound through a mental image of the singing tone

Acquire intermediate level understanding of diaphramic costal singing. Acquire the ability to hold the rib cage correctly and to maintain an openness in the airways.

Distinguish good tone from bad tone at an intermediate level

Gain an understanding of how it can result in a more exciting performance

Gain an awareness of skills necessary for the performance of vocal music

Practice pieces required for midterm

Vowel-formation consonants

Acquire intermediate level understanding of performance problems relating to uncertainty, subconscious fears, physical tensions, and self consciousness. Knowledge of specific practice techniques.

Gain an ability to critically assess good performance characteristics such as accurate rhythm, legato phrasing and controlled breathing.

Acquire an understanding of the basic consonant categories and their proper production: explosive consonants, sustaining consonants, aspirates, and vowel-formation consonants.

Practice on pieces required for final

Acquire a deeper understanding of the concepts of head tone, chest tone, and falsetto

Gain ability to critically assess good performance characteristics such as accurate rhythm, legato phrasing and controlled breathing at intermediate level

Gain an intermediate level knowledge of specific practice techniques developing accuracy in rhythm, intonation and phrasing

Acquire knowledge of basic musicianship skills in the areas of rhythm, pitch notation, tempo and dynamics, articulation, intonation, and descriptive musical terms in the context of artistic expression.
Gain an awareness of performance pressure

Gain an awareness of the relationship of posture to breathing, projection, and tone. In-class practice on pieces required for midterm.

Discover student's voice range

Gain ability to produce the ten basic vowel sounds with words painting technique

Gain a deeper understanding of diaphragmic costal singing

Aspirates

Gain intermediate level awareness of the relationship of posture to breathing, projection, and tone

Acquire an understanding of the role of the larynx, nasal cavity, mouth cavity, trachea, ribs, costal muscles, and diaphragm in the production of tone.

Gain an understanding of diaphragmatic costal singing

Aspirates

Gain an awareness of the relationship of posture to breathing, projection, and tone

Acquire an understanding of the role of the larynx, nasal cavity, mouth cavity, trachea, ribs, costal muscles, and diaphragm in the production of tone

Gain the knowledge of specific practice techniques developing accuracy in rhythm, intonation and phrasing.

Gain an awareness of skills necessary for the performance of vocal music. Discovery of student's voice range.

Sustaining consonants

Acquire an understanding of the basic consonant categories and their proper production:

Gain the ability to utilize these voices in singing at the beginning level

Acquire further understanding of the concepts of head tone, chest tone, and falsetto.

Be able to demonstrate vocal production knowledge acquired up to this point.

Gain an awareness of performance pressure and how it can result in a more exciting performance.

Explosive consonants

Express musical phrase through

Develop a deeper understanding of performance problems relating to uncertainty, subconscious fears, physical tensions, and self-consciousness

Be able to demonstrate vocal production knowledge acquired up to this point. At the same time working on music required for final.

Be able to develop further the legato phrasing technique through breath control.

Acquire the ability to hold the rib cage correctly and to maintain an openness in the airways

Gain knowledge of basic musicianship skills in the areas of rhythm, pitch notation, tempo and dynamics, articulation, intonation, and descriptive musical terms, in the context of artistic expression of songs

Acquire knowledge of specific practice techniques

**Student Learning Outcomes:**

Sing the following items from a given pitch: A Major Scale ascending and descending A chromatic scale ascending and descending Major (M) 2 ascending (asc) and descending (desc) M 3 – asc & desc Perfect 4 - asc & desc Perfect 5 - asc & desc M 6 - asc & des

Sing 3 solo songs in English and 1 solo song in a foreign language.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

36.0
Advanced Voice  
MUS123:

1.0 Units

Advanced principles of solo and choral vocal production. Vocal exercises and song literature in English and other languages included. Practice outside of class required. Recommended for non music majors and for music majors not studying privately. Field trips are required.

Requisites

Requisites:
Prerequisite

MUS122 - Intermediate Voice

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:
Develop a foundation of vocal technique through musicianship skills.
Increase personal repertoire for performance.
Mark in the music all vowels and diphthongs using the IPA method.
Extend the vocal range using exercises and techniques.
Demonstrate knowledge of vocal elements/skills necessary for the performance of vocal music.
Demonstrate deeper knowledge of the four phases of breathing.
Demonstrate the physiology of the vocal instrument to distinct improvements in tone, phrasing, and breathing.
Mark in the music all vowels and diphthongs using the IPA method with greater speed and mastery.
Add extreme dynamics to vocal performances.
Qualify individual differences and limitations in singing technique.
Improve the tone, phrasing, and musicality of the first two songs through good posture, relaxation and natural singing sensations.
Demonstrate deeper knowledge of his/her voice ranges.
Perform at least four songs in a variety of different languages (English, Italian, German) and from different musical areas.
Employ normal breathing techniques and catch breath principles in the production of musical phrases.
Further practice is required to master this good breath control technique.
Sing one English and one Italian art song with confidence and proper use of the vocal instrument.
Deliver performances which reflect one's understanding principles of breathing, phrasing, and tone production learned.

Use good breath control in the production of tonal attacks and releases.

Demonstrate knowledge how relaxation techniques creates vocal freedom.

**Student Learning Outcomes:**

- Sing the following items from a given pitch a cappella: Sing a Major Scale ascending and descending
- Sing a melodic minor scale ascending and descending
- Sing a chromatic scale ascending and descending
- Major (M) 2-Des A minor (m) 2 -Des A m3-Des A m6-Des A

- Sing 3 solo art songs in English; sing 1 solo art song in a foreign language.

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### Advanced Vocal Production and Repertoire

**MUS124:**

1.0 Units

Continuation of group instruction for students who have completed three semesters of voice and can perform at an advanced level. Further develops advanced vocal and choral production in a variety of styles and techniques. Instruction includes advanced English and foreign language song literature. Practice outside of class required. Designed for both music majors and non music majors. Field trips are required.

**Requisites**

**Prerequisite**

- MUS123 - Advanced Voice

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### Transferability & General Education Options

**Transferable:**

Transferable to both UC and CSU

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### Weekly Lecture Hours:

1.0

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### General Education Plan:

**UC Comparable Transfer Courses**

**UC Comparable Transfer Courses**

**Santa Ana College - Shared Course**

- Shared Course with SAC

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### Learning Outcomes

**Course Objectives:**

Gain a deeper and comprehensive understanding of the skills necessary for the performance of vocal artistic music.

Self-exam for knowledge of specific strengths and weaknesses in vocal technique acquired up to this point.
Identify anger, fear, and confusion as the emotions of stage fright.
Channel these emotions in a positive way for better performances.
Gain an understanding of health problems related to singing including voice strain and vocal nodes.
Acquire an awareness of health issues which contribute to the proper care of the voice.
Improve the tone, phrasing, and musicality of the first two songs.
Control specific vocal faults: breathy tone, nasal tone, throaty tone, closed-jaw tone.
Perform various breath control exercises such as "hook", circle-arm breath, back breath expansion, and wide-snuff.
Acquire an understanding of how these techniques lead to increased breath control.

Demonstrate knowledge of specific techniques for developing proper vibrato and exercises to correct faulty vibrato speed.
Use forward placement in tone production by allowing resonance of the nasal passages.
Work further in the IPA method of marking vowels and diphthongs (not normally used or indigenous accent syllable in IPA).
Explore techniques at a deeper level that are used to discover and communicate the emotional content of the song as implied through the music, words, form, style, mood, tradition and phrasing.
Analyze exercises and techniques used to extend the vocal range.
Identify and incorporate various moods, including happiness, sadness, excitement, courage, anger, fear, love, hatred, and reverence, in his/her performance.
Perform at least five songs in a variety of different languages (English, Italian, German) and from different musical areas.
Present a performance, which reflects principles of breathing, phrasing, and tone production learned throughout the semester.

**Student Learning Outcomes:**

Sing the following items from a given pitch a cappella:
- Sing a Major Scale ascending and descending
- Sing a Melodic minor scale ascending and descending
- Sing a Harmonic minor scale ascending and descending
- Sing a Natural minor scale ascending and descending
- Sing 3 solo songs in English; sing 1 solo song in a foreign language.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours**
36.0

**Collegiate Choir**

**MUS126:**
1.0 Units

Mixed chorus for general interest singers. Rehearses and performs a variety of music, including classical, folk tunes, and songs from Broadway musicals. Each semester requires performance of a variety of new repertoire. Field trips are required.

**Requisites**

None

**Transferability & General Education Options**

Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Private Institution Comparable Transfer Courses**
- Private Institution Comparable Transfer Courses

**UC Comparable Transfer Courses**
- UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**
- Perform choral singing and vocal techniques, i.e. breathing, diction, tone production, intonation, rhythm, vibrato, tempo, balance, blend and sight singing, of various musical genre and style including popular music.
- Practice beginning sight singing skills of music from different era through ensemble singing
- Understand the role of the individual with the ensemble
- Practice good vocal techniques including breath support, diction, tone, dynamics, tempo, balance and blend
- Build necessary skills for successful technical and aesthetic performances
- Perceive greater awareness of other ensemble members and parts
- Understand the emphasis shift from proper technical execution to a musically ideal group sound
- Grow and develop a larger chamber choral repertoire with emphasis placed on mental aspect of live performance
- Fine tune and analyze performances from audio and video review
- Demonstrate proper preparation, stage presence and demeanor
- Manage the effects of stage fright
- Recognize personal growth techniques through review of individual and group performance(s)

**Student Learning Outcomes:**
- Acquire an understanding and knowledge of the artistic, rehearsal, and performance practices commonly associated with a wide range of folk, classical, and Broadway/music theater choral music styles.
- Demonstrate a working habit (i.e., performance caliber) in pronunciation and diction of English, German and Spanish.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours:**
54.0

**Concert Chorale**

**MUS127:**

1.0 Units

Rehearsal and performance of standard and current choral classic repertoire (Renaissance, Baroque, Classical, Romantic and Contemporary). Designed to train students in mixed ensemble singing. Public performance emphasized. Each semester requires performance of a variety of new and different repertoire. Designed for students who have basic singing skills. Field trips required.
Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Demonstrate an understanding of what is required for musical performance

Perform choral singing and vocal techniques

Demonstrate sight singing skills of music from different era through ensemble singing

Describe the role of the individual with the ensemble

Practice good vocal techniques including breath support, diction, tone, dynamics, tempo, balance and blend

Familiarize themselves with selected repertoire

Demonstrate necessary skills for successful technical and aesthetic performances

Demonstrate greater awareness of other ensemble members and parts

Understand the emphasis shift from proper technical execution to a musically ideal group sound

Grow in refinement for repertoire

Demonstrate a deeper understanding of appropriate stylistic interpretation for chosen repertoire

Identify the importance of proper preparation, stage presence and demeanor

Manage the effects of stage fright

Improve technique through individual and group review of performance(s)

Student Learning Outcomes:

Demonstrate an understanding and knowledge of the artistic, rehearsal, and performance practices commonly associated with a wide range of elementary to advanced level difficulty Renaissance through 20th/21st century choral literature.

Demonstrate a working (i.e., performance caliber) in the pronunciation, diction of English, German, French, Spanish, and Swahili.

Units & Hours

Minimum Units:

1.0

Maximum Units

1.0

Total Hours

54.0

Masterworks Chorale
MUS128:

1.0 Units
Rehearsal and performance of standard and current masterworks repertoire. Designed to train students in oratorio ensemble singing. Public performance emphasized. Each semester requires performance of a variety of new and different repertoire. Designed for students who have basic singing skills. Field trips are required.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Weekly Lecture Hours:
1.0

Learning Outcomes

Course Objectives:
Perform choral singing and vocal techniques
Demonstrate sight singing through ensemble singing
Identify the role of the individual with the ensemble
Practice techniques including breath support, diction, tone, dynamics, tempo, balance and blend
Familiarize themselves with repertoire
Demonstrate necessary skills for successful technical and aesthetic performances
Demonstrate an awareness of other ensemble members and parts
Understand the emphasis shift from proper technical execution to a musically ideal group sound
Increase and refine repertoire
Demonstrate stylistic interpretations appropriate for chosen repertoire
Identify the importance of proper preparation, stage presence and demeanor
Manage the effects of stage fright
Improve technique through individual and group review of performance(s)

Student Learning Outcomes:
Demonstrate an understanding and knowledge of the artistic, rehearsal, and performance practices commonly associated with a wide range of intermediate to advanced level difficulty Baroque through 20th/21st century masterworks literature.
Demonstrate a working (i.e., performance caliber) in the pronunciation, diction of English, German, and Latin.

Units & Hours
Minimum Units:
1.0

Maximum Units:
1.0
Total Hours
54.0

Chamber Choir
MUS129:

1.0 Units
Rehearsal and performance of chamber choir repertoire from various historical periods. Course designed for festival and concert performance. Each semester requires the performance of new repertoire. Field trips are required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Perform chamber choral singing and vocal techniques
Refine sight singing through ensemble singing
Demonstrate a higher awareness of an individual's role within the ensemble
Apply techniques including breath support, diction, tone, dynamics, tempo, balance and blend
Familiarize themselves with more chamber repertoire
Perform necessary skills for successful technical and aesthetic performances
Demonstrate a higher awareness of other ensemble members and parts
Mentally shift from proper technical execution to a musically ideal group sound
Develop a larger chamber choral repertoire
Place an emphasis on mental aspect of live performance
Fine tune and analyze performances from audio review
Identify the importance of proper preparation, stage presence and demeanor
Manage the effects of stage fright
Improve technique through individual and group review of performance(s)

Student Learning Outcomes:
Demonstrate an understanding and knowledge of the artistic, rehearsal, and performance practices commonly associated with a wide range of advanced Renaissance through 20th choral chamber music styles.
Demonstrate a working (i.e., performance caliber) in the pronunciation, diction of English, German, Spanish, Russian, Swahili, Korean, and Japanese.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
72.0

Class Piano I
MUS161:
1.0 Units

Group instruction for beginners emphasizing note reading, basic keyboard skills, chord patterns, and sight-reading. Practice outside of class required. Practice pianos available on campus. Required for music majors whose principal instrument is not piano.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

Learning Outcomes
Course Objectives:
Learn basic pitch notation
Find notes on a keyboard
Find the major five-finger patterns
Play musical pieces
Demonstrate exercises which present elementary concepts of rhythm, harmonization, hand position, and hand independence
Prepare pieces for in-class performance
Play repertoire which involves eighth-note counting methods, staccato and legato
Play styles, harmonization of melodies using tonic and dominant, and more independence between the hands
Prepare pieces for performance

Student Learning Outcomes:
Demonstrate keyboard notation, rhythmic and sight reading skills and basic primary chord patterns.
Identify and define basic musical terminology.
Identify, read and play basic melodies and primary chord patterns in the keys of C major and G major.
Perform selected solo pieces demonstrating the competencies for Level I.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0

Class Piano II
MUS162:

1.0 Units

Group instruction for those possessing basic piano skills but still classified as beginners. Emphasizes note reading, keyboard technique, chord patterns, sight-reading. Daily practice required. Practice pianos available on campus. Required for music majors whose principal instrument is not piano.

Requisites

Requisites:
Advisory

MUS061 - Basic Piano Skills

OR

Advisory

MUS161 - Class Piano I

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Review and perfect essentials of 5-finger and 2-handed keyboard technique

Read basic notation

Demonstrate 5-finger patterns and use of chord formulas

Harmonize additional keys

Demonstrate finger dexterity, hand independence and interpretive techniques

Prepare performance pieces for evaluation

Demonstrate mastery of required terminology

Count and work through difficult problems such as syncopation in performance pieces
Distinguish half and whole step differences between major and minor finger patterns

Incorporate new interpretive techniques of articulation and pedaling into their playing technique

Control new elements of technique into longer and more difficult study pieces.

Prepare performance pieces for evaluation

Demonstrate mastery of required terminology

Transpose keyboard patterns

Improvise harmonization of melodies

Read lead sheet style notation

Sight read

Play and count rhythms accurately

**Student Learning Outcomes:**

- Demonstrate continuing basic skills in accurate music reading of notational and rhythmic technique at the advanced beginning level.
- Demonstrate an ability to understand and perform fundamental chordal progressions, as well as selected major scales and fingering patterns.
- Perform selected solo pieces demonstrating the competencies for level II.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

36.0

**Class Piano III**

**MUS163:**

1.0 Units

Instruction for students who have completed two semesters of piano and are ready for the intermediate level. Emphasizes building technique, sight-reading, and performance. Daily practice required. Practice pianos available on campus.

**Requisites**

**Requisites:**

Advisory

*MUS162 - Class Piano II*

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**
Learning Outcomes

Course Objectives:
- Demonstrate techniques for learning repertoire, counting and performance of triplets and syncopation patterns
- Demonstrate techniques for major and minor keys for 5-finger exercises and basic chord progressions
- Sight read music including hand extensions of the 6th
- Improvise new accompaniment
- Demonstrate greater ability to move across keyboard in an expanded playing range
- Synthesize previously learned techniques into study pieces of greater complexity
- Demonstrate new fingering strategies which allow continuous playing by step across the keyboard
- Count and play in compound
- Use rhythms
- Demonstrate techniques of ensemble playing
- Prepare performance pieces for evaluation
- Demonstrate mastery of required terminology
- Sightread music including hand extensions of the 7th, octave and finger crossings with flat key progressions
- Demonstrate additional flat key progressions
- Apply practice strategies previously learned
- Apply correct interpretive techniques, including expressive indications, as designated in the score
- Prepare performance pieces for evaluation
- Demonstrate mastery or required terminology

Student Learning Outcomes:
- Demonstrate abilities necessary for assimilating skills requiring increased technique involving syncopation, compound rhythmic and intervallic complexities, fingering patterns for new major key scales, arpeggio execution and selected minor scales.
- Perform selected solo pieces demonstrating the competencies for Level III.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0

Intermediate Piano Repertoire I

MUS164A :

1.0 Units


Requisites
Requisites:
Advisory
MUS163 - Class Piano III

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Demonstrate:
Major scales, two-handed, 2 octaves in C,G,D,A,E,F,B,F#,D Major
Arpeggios: C,G,F, major and minor, 2 octaves, hands together
Understanding of major style differences between classical and romantic composition
Techniques for memorizing pieces of moderate length
Expanded knowledge of tempo and dynamic term
Improved sight reading ability
Intermediate proficiency with all pedals
Play advanced intermediate piano literature at an acceptable level of proficiency using the performance criteria stated in "Standards of Achievement"
Formulate a plan for learning a musical composition at an early intermediate level
Verbalize musical concept
Play expressively as well as accurately
Listen critically to others and to give helpful critique
Develop a daily practice routine that includes technical studies as well as repertoire
Connect the benefits of the practice of scales and arpeggios to the semantics of music
Acquire vocabularies use in music critique and the phenomenal they label
Memorize a song in the simple musical forms context
Use musical terminologies to communicate with musicians of other cultures and languages
Connect the usage of pedal to create various sound colors, pictorial analogy and human’s expression
Recognize simple musical form by visually exam musical score
Discover the relationship between metronomical rhythm and nature rhythm in human expression
Understand the "performance practice" concept, and it relationship with music history and styles in piano performance
Connect the discovering of one's own being and the pursuing of “fully-express” of it through piano performance
Student Learning Outcomes:
Demonstrate necessary skills emphasizing solo repertoire and advanced piano technique.
Demonstrate increased competency in sight reading, interpretation, and performance skills, including recognition of repertoire from various eras.
Demonstrate an ability to verbalize musical concepts, ability to play expressively and accurately, intermediate proficiency with all pedals.
Perform selected solo pieces demonstrating the competencies for Intermediate Level I.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

36.0

**Intermediate Piano Repertoire II**

**MUS164B:**

1.0 Units

Continuation of instruction for advanced intermediate level students. Emphasizes solo material, technique, sight-reading, and performance. Daily practice required. Practice pianos available on campus.

**Requisites**

**Requisites:**

*Advisory*

**MUS164A - Intermediate Piano Repertoire I**

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**UC Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**

Demonstrate:

- Major scales, two-handed, 2 octaves in C, G, D, A, E, F, B, F#, Db Major and Minor
- Arpeggios: C, G, F, Bb, D, A major and minor, 2 octaves, hands together
- Understanding of the major style differences between renaissance, baroque, classical and romantic compositions
- Expanded knowledge of tempo and dynamic term
- Improved sight-reading ability
- Intermediate proficiency with all pedals

Play advanced intermediate piano literature at an acceptable level of proficiency using the performance criteria stated in “Standards of Achievement”
Formulate a plan for learning a musical composition at an advanced intermediate level
Acquire a more advance command of techniques for memorizing pieces of moderate length
Verbalize a more complex musical concept
Play expressively as well as accurately within general performance practice style
Listen critically to others and to give helpful critique
Develop a daily practice routine that includes technical studies as well as repertoire
Connect the benefits of the practice of scales and arpeggios to the semantics of music and begin to make it a habit
Expand vocabulary used in music critique
Memorize a song in the simple and more complex musical forms
Expand collection and understanding of musical terminology to communicate with musicians of other cultures and languages
Gain a deeper understanding and command of the use of the pedal to create various sound colors, pictorial analogy and human expression
Recognize simple and more complex forms by visually examining a musical score
Gain a deeper understanding of the relationship between metronomical rhythm and natural rhythm in human musical expression
Gain a deeper understanding of the "performance practice" concept and its relationship with music history and styles in piano performance
Gain a deeper understanding of the continuous cyclical growth connection between the discovery of one's own being and pursuit of “full-expression” of it through piano performance

Student Learning Outcomes:
- Demonstrate necessary skills for emphasizing technical problems arising from advance intermediate piano repertoire.
- Demonstrate increased competency in major and minor scale as well as arpeggio articulation.
- Demonstrate increased competency in sight reading, interpretation, standard music terminology affecting performance, effective use of the metronome and its proper use in practice sessions.
- Perform selected solo pieces demonstrating the competencies for Intermediate Level II.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0

Musical Ensemble
MUS182:
1.0 Units
Study and performance of standard and contemporary music literature. Public concerts on campus and in community each semester. Concert tour/performance field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Beginning Classical Guitar

**MUS185:**

1.0 Units

Basic instruction in guitar technique and music nomenclature as related to performance of entry level solo and ensemble repertoire. Student must furnish nylon string guitar.

**Requisites**

None

**Transferability & General Education Options**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Transferable to both UC and CSU**

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Learning Outcomes**

**Course Objectives:**

Prepare for an audition practice rehearsal etiquette

Improve sight reading through ensemble performance

Describe the role of the individuals within the ensemble

Gain experience by performing different repertoire

Build necessary skills for successful technical and aesthetic performances

Increase awareness of other ensemble members and parts

Shift from a personal proper technical execution to a musically ideal group sound

Refine personal performance repertoire

Recognize various stylistic interpretations for selected repertoire

Demonstrate the importance of proper preparation. Stage presence and demeanor and managing the effects of stage fright

**Student Learning Outcomes:**

- Demonstrate knowledge of the artistic, rehearsal, and performance practices commonly associated with a wide range of intermediate to advanced level difficulty Baroque through 20th/21st century masterworks literature.
- Demonstrate a professional working etiquette in rehearsals, in a live performance or in a studio recording environment.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

54.0
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
- Play a new solo piece
- Acquire development of musicality through technique
- Demonstrate understanding of musical concepts, through informal performances
- Interpret dynamics and tempo markings
- Acquire the ability to play a simple solo composition in major and minor keys and chords produced by the C major scale
- Apply problem solving to technique development
- Use the rest technique
- Present a number in a performance
- Acquire the ability to play simple solo compositions and simple ensemble compositions in major and minor keys in a performance situation
- Understand the introduction to solo literature which uses key signatures
- Participate in a trio ensemble playing number
- Count meters and rhythmic notation
- Understand scales and scale patterns in various keys
- Read basic music notation
- Understand the development of musicality through technique
- Demonstrate understanding of the correlation between written notes and the strings
- Play right-hand arpeggio techniques
- Apply alternate stroking pattern techniques to various etudes and preludes
- Develop sight reading and key signatures
- Hold the guitar properly
- Acquire ability to listen critically and to evaluate performance of peers and concert artists
- Learn beginning sight reading techniques and chromatic scale
- Apply previously acquired musical concepts, through informal classroom performances
- Play music using alternate stroking patterns
- Listen critically and evaluate performance of peers and concert artists
- Practice previous skills
- Acquire a fundamental understanding of guitar’s finger-hand-arm technique
- Acquire the development of musicality through technique
- Gain the ability to listen critically and to evaluate performance of peers and concert artists
Student Learning Outcomes:

- Acquire basic didactic skills: reading staff notation, and counting.
- Learn one solo appropriate for a beginning guitar player, paying attention to rhythm, fingering, dynamics, phrasing and tempo.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0

Intermediate Classical Guitar
MUS186:

1.0 Units

Intermediate instruction in solo, duo and trio repertoire. Emphasizes technique studies and performance styles of 18th century music. Student must provide nylon string guitar.

Requisites

Requisites:
Advisory

MUS185 - Beginning Classical Guitar

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

- Demonstrate effective practice approaches to new solo and ensemble pieces
- Perform the Pujol arpeggio study accurately and with steady rhythm
- Perform the scales on the 5th string accurately and in steady rhythm
- Distinguish among stylistic elements of guitar literature from the 18th and 20th centuries
- Prepare and execute a performance in front of an audience.
- Apply a variety of rhythmic patterns on arpeggio and scale patterns
- Develop proper hand position and posture
- Define basic musical terms
- Incorporate these stylistic elements into the performance of this literature
Perform the first solo piece in front of the class with good posture, good hand positions, accuracy, steady tempo, and musicality.

Break the piece into formal units, work on rhythmic elements separately, and analyze the hand/finger positions.

Demonstrate knowledge of the major scale pattern.

Recognize signs and symbols pertaining to rhythm, pitch, dynamics, articulation, and tempo.

Recognize the notational elements of rhythm, pitch, articulation and tempo.

Identify the upper and lower number of the time signatures 4/4, 3/4, 2/4, and 2/2.

Demonstrate knowledge of the style considerations (ornamentation, rhythm, form, harmony, tempo) which are particular to guitar literature of the 18th century.

Perform pieces on midterm playing test with good posture, good hand position, accuracy, steady rhythm and musicality.

Experience with sight reading at a slow and steady tempo

**Student Learning Outcomes:**

- Acquire continued skills in reading above the fifth fret, technique development, scales, arpeggios and slurs and selected solo pieces necessary for such competencies.
- Learn one solo appropriate for an intermediate guitar player, paying attention to rhythm, fingering, dynamics, phrasing and tempo.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

36.0

**Advanced Classical Guitar**

**MUS187:**

1.0 Units

Instruction at the advanced level in solo, duo and trio repertoire. Emphasizes advanced technical studies and etudes and performance styles of 16th through 20th century music. Student must provide nylon string guitar.

**Requisites**

**Advisory**

*MUS186 - Intermediate Classical Guitar*

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses
Learning Outcomes

Course Objectives:
Superimpose more complex rhythmic patterns on arpeggio and scale patterns
Prepare and execute a performance in front of an audience.
Perform assigned pieces in front of the class with increased attention to interpretation, musicality dynamics, and rhythmic accuracy
Incorporate style considerations of the 18th and 20th centuries into performance of pieces
Identify and perform the above mentioned elements in the music
Perform the first solo piece in front of the class
Distinguish from among stylistic elements of guitar literature from the 18th and 20th centuries
Demonstrate knowledge of the major scale pattern
Demonstrate an understanding the meaning and stylistic interpretation of the time signatures 4/4, 3/4, 2/4, 2/2, 6/8, 9/8, and 12/8
Interpret musical signs and symbols for articulation style and performance direction
Identify and perform these elements in the music
Demonstrate an understanding of the issues, problems and appropriate practice techniques which relate to newly-assigned literature
Define notational elements of rhythm, pitch, articulation, and tempo
Demonstrate knowledge of the style considerations (ornamentation, rhythm, form, harmony, tempo) which are particular to guitar literature of the 16th, 17th, and 18th centuries
Experience with sight reading at a moderate and steady tempo
Distinguish among stylistic considerations (ornamentation, rhythm, form, tempo, harmony) which are particular to guitar literature from the 20th century
Use application of rhythmic accuracy, dynamics, and musical interpretation in a group setting
Demonstrate a refined sense of musicality as well as technical accuracy
Know how to break the piece into formal units, work on rhythmic elements separately, and analyze the hand/finger positions
Perform pieces on midterm playing test with increased attention to interpretation and musicality
Execute scale patterns at more refine caliber (rhythm, tempo, and swift fingering)
Refine proper hand position and posture
Incorporate these stylistic elements into the performance of this literature
Develop facility in arpeggio studies

Student Learning Outcomes:
Acquire and demonstrate abilities for assimilating skills requiring increased technique involving syncopation, compound rhythms and intervallic complexities, fingerings, slur and scale and arpeggio techniques. Additionally, selected solo pieces are neces
Learn one solo appropriate for an advanced guitar player, paying attention to rhythm, fingering, dynamics, phrasing and tempo.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0
Advanced Classical Guitar Technique and Repertoire
MUS188:

1.0 Units

Further develops advanced technique and solo performance through study of Renaissance, Baroque, and Classic ornamentation and various performance styles of 16th through 20th century music. Student must provide nylon string guitar.

Requisites

Requisites:
Advisory

MUS187 - Advanced Classical Guitar

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
1.0

General Education Plan:

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Perform assigned repertoire in front of the class with some demonstration of a more advanced articulation and chord activation skills.

Perform music with various chord activation styles including arpeggios, Style brise and Alberti bass.

Perform a piece of music with an understanding of stylistic considerations of performing Classical literature.

Perform music with a variety of articulation techniques: slure, ligados (ascending and descending) and double slure.

Perform two-octave scales with improved tone quality.

Demonstrate an ability to learn a newly assigned piece from the beginning to the end with less coaching from a teacher.

Demonstrate further facility in performance conventions of the Classical era literature.

Demonstrate an understanding of stylistic considerations of performing Romantic music.

Recognize what needs to be done to overcome the technical and interpretive problems and issues involved in learning three new solo pieces.

Perform assigned repertoire in front of the class which exhibits more advanced musicianship and interpretive skills.

Count and perform more rhythmically complex music using standard eighth-note and sixteenth-note counting methods.

Perform accurately the rhythmic music with dotted and double dotted notes.

Perform assigned pieces in front of the class with an exhibition of more advanced understanding of the stylistic conventions of the classical era.

Demonstrate understanding of issues in the stylistic conventions of performing the 20th-century guitar music which includes extended harmonies, polytonality, and complex rhythm.

Perform rest strokes and free strokes in the performance of group and solo literature.

Student Learning Outcomes:

Acquire and demonstrate abilities necessary from further advanced and solo performance practices through study of Renaissance, Baroque, and Classical, Romantic, and 20th century ornamentation, grace notes, slur technique, ascending/descending legatos,
Learn one solo appropriate for an advanced guitar player, paying attention to rhythm, fingering, dynamics, phrasing and tempo.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
36.0

Mathematics*

Mission

The SCC mathematics department's mission is to equitably prepare our students to pursue their educational and professional goals amid an evolving global community. Students will leave our program with knowledge of and an appreciation for mathematics.

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Course

MATH080 - Intermediate Algebra
MATH085 - Intermediate Algebra with Integrated Support
MATH086 - Intermediate Algebra for Statistics and Liberal Arts
MATH105 - Mathematics for Liberal Arts Students
MATH140 - College Algebra
MATH150 - Calculus for Biological, Management, and Social Sciences
MATH160 - Trigonometry
MATH170 - Pre-Calculus Mathematics
MATH171 - Precalculus and Trigonometry
MATH180 - Single Variable Calculus I
MATH180H - Honors Single Variable Calculus I
MATH185 - Single Variable Calculus II
MATH199 - Mathematics Independent Study
MATH203 - Fundamental Concepts of Elementary Mathematics
MATH219 - Statistics and Probability
MATH219H - Honors Statistics and Probability
MATH220 - Statistics and Probability with Integrated Review
MATH280 - Intermediate Calculus
MATH287 - Introduction to Linear Algebra and Differential Equations
MATH290 - Linear Algebra  
MATH295 - Differential Equations  
MATHN40 - Intermediate Algebra Support Course  
MATHN41 - Precalculus Support Course  
MATHN43 - Statistics and Probability Support Course  
MATHN73L - Math Review

Programs  
Mathematics AS-T  

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Nutrition  

NUTR115:  

3.0 Units  
A study of scientific concepts of nutrition relating to the functioning of nutrients in the basic life process. Emphasis is on individual needs, food sources of nutrients, current nutrition issues and diet analysis.

Requisites  

Requisites:  

Prerequisite  

ENGL100 - Freshman Composition with Integrated Support

Outcomes  
Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.  
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite  

ENGL101 - Freshman Composition

Outcomes  
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.  
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

OR

Prerequisite  

ENGL101H - Honors Freshman Composition

Outcomes  
Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.  
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options  

Transferable:  
Transferable to both UC and CSU
Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area E1: Lifelong Learning

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify and examine the traditional biological and biochemical facts as well as recent clinical and/or epidemiological data using the scientific method.

Examine undernutrition throughout the world and outline possible solutions.

Identify biological and psychological factors that affect food choices.

List the major classes of nutrients.

Describe the 3 basic physiological or anatomical functions of nutrients in the body.

Describe how consuming too much or too little of a nutrient can affect health.

Define and list the steps of the scientific method.

Describe hypothesis, sample size, double blinded study.

List the steps of the scientific method.

List 3 types of scientific studies that are used in the study of nutrition.

Identify valid versus questionable nutrition information.

Utilize the scientific method to evaluate a scientific research article.

Identify and utilize food label information.

Explain what dietary standards, such as the Dietary Reference Intakes, are and how they are used.

Explain the goals of the Dietary Guidelines and current recommendations.

Describe the MyPlate dietary guidelines and explain how they can be used in selecting a healthy diet.

Explain what the Exchange Lists are and how they can be used to plan diets.

List and explain the types of information provided on food labels.

List and explain the components of a nutritional assessment.

Describe the sequence and digestive process of a meal as it travels through from the oral cavity through the anus.

Explain how the pancreas, liver, and gall bladder function in digestion.

Describe how and where the digestion of carbohydrates, lipids, and proteins takes place.

Explain the difference between the absorption and transport of water-soluble and fat-soluble nutrients.

Describe how absorbed nutrients can be used by body cells.

Describe how waste products can be eliminated from the body.

Identify the major sources of carbohydrates in the food supply.

Explain how the structure of simple carbohydrates is related to that of complex carbohydrates.
Describe how carbohydrates are used for fuel.

Explain the concept of nutrient density and how it applies to added simple sugars.

Describe the benefits of a high fiber diet.

Explain the recommendations for carbohydrate intake for the general population.

List the uses of carbohydrates in food processing.

Identify food sources of saturated, monounsaturated, polyunsaturated, and trans fatty acids and cholesterol in the diet.

Describe the difference between saturated and unsaturated fatty acids.

Describe the functions of lipids in the body.

Explain how the type and amount of dietary fat affects the risk of heart disease and cancer.

Differentiate between HDL and LDL cholesterol and explain the effects of each in relation to cardiovascular disease.

Explain the recommendations for fat intake for the general population.

Identify the major sources of plant and animal protein in the food supply.

Describe how the structure of protein relates to that of amino acids.

Explain the functions of protein in the body.

Describe the relationship between genes and protein.

Describe situations when protein would be used for fuel.

Define limiting amino acid in terms of the diet and in terms of protein synthesis in the body.

Explain why health problems arise when protein is deficient in the diet and which life stage groups are most vulnerable.

Identify different types of vegetarianism and meal planning methods to ensure adequate intake.

List the health benefits of exercise.

Explain why a lifestyle that includes regular aerobic exercise reduces the amount of work required by the heart on a day-to-day basis.

Describe how the amount of oxygen that is available to the muscle affects energy production.

Explain what is happening when an athlete “hits the wall”.

Discuss how duration, intensity, and training affect the sources of fuel that are used for activity.

List the components of a good exercise program.

Describe the amounts and types of fluids that athletes should consume before, during, and after various activities.

Propose a diet for an athlete. Be sure that it meets the recommendations for carbohydrate, fat, and protein.

Explain the principle of energy balance.

Differentiate fact and opinion and evaluate the accuracy of information presented.

List and explain the components of energy output.

Describe methods of assessing body weight and body composition.

Describe the health risks associated with excess body fat.

Explain the role of genetics and environment in determining body weight.

Describe components of a good weight management program.

Differentiate between unrealistic and legitimate claims for weight loss products or programs.

Recognize the hazards of fad diets.

Describe the eating disorders anorexia nervosa and bulimia nervosa.

Define the term vitamin.
Discuss the reasons that both deficiencies and excesses of vitamins can be unhealthy.

Describe some of the potential impacts of modern food processing on the vitamin content of foods.

Explain the purpose of the DRIs.

List the general functions of each of the water-soluble vitamins and identify good food sources of each.

Explain why adequate folate is important during pregnancy.

Describe the functions of vitamin C in the body.

Explain what an antioxidant does.

List food sources and functions of fat soluble vitamins A, D, E, and K.

Explain why it is recommended that we meet our vitamin needs with food, not supplements.

Explain what phytochemicals are and how they impact on human health.

List the pros and cons of dietary supplements.

Describe the functions of water in the body.

Define the terms mineral and trace element.

List dietary factors that affect mineral bioavailability.

List the major sources of sodium and potassium in the diet.

Describe the major functions of electrolytes in the body.

Explain the relationship between diet and hypertension.

List the major plant and animal sources of dietary calcium.

Describe the major functions of calcium in the body.

Explain the relationship between calcium and osteoporosis.

Explain why it is difficult to determine exact requirements of many of the trace elements.

List the major plant and animal sources of dietary iron.

Explain dietary factors that affect iron bioavailability.

Describe the functions of iron, copper, and zinc.

List antioxidant minerals and explain how they function in antioxidant defenses.

Describe different foodborne illnesses and their causes.

Identify procedures used to limit foodborne illness.

Discuss functions for using chemical additives in foods.

Understand the reasons behind pesticide use and possible health complications.

Compare the nutrient needs of a woman before pregnancy to her needs during pregnancy and lactation.

List dietary and other lifestyle factors that increase risk to mother and fetus.

Describe the recommendation for feeding an infant from birth to twelve months of age.

Describe how growth charts are used and why.

Explain how nutrient intake during childhood can affect the incidence of chronic disease later in life.

Explain how nutrient intake during childhood can affect the incidence of chronic disease later in life.

Explain how to introduce solid food while monitoring for food allergies.

Compare the effects of sexual maturation on nutrient needs in boys and girls.

Plot a child's growth on a growth chart and explain what it means.
Explain how children’s psychological needs affect their nutrient intake.

Explain how alcohol consumption affects nutritional status.

Describe how fast food can be part of a healthy diet.

Explain how nutrition can affect aging.

Discuss why a nutrient dense diet becomes more important as we grow older.

Explain why it is difficult to define precise nutrient requirements for the aging population.

Describe how the physiological and socioeconomic changes that accompany aging affect nutrition.

List the nutrients that provide energy.

**Student Learning Outcomes:**

- Evaluate the roles of the basic components of nutrition for health promotion and disease prevention.
- Analyze and identify credible research on nutrition information.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Food and Culture**

**NUTR120:**

3.0 Units

A multi-cultural perspective on traditional and contemporary food choices. The class considers customs associated with food in relation to religion, health/medicine, human survival, and symbolism. The impact of socio-economics, historical events, population movements, and geography are also discussed.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area F2: Physical Activity

**CSU GE - Plan B**

Area E1: Lifelong Learning

**IGETC - Plan C**

Area 3B: Humanities
Area 4: Social and Behavioral Sciences

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Define key terms.
Consider future trends.
Define terms.
Examine the relationship between food and health.
Examine the relationship between food and performance.
Examine the role of food in religious practices.
Evaluate the historic, geographic, economic, ethnic and religious impact on the development of traditional food habits and patterns.
Provide a general overview of the relationship between food and culture.
Evaluate the historic, geographic, economic, ethnic and religious impact on the development of traditional food habits and patterns.
Evaluate the historic, geographic, economic, ethnic and religious impact on the development of traditional food habits and patterns.
Evaluate the role of food in religious practices.
Evaluate the ethnic distribution patterns of major groups of immigrants and consider the variation in degrees of assimilation in America and the impact on cultural pluralism.
Critically analyze adaptations of food habits in modern culture.
Examine and explore the nutritional status of common foods.
Evaluate the historic, geographic, economic, ethnic and religious impact on the development of traditional food habits and patterns.

Student Learning Outcomes:
Analyze and evaluate the role of culture in food choices.
Analyze and evaluate the role of food with regard to health across differing cultures.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Natural Sciences

ASTR100L - Astronomy Laboratory
ASTR112 - Introduction to Cosmology
BIOL109 - Fundamentals of Biology
BIOL109H - Honors Fundamentals of Biology
BIOL109HL - Honors Fundamentals of Biology Laboratory
BIOL115 - Concepts in Biology for Educators
BIOL139 - Health Microbiology
BIOL229 - General Microbiology
BIOL239 - General Human Anatomy
PSYC200 - Introduction to Biological Psychology
WATR107 - California Water Resources

Health and Wellness

OAP200:

72.0 Hours

Provides information and discussion related to current and relevant health and wellness topics. Students will research techniques, decision making, and communication skills to enhance learning. Open Entry/Open Exit.
Requisites
Requisites: None

Learning Outcomes
Course Objectives:
Identify the role of ethical behavior and learn responsibilities as related to health and wellness.
Describe self-awareness, become informed, research and information processing skills as they relate to current health and wellness topics, issues and/or concerns.
Apply appropriate problem-solving strategies and critical thinking skills to assist with decision making in health-related topics.

Student Learning Outcomes:
- Demonstrate an increased awareness for health and wellness.
- Apply concepts related to staying mentally sharp and physically well.

Hours
Total Hours
72.0

Music Arts for Older Adults
OAP457:

72.0 Hours

Provides a positive framework for developing and enhancing music appreciation, vocal and instrumental skills. Emphasis will be on activities designed to encourage creative expression. Open Entry/Open Exit.

Requisites
Requisites: None

Learning Outcomes
Course Objectives:
Develop an appreciation for music and its related art fields
Increase participation in group experiences
Increase motor coordination
Understand the therapeutic value of music
Play simple rhythm instruments
Develop individual and group vocal skills
Develop an understanding of music as related to history
Enhance listening skills
Utilize music as a relaxation technique
Increase creative skills
Improve memory through utilization of songs, poems, melody recognition and discussion
Appreciate varied forms of music
Develop self-confidence

Student Learning Outcomes:
- Demonstrate an understanding of the elements of music such as rhythm, melody, harmony, and tempo.
- Demonstrate an ability to perform music at a level appropriate to the class.
Hours
Total Hours
72.0

Creative Cooking for Older Adults
OAP518:

72.0 Hours

Enhances awareness of current cooking techniques, basic nutrition, and consumer awareness. A variety of cooking appliances and methods are utilized. Open Entry/Open Exit.

Requisites

None

Learning Outcomes

Course Objectives:
Explain the use of a food guide and the importance of balanced meals
Demonstrate an understanding of information on food packages and labels
Summarize the importance of protein in the diet
Describe the nutritional contributions of fruits and vegetables to the diet
Describe the use of baking powder and soda in combination with other ingredients to create biscuits, muffins and breads
Demonstrate knowledge of advertised specials and seasonal buys
Recognize meat substitutes
Demonstrate knowledge of the following:
Explain the use of water (steam), eggs, and leavening agents when making bread
Develop a grocery shopping list based on a planned menu
Tell how to prepare wholesome snacks and appetizers
Explain how to substitute inexpensive ingredients for more expensive ones
Discuss skills for eating away from home
Identify complete and incomplete proteins and their sources
List methods of international food preparation
Select cooking products and methods that conserve energy
Soup by itself can be a meal
Select the proper foods to meet the needs of older adults
Compare the pros and cons of using fresh, frozen, and canned fruits and vegetables
Demonstrate knowledge of safe food handling and storage
Give examples of recipes for nutritious desserts including simple, fancy, traditional, and exotic choices
Give examples of quick and convenient preparation methods
Leftovers may be used to advantage in soups
Identify wholesome snacks and appetizers
Cost of soup ingredients can vary greatly
Explain how to buy, store, and prepare fruits and vegetables in order to maintain nutritional value and taste appeal

Demonstrate understanding of the purpose of breads in the diet and the history of ethnic breads

**Student Learning Outcomes:**
- Identify the components of a balanced diet and develop a healthy menu plan.
- Explain various cooking techniques and the basic elements of nutrition.

**Hours**
**Total Hours**
72.0

**Introduction to Keyboarding, Basic Windows and Navigating the Internet**

**OAP800:**

- **72.0 Hours**

Provides introductory instruction for keyboarding by touch and learning MS Windows. Introduces students to Windows: navigation, views, commands, file management, desktop customization and simple Accessory programs. Introduces students to the Internet. Topics include types of Internet connections, research and data retrieval techniques, and e-mail. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

- Explore Windows, navigation, views, commands, desktop customization, and simple programs.
- Learn Keyboarding by touch and Learn MS Windows
- Use mobile device technology

**Student Learning Outcomes:**

- Demonstrate basic touch-typing proficiency
- Demonstrate basic MS Windows, OS navigation and organizational skills.
- Utilize mobile technology and social media tools

**Hours**
**Total Hours**
72.0

**Seminar for Older Adults**

**OAP802:**

- **72.0 Hours**

Provides information and a discussion forum related to the examination of concerns common to older adults. Discovers specific needs and interests and examines current news events as interpreted through historical background and current political/regional developments and changes. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**
Explore and identify problem-solving techniques
Discuss impact of current events on older adults
Explore and discuss: global, national, state, and local issues
Apply methods for increasing positive communication
Appreciate each person's uniqueness and similarities
Explore issues/interests for the older adult, including but not limited to: retirement living, budget, health, volunteer work, obtaining new skills, recreational options (travel, arts, and crafts, etc.), and brain fitness
Identify problems and establish priorities

**Student Learning Outcomes:**
- Communicate how the ideas and topics discussed in class relate to their personal lives.
- Demonstrate maintenance or improvement of effective verbal and nonverbal communication skills.

**Hours**

**Total Hours**
72.0

**Manipulative Skills for Older Adults**

**OAP823:**

72.0 Hours

Concentrates on improvement of motor skills and decision making through utilization of a variety of art media and techniques. Provides opportunities for analysis and decision making skills while exercising basic manipulative skills. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Demonstrate an understanding of the use and types of design motif
- Demonstrate an understanding of the concept of mass as the inner structure as well as the visible shape of objects
- Identify the physical and psychological properties of color
- Explain the concepts of repetition, opposition, transition and variation
- Identify the many different associations in response to a change in value
- Recognize line as an eye-mind concept, formed by following visual stimuli in an attempt to organize them into an order
- Identify line in two-dimensional and three-dimensional work
- Describe and apply color theory
- Explain the methods for achieving variation of line
- Recognize value in a variety of media to achieve a desired mood
- Recognize value as the contrast between light and dark
- Recognize simple and complex patterns which are natural and man made
- Recognize the tactile quality of surface
- Demonstrate the ability to visually and manually follow actual and implied line
- Explore materials based on an understanding of their inherent characteristics
Examine a sense of space in his/her work through overlapping shapes, graying of colors, size variation, converging lines and vertical positioning

Recognize the underlying structures of art

**Student Learning Outcomes:**
- Demonstrate creative expression through art.
- Describe the maintenance or improvement of motor skills through the creation of art projects.

**Hours**

**Total Hours**

72.0

**Open Enrollment**

The policy of the Rancho Santiago Community College District and Santiago Canyon College is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the college, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to section 55003 of division 6 of title 5 of the California Code of Regulations.

**Fundamentals of Public Works**

PBLC050:

3.0 Units

Provides basic knowledge of Public Works, including history and development, department functions, careers opportunities and future trends. Emphasis is placed on math problems, communication and computer application.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**
- Identify the importance of storm water regulations and compliance
- Evaluate the basic functions of Administration Services
- Evaluate the basic functions of Engineering Services
- Acknowledge the course content and expectations
- Evaluate the basic functions of Maintenance and Operations Services
- Distinguish proper report writing
- Interpret basic math principals for routine Public Works functions
- Assert the importance of construction site safety and assessment
- Analyze the trends and direction of Public Works
- Determine the purpose of Public Works and available careers in the field
Student Learning Outcomes:

- Depict organizational structure, services and procedures of Public Works.
- Assess career opportunities and future trends in Public Works.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Infrastructure Construction and Maintenance

PBLC051:

3.0 Units

Focuses on the infrastructure construction and maintenance processes of public facilities including equipment and material procurement, scheduling, financing, project management, and permitting.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

- Recognize the composition of various construction materials including but not limited to soil, rock products, piles, timber, asphalt concrete and portland cement concrete
- Compute and analyze the costs that result from equipment ownership and operations
- Evaluate construction management concepts related to scheduling and controlling
- Recognize asphalt mix production related to batch plants, drum mix plants and placement equipment including but not limited to haul trucks, asphalt distributors, pavers and compactors
- Recognize concrete mix production related to ready-mixed, central-mixed and placement equipment including but not limited to buckets, pumps, consolidating and finishing
- Identify types of Public Works construction and maintenance projects
- Compute unit conversions, areas, volumes, slopes, percentages and cost functions
- Manage and prioritize infrastructure construction and maintenance projects
- Evaluate project site conditions and determine quantities involved, haul distances and grades for all segments of hauls
- Evaluate local, state and federal safety regulations related to Public Works construction
- Identify the purpose and complete production rates of various equipment related to earth moving including but not limited to dozers, scrapers, excavators, graders and trucks
Evaluate local, state and federal environmental regulations related to Public Works construction

Identify the purpose and complete production rates of various equipment related to compaction and stabilization including but not limited to rollers, compactors and stabilizers

Analyze infrastructure distresses

**Student Learning Outcomes:**
- Recognize equipment and materials of Public Works construction projects.
- Evaluate a Public Works infrastructure inventories.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Plan Interpretation and Cost Estimating**

**PBLC061:**

3.0 Units

Reading and interpreting construction plans related to public works infrastructure projects, including roadway, water, sewer, storm drain and traffic improvements. Related concepts include basic mathematical formulas and conversions, construction materials and equipment, surveying, project management, contract documents, costing, quantifying and computer applications.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**

Acknowledge the course content and expectations.

Interpret basic mathematics principles for routine public works functions.

Determine types, properties and applications of materials, including earthwork calculations.

Evaluate survey data on construction plans, including slopes and grades.

Recognize heavy construction equipment and standard production rates.

Identify pavement distresses and recommend remedies.

Reference and understand standards specifications and plans.

Recognize various types of plans including disposition, grading, road, water, sewer, storm drain, channelization, landscape/irrigation and traffic control.

Evaluate plan and profile views, and correlate typical sections, details and standard plans.
Understand symbols, abbreviations and notes used on plans.

Utilize current cost data to determine potential construction costs, create detailed cost estimates.

Utilize computer applications to perform calculations and create detailed cost estimate.

Understand project management concepts related to scheduling and controlling resources.

**Student Learning Outcomes:**

- Explain construction documents for a selected public works project and identify the components within the plan.
- Quantify materials and cost out a selected public works project, or component within a project, within 10% accuracy.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0

**Construction Materials and Testing**

**PBLC063:**

3.0 Units

Provides basic knowledge properties of methods of use and testing procedures of construction materials used in Public Works. Common materials of construction include portland cement concrete, masonry, timber, iron, steel, plastic, soil and bituminous materials. Optional field trip may be offered.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

- Determine types, properties, applications and testing procedures of cementitious materials
- Determine types, properties, applications and testing procedures of masonry
- Evaluate product standards of various construction materials
- Evaluate construction material types and properties
- Determine types, properties, applications and testing procedures of aggregates and soils
- Determine types, properties, applications and testing procedures of iron and steel
- Determine types, properties, applications and testing procedures of timber products
- Determine types, properties, applications and testing procedures of plastics
- Determine types, properties, applications and testing procedures of bituminous materials
**Student Learning Outcomes:**
- Analyze construction material properties and applications
- Recognize proper testing procedures of construction materials

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Environmental Management**

**PBLC067:**
3.0 Units

Provides an overview of the processes and requirements to obtain environmental clearance for Public Works construction projects, including other non-environmental related permits. Emphasis is placed on studies as they relate to impacts and mitigations.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Recognize environmental impacts and mitigation measures related to air quality
- Recognize environmental impacts and mitigation measures related to public services
- Analyze the process and requirements for obtaining the various local permits
- Define terminology and authority/responsibilities of the agency and developer/contractor
- Recognize environmental impacts and mitigation measures related to aesthetics
- Recognize environmental impacts and mitigation measures related to biological resources
- Recognize environmental impacts and mitigation measures related to agricultural resources
- Recognize environmental impacts and mitigation measures related to hazards and hazardous materials
- Analyze the process and requirements for obtaining local, county, state, federal and private construction encroachment permits
- Define the process and requirements for obtaining permit
- Define the process and requirements for obtaining permit
- Recognize environmental impacts and mitigation measures related to geology and soils
- Recognize environmental impacts and mitigation measures related to hydrology and water quality
- Recognize environmental impacts and mitigation measures related to greenhouse gases
Specify the federal review and permit approval process

Recognize environmental impacts and mitigation measures related to noise

Define the process and requirements for obtaining permit

Recognize environmental impacts and mitigation measures related to transportation and traffic

Recognize environmental impacts and mitigation measures related to land use and planning

Specify the state review and permit approval process

Recognize environmental impacts and mitigation measures related to mineral resources

Recognize environmental impacts and mitigation measures related to recreation

Recognize environmental impacts and mitigation measures related to population and housing

Recognize environmental impacts and mitigation measures related to utilities

**Student Learning Outcomes:**

- Identify permit and environmental requirements.
- Evaluate effective compliance measures for permits and environmental requirements.

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**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

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**Fundamentals of Storm Water Management**

**PBLC068:**

3.0 Units

Provides basic knowledge of regulatory storm water discharge permits administered by Regional Water Quality Control Board. Emphasis is placed on permit compliance requirements for contractors, business owners, residents and government agencies.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

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**Learning Outcomes**

**Course Objectives:**

- Define regulatory stormwater permit terminology and regional plans
- Analyze permit compliance requirements related to dewatering activities
- Analyze permit compliance requirements related to minimal discharge activities
- Analyze permit compliance requirements related to construction activities
Analyze permit compliance requirements related to industrial activities
Analyze permit compliance requirements related to scrap metal recycling activities
Analyze permit compliance requirements related to large municipal activities
Analyze permit compliance requirements related to small municipal activities

Student Learning Outcomes:
- Analyze the regulatory requirements for stormwater permits.
- Evaluate effective compliance measures for stormwater requirements.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Green Infrastructure Construction
PBLC069:
3.0 Units

Presents practice of alternative methods for stormwater management. Practices to maintain healthy waters, provide environmental benefits and support sustainable communities while providing flood mitigation, energy use reduction and air quality management.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
- Identify successful stormwater management projects
- Interpret Federal, State and Local stormwater management requirements
- Compare green techniques to effectively managing stormwater
- Assess stormwater impacts to air quality
- Assess stormwater impacts to habitat and wildlife
- Assess stormwater impacts to water quality
- Define the needs and benefits for stormwater management
- Assess stormwater impacts to energy and climate change
- Assess stormwater impacts to the community
- Evaluate available stormwater management resources
Student Learning Outcomes:

- Analyze the environmental impact of stormwater pollution.
- Evaluate alternative approaches to manage stormwater.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Construction Inspection

PBLC070:

3.0 Units

Certification focuses on inspection techniques and procedures for examining materials and evaluating methods used in Public Works construction projects. Emphasis is placed on evasive compliance with contract documents.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

- Assert the importance of maintaining various records and reports accurately
- Recognize proper landscaping and irrigation techniques
- Identify proper public convenience, public safety and construction safety procedures
- Define terminology and standard inspector procedures
- Determine proper earthwork construction methods
- Determine proper tunneling and jacking techniques
- Evaluate miscellaneous construction products and applications
- Identify proper compliance by verifying conformance of work
- Determine electrical terms and devices
- Recognize proper surveying techniques and interpretation of stakes
- Determine proper concrete construction methods
- Acknowledge the course content and textbook
- Evaluate proper pipeline construction methods

- Assert the importance and responsibility for protecting public and private improvements
Determine proper street surfacing construction methods

Determine proper sewer and stormdrain construction methods

**Student Learning Outcomes:**
- Interpret specification when inspecting Public Works construction projects.
- Demonstrate effective communication skills in Public Works construction projects.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Contract Administration**

**PBLC074:**

3.0 Units

Presents techniques, methods and processes used to manage Public Works construction projects. Emphasis placed on planning, scheduling, execution, controlling and closure, and evaluation of extra work, claims, disputed work and project documentation.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Delineate the project advertisement and bidding process
- Evaluate techniques to measure project progress and make necessary adjustments, including resource leveling
- Manage the flow of information between the agency and public
- Derive basic principals used to help interpret and resolve problems
- Define terminology and authority/responsibilities of the agency and contractor
- Illustrate scheduling methods to logically analyze construction projects
- Recognize the importance of maintaining accurate and detailed records and reports
- Reiterate contractor’s safety obligations
- Assess types of contracts and liability
- Recognize when to accept the work and issue final payment
- Identify the approval process for payment requests
- Assert the importance of subcontracting
Analyze the qualitative requirements of the project, specifications and drawings
Recognize the importance of identifying, assessing and prioritizing risks
Distinguish types of bonds and insurance coverages
Recognize the importance of prepurchasing materials and equipment

**Student Learning Outcomes:**

- Analyze construction management processes and their impacts on cost and duration.
- Demonstrate the ability to assert the importance of accurate and detailed record keeping.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Principles of Project Management**

**PBLC080:**

3.0 Units

Utilizing project planning tools and techniques, learn how to define, plan, execute, and deliver projects of all types and sizes. Emphasizes practical application using case studies to organize, schedule, and manage projects effectively. Industry guest speakers included.

**Requisites**

**Requisites:**

**Anti-Requisite**

**BUS090 - Principles of Project Management**

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

- Describe purpose and objectives of project management
- Identify and define project management terminology
- Identify desired outcome and determine scope of a project
- Describe the importance of project schedules
- Define basic principles of cost management and resource planning
- Define principles of project risk management and performance reporting
- Describe components of a project closure report, and illustrate processes for post implementation project review
- Identify skills and qualifications necessary to be a successful project manager, and describe the roles and responsibilities of a project manager
Identify and discuss methods for motivating project team members, and illustrate methods for effective performance evaluation of project team members

Compare and contrast management and leadership, and describe effective techniques for delegation

Describe reasons and methods effective project communications, and explain forms of information distribution

Define activities required to create schedules

Demonstrate ability to estimate activity duration and activity sequencing

Define basic principles of cost management and resource planning

Describe the challenges and benefits of creating a diverse work team

Illustrate guidelines for creating a constructive diverse climate

Student Learning Outcomes:

Create an effective plan and schedule for a business project.
Describe techniques used to monitor, control, and measure performance of a project in progress.
Analyze the relationship between timing, costs, and resources in a business project.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Code Enforcement Officer

PBLC085:

3.0 Units

This course is designed to provide academic and professional training for code enforcement personnel and/or individuals seeking employment in Public Sector Agencies such as Public works, Planning & Building, Community Development, and any municipal agency that provide code compliance dealing directly with the public. Course topics will include, Role of a Public Service employee, interdepartmental functions; Code Enforcement Officer training and inspection protocols; Understanding Public Safety Standards; Ethics and Legal Aspects; and a complete review of compliance enforcement tools used currently used in municipal government. An overview of the Health and Safety Code, International Code Council Property Maintenance and Zoning will be covered in this course.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
List course policies and procedures, contact information, student advice for successful completion of the course, and referrals to student assistance programs

Examine the role of a public service employee and today's perception and standards
Define and recognize ethical behavior for enforcement officers

Examine policies, procedures, industry code of ethics and universal ethical values

Describe the differences of municipal departments and how they function.

Illustrate how to foster, create and develop inter-agency task forces, foster community engagement, collaboration, and neighborhood action programs.

Employ best practices for promoting a code enforcement agency, marketing programs and using diplomacy when interacting with the community.

Examine the law and court decision of illegal inspections and search and seizures

Apply professionalism in the field of inspections through simulations and discuss prevention of accusation of harassment

Illustrate proper photograph and preservation of evidence techniques

Utilize different methods of documenting evidence and identify common violations

Distinguish the differences between residential inspections and commercial buildings

Learn basic officer safety technique to safeguard themselves while dealing with the public out in the field

Identify standard industry best practices relating to writing investigative reports

Practice and demonstrate clear concise writing documenting criminal violations, and detailing observations in writing

Learn, examine and prepare requirements and best practices relating to successful resolution of enforcement cases in civil, criminal, and administrative environments

Examine rules pertaining to inspection warrants

Recall how to prepare a warrant affidavit and warrant document

Identify and understand when to apply administrative or civil legal remedies including receiverships, civil penalties, cost recovery and injunctions

Gain an understanding of a typical city or county planning department, the history or zoning laws, plan reviews and city, county general plans

Examine the planning process including administrative, political and community relations factor

Examine real plans, zoning maps, and actual scenarios

Understand the history, legal and code sections of the state substandard housing regulations

Identify substandard housing conditions and apply code sections

Define the most common Health and Safety Codes used in the field

Identify commonly used International Code Council Property Maintenance code sections to apply under structural and dangerous constructions and maintenance violations

Identify commonly used International Code Council Zoning code sections to apply to certain planning and zoning violations

Give examples of the role the California Building Code plays in all disciplines

Identify common violations, code requirements and hazards encountered in the field

**Student Learning Outcomes:**

Identifying the differences and job functions of other professionals to support and assist them in their occupation.

Comprehend and effectively use the Health and Safety, California Building, Property Maintenance, and Zoning Code sections to enforce basic and common violations observed in the field.

Describe and apply ethics, basic inspection protocol, and laws as it pertains to a Code Enforcement Officer.

**Units & Hours**

**Minimum Units:**

3.0
Maximum Units
3.0

Total Hours
54.0

Basic Code Enforcement Officer Module 1
PBLC086:

1.0 Units

This basic code enforcement class is designed to provide standardized academic and professional training for current California code enforcement officers or individuals seeking employment as a code enforcement officer. Course topics include enforcement ethics, inspection best-practices, planning and zoning, basic construction concepts, vehicle abatement, right of entry, inspection warrants, documenting investigations, and legal aspects of criminal, civil, and administrative case preparation. The Health and Safety Code 17920.3 will be covered in this course.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.0

Learning Outcomes
Course Objectives:
POST certified instructors will examine the legal environment and use of force for self-defense through case studies, scenario practice, and non-physical examples of self-defense and preparedness

Examine real plans, zoning maps, and actual case scenarios
Identify vehicles and determine ownership
Learn, examine and prepare requirements and best-practices relating to successful resolution of enforcement cases in civil, criminal, and administrative environments
Role-play and practice coping with non-compliant, hostile, or violent subjects
Examine policies, procedures, industry code of ethics, and universal ethical values
Examine officer safety methods for law enforcement based on POST training and law enforcement best-practices
Gain an understanding of a typical city or county planning department, the history of zoning laws, basic plan review, and California general plans
Examine the planning process including administrative, political, and community relations factors
Demonstrate a working knowledge of course policies and procedures, contact information, student advice for successful completion of the course, and referrals to student assistance programs
Complete a standardized examination based on the course topics with a focus on industry standards and best-practices
Act with professionalism in the field and prevent accusations of harassment
Examine the verbal and non-verbal interpersonal behaviors associated with enforcement related communication
Demonstrate a working knowledge of current administrative or civil legal remedies including receiverships, civil-penalties, cost-recovery, and injunctions
Examine the law and court decisions of search and seizure for law enforcement

Participate in a scenario that demonstrates typical deceptive behaviors

Understand and define ethical behavior for enforcement officers

Photograph and preserve evidence

Practice and demonstrate clear and concise writing, documenting criminal violations, and detailing observations in writing

Review course outlines, standard industry best-practices relating to public documents as they relate to writing investigative reports

Student Learning Outcomes:
- Demonstrate and apply fundamental entry-level abilities expected of a code enforcement officer to effectively identify industry best-practices of conducting field inspections, preparing case documentation, and providing testimony.
- Pass the Basic Code Enforcement certification exam with a score of 70% or greater.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
40.0

Intermediate Code Enforcement Officer Module 2
PBLC087:

1.0 Units

The intermediate code enforcement class is designed to provide standardized academic and professional training for current California code enforcement officers or individuals seeking employment as a code enforcement officer. Course topics include the abatement of sub-standard or hazardous buildings, hazardous materials, residential construction, use of force, self-defense and chemical agents, criminal law, and methods to collaborate with the community. The International Property Maintenance Code and National Pollutant Discharge Elimination System enforcement will be reviewed.

Requisites
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.0

Learning Outcomes
Course Objectives:
Demonstrate an understanding through contextualized in-depth instruction, physical examples of self-defense strategies and tactics

Provide students with advanced knowledge on pursuing criminal or civil actions against property offenders, including rules of evidence, testimony, civil and criminal seizure of property, rules of arrest, issuing citations/summonses, and filing complaints

Understand how to foster, create and develop inter-agency task forces, CERT, fostering community engagement, collaboration, and neighborhood action programs

Examine the statutory environment, case law, and enforcement authority for sub-standard housing enforcement, methods of abating nuisances, and the documentation required for complex housing investigations
Understand the history, legal and cultural influences of sub-standard housing enforcement

Understand and be able to recognize common hazardous materials encountered in the field

Understand the authority and tactics in the use of chemical agents, including decontamination and first aid

Identify residential and associated plumbing, mechanical and electrical (PME) requirements

Employ best-practices for promoting a code enforcement agency, marketing programs, and using diplomacy when interacting with the community

Demonstrate a working knowledge of course policies and procedures, contact information, student advice for successful completion of the course, and referrals to student assistance programs

Demonstrate an in-depth knowledge of instruction on the authority of a public officer’s use of force, consequences, and ethical implications of using force on violent subjects

Demonstrate knowledge of the residential building code, and elements of residential construction

Complete a standardized examination based on the course topics with a focus on industry standards and best-practices

**Student Learning Outcomes:**

- Recognize and apply journey-level skills expected of a practiced code enforcement officer in the abatement of sub-standard or hazardous buildings, hazardous materials response, residential construction, use of force, and self-defense practices.
- Pass the Intermediate Code Enforcement certification exam with a score of 70% or greater.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

40.0

**Advanced Code Enforcement Officer Module 3**

**PBLC088:**

1.0 Units

The advanced code enforcement course is designed to provide standardized academic and professional training for current California code enforcement officers or individuals seeking employment as a code enforcement officer. Course topics include effective communications, vectors and animal safety, hoarding, developing staff reports and new ordinances, building, residential, mechanical, plumbing, and fire codes, and gang and drug awareness and officer safety. The International Property Maintenance Code will be reviewed.

**Requisites**

None

**Transferability & General Education Options**

Transferable:

Not transferable

**Weekly Lecture Hours:**

1.0

**Learning Outcomes**

**Course Objectives:**

Learn about and examine the various types of illegal drugs or narcotics encountered in the field.
Examine best-practices for delivering effective communications in a variety of encounters, overcoming communication barriers, active listening skills, de-escalation techniques, and controlling field encounters

Review course policies and procedures, contact information, student advice for successful completion of the course, and referrals to student assistance programs

Understand who has legal authority to abate hazardous vectors, the identification of common invasive species, animal issues, and the common ways for zoological disease transmission

Identify common violations, code requirements, and hazards encountered in the field

Gain an understanding of the California Building Code

Examine best-practices in researching, drafting, and developing staff reports in the public environment. Topics include navigating the political process, ethical concerns of data, and common methods of organizing staff reports

Identify common violations, code requirements, and hazards encountered in the field

Complete a standardized examination based on the course topics with a focus on industry standards and best-practices

Gain an understanding of the Fire Code

Examine best-practices in researching, drafting, and developing staff reports in the public environment. Topics include navigating the political process, ethical concerns of data, and common methods of organizing staff reports

Gain an understanding of the electrical code

Identify clandestine labs, marijuana growers, and the symptoms of illicit drug use.

Identify common violations, code requirements, and hazards encountered in the field

Gain an understanding of the Mechanical and Plumbing Codes

Examine and be exposed to modern day criminal gangs, identification of members, the effect on neighborhoods, and crimes related to gang activity

Identify common violations, code requirements, and hazards encountered in the field

Student Learning Outcomes:

Recognize and apply advance-level knowledge expected of an experienced code enforcement officer to effectively communicate, develop staff reports and ordinances, recognize vectors and animal safety, officer safety, and apply building, residential, mechanical

Pass the Advanced Code Enforcement certification exam with a score of 70% or greater.

Units & Hours

Minimum Units:

1.0

Maximum Units:

1.0

Total Hours:

40.0

Code Enforcement Officer-Supervision Module 4
PBLC089:

1.0 Units

The supervisory code enforcement class is designed to provide standardized academic and professional training for current California code enforcement officers or individuals seeking promotion to a senior or supervising code enforcement officer. Course topics include diversity, ethics, and communication for supervisors; performance management best-practices, employment law, assertive leadership, budgets, finance, and grant administration; promoting an agency, critical incident management, strategic planning, and internal investigations.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
1.0

Learning Outcomes

Course Objectives:
Practice and critique, individually or in groups, standardized scenarios on topics such as communication, presentations, employee relations, and major incident responses

Examine the role of the supervisor in promoting and communicating the accomplishments, failures, methods, or goals of the agency

Research, apply, and draft grant proposals

Collect, retain, and disseminate data, reports, and internal information

Practice the role of code enforcement in the incident command system (National Incident Management System [NIMS]/Standardized Emergency Management System [SEMS]), chain of command, public employee activation, and mutual aid agreements/requirements

Describe communication methods that prevent miscommunication, assertive communication, and prevent employee complaints when providing feedback, oversight, and direction to individuals

Evaluate public-sector budgets including line and performance budgets, the budget cycle, aligning goals to budget expenditures, and developing efficient public programs

Employ best-practices for employee counseling, building relationships, evaluating employees, and documenting employee actions

Review and understand policies and procedures, contact information, student advice for successful completion of the course, and referrals to student assistance programs

Employ best-practices for tracking employee performance, establishing goals, and motivating employees

Identify current technology and database systems used in the code enforcement industry

Employ best-practices in strategic planning, developing neighborhood improvement programs, inter-agency cooperation Community Oriented Policing (COP) and Problem Oriented Policing (POP), and planning models for future agency needs

Describe building an agency mission, community outreach, and establishing positive values and an ethical agency culture

Employ managerial best-practices for developing or remediating public programs, cost-recovery methods, and fee-based program analysis and implementation

Interpret California employment laws, recruiting and retaining employees, civil service protections, employee discipline, counseling, and assistance programs

Complete a standardized examination based on the course topics with a focus on industry standards and best-practices

Apply concepts of ethical leadership, decision-making, and management best-practices in diverse workplaces

Employ best-practices for recognizing and documenting employee performance, transgressions, and responding to complaints of employee behavior

Compare the differences among managerial power and authority, conflict management, leadership styles and behavior, supervisor and employee accountability, stress management concepts, and concepts of team-building

Track grant activity, status reporting, and manage grant funds for personnel

Explain purchasing, mutual aid agreements, cost-sharing programs, and collection/recovery laws

Student Learning Outcomes:
Recognize and apply supervisory-level knowledge to scenarios dealing with diversity, ethics, effective communications for supervisors, assertive leadership, critical incident management, performance management best-practices, internal investigations,
Pass the Supervisory Code Enforcement certification exam with a score of 70% or greater.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
40.0

Introduction to Microsoft Project
PBLC110:

3.0 Units
Provides basic knowledge of how to plan a project, identify and create tasks, estimate workloads and duration, setup project schedules, maintain the schedule, assign resources, connect resources to tasks, setup a project budget, track progress utilize reports and close a project using Microsoft Project software.

Requisites

Requisites:

Anti-Requisite

CIS110 - Introduction to Microsoft Project

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Define the concept of project management software
Determine the path in planning a project
Present a project schedule
Provide project information in various ways
Designate resources and calculate related project costs
Report project progress and determine completion
Dovetail related projects using various software applications
Utilize MS Project to complete a project

Student Learning Outcomes:

Create a project using Microsoft Project.
Analyze the critical path, resources used and progress of a project.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Public Administration
PBLC150:

3.0 Units

This course is designed to provide a general overview of public organizations, the bureaucratic process, and public service for those interested in pursuing/enhancing a career in government.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Understand course expectations and requirements
Explain how government is organized to deliver services
Explain how government serves the public
Define Public Administration
Cultivate and maintain a high-quality workforce
Explain where governments get their money
Describe how governments they budget and spend their money
Identify and apply classical, neo-classical, and contemporary management theories
Describe the human side of organizational management
Apply theoretical models of decision-making
Define reform and neutrality
Understand the reality of bureaucratic politics
Check and understand bureaucratic discretion
Explain inter-local shared government
Improve performance via intra-governmental and intergovernmental competition
Develop public-private partnerships
Measure performance
Understand the role of privatization in government performance
Understand the importance of empirical data
Explain the evaluation process and identify stakeholders
Describe the different types of evaluations
Apply leadership theories
Describe the different types of leadership
Enforce formal rules and utilize bureaucratic discretion
Use and apply technology in the public sector
Act with awareness and increase the wellbeing of the global community
Prepare students for the final exam

Student Learning Outcomes:
Understand the basic functions of government, municipality organization structure and political factions.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
54.0

Ethics and Professionalism: The High Calling of Public Service
PBLC151:
3.0 Units
Presents service in the public sector as worthy profession; a trust to be carried out with the highest degree of ethics, professionalism, and personal integrity. Along with the foundations of ethics, emphasis is placed on the practical application of ethical principles in the public service workplace. Various ethical decision-making models are presented with a view to resolving ethical dilemmas before they adversely affect stakeholders. Finally, the consequences of ethical misconduct are examined, including effects on individuals, organizations, and the public as a whole. Ethical conduct in the public sector is presented not only as the “right” way to work, but as the “smart” way to work.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Understand instructor expectations
Define the Public Trust and explain why it is relevant to public sector employment
Examine public perception and why perception matters
Describe how ethical conduct by individuals and organizations affect public perception
List and discuss common expectations the community has of its public service employees and organizations
Describe the practical and personal reasons for studying ethics
Discuss the various perspectives on ethics
Explain why public service is more than a technical enterprise
Give examples of the role of power in public service professions
Compare personal ethics, values, and morals and how they are related
Contrast how values and morals apply to public service
Describe individual-centered approaches to ethics, including Moral Development and Virtue approaches
Identify and describe the relationship between organizational ethics, and individual and societal ethics
Summarize how and why organizations deviate from positive ethical practices
Give examples of the unique ethical challenges faced by those serving in the public service sector of law enforcement
Differentiate how power has the ability to impact the public through imposing sanctions such as levying fines, confiscation of property, and restricting freedoms, mandates the highest level of ethical conduct in law enforcement
Discern when an issue is an ethical one
Differentiate an ethical problem from an ethical dilemma
Identify and prioritize interests and needs of stakeholders
Apply the five-stage method of issue analysis
Comprehend the role of moral courage in decision-making
Utilize several complementary decision-making strategies
Distinguish the costs associated with ethical misconduct at the personal, organizational, and public levels
Describe the continuum of ethical misconduct
Research root causes of corruption in human nature
Review and analyze current, noteworthy events in the public sector
Examine ethical issues, causes, and how these issues could have been approached to have produced better outcomes
Review key points of course and discuss the following issues: What will likely be the future role of public sector employment in society? Will the need for ethical conduct continue to be an issue? How can the individual public servant make a difference in the ethical climate of their organization?

Student Learning Outcomes:
Articulate the concept of the Public Trust, and why maintaining the Public Trust is critical in public sector employment.
Describe and demonstrate various ethical decision-making models in preventing and/or resolving common ethical conflicts in public sector employment.

Units & Hours
Minimum Units:
3.0

Maximum Units:
3.0
Total Hours
54.0

Preparing for Supervision Public Sector
PBLC152:

3.0 Units

The purpose of this course is to provide those employed in or seeking a career in public service a firm foundation in supervision. The fundamental philosophy of supervision, management will be covered in detail. Practical application mechanisms, when dealing with employees, changing organizational culture and helping provide goals and mission statements will help ensure career success.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Understand instructor expectations
Identify potential conflicts in expectations between worker and supervisor
Establish a meaningful and practical framework for communication with employees, peers, and managers
Understand the differences between managing and leading, and ways to incorporate both in interpersonal supervisory style
Apply a step-by-step approach for decision making regarding delegation, policies, procedures, personnel matters and resolving conflict
Identify techniques to truly motivate others to bring their best to work each day
Establish ways to incorporate accountability as part of your supervisory style
Develop strategies to successful make a transition from worker to supervisor
Review employee job expectation and to set them up for success
Evaluate empowerment and challenges in the public sector and how it fits in the organization
Review different types of coaching mechanisms
Identify the interpersonal communication skills necessary to effectively communicate with your employees
Avoid pitfalls as a supervisor when dealing with a trouble employee
Motivate and get employees back on track
Develop skills to be proactive before hits in the workplace
Describe grievance procedures, meet and confers, and Memoranda of Understanding (MOUs) between entity and unions
Analyze the Weingarten Rights and the "dos" and "don'ts"
Identify ethical issues, causes, and issues could have been approached to have produced better outcomes
Prepare students with mock interviews
Prepare students for the final exam

Student Learning Outcomes:
Learn the role of a supervisor and the fundamental qualities and skills needed to be successful in the role. Learn practical approaches to supervision and skills to be effective and motivational towards employees

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Public Sector Budgeting Fundamentals
PBLC153:

3.0 Units

This course is intended to explain the local budgetary process and to familiarize students with the following topics: budget document and budget process; the budget cycle; operating and capital budget; evolution of budget; the balanced budget; functions of the budget office; planning, adopting, implementing and controlling the budget; performance measures for public budgeting and budgeting for capital improvements.

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Understand instructor expectations

Summarize and research Generally Accepted Accounting Principles (GAAP) and Government Standard Accounting Board (GSAB)

Identify key elements of the budget process

Discuss the budget as a controlling process and it's use as a management tool

Compare and contrast the four (4) types of Capital Improvement Projects and the planning process

Describe the differences among the forecasting methods and explain how it is used in decision making

Explain the most commonly used budget process for government

Describe how performance measures interacts with the budgeting process

Describe how a budget interacts with the procurement process

Prepare students for the final exam

Student Learning Outcomes:

Develop an understanding of the budget process
Create a departmental operating budget following policy guidelines

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Public Sector Human Resources Fundamentals
PBLC154:

3.0 Units
The purpose of this course is to provide those employed in, or seeking a career in public service, an overview of public sector Human Resources. The course will cover all of the major areas within a full-functioning Human Resources operation. The information presented is intended to provide a working understanding of each of the following disciplines: Public Sector HR Basics, Recruitment and Selection, Job Classification and Compensation, Employee Benefits, Labor and Employee Relations, EEO and Diversity, Risk Management, and Organizational Development.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Understand instructor expectations
Review the history of laws that have affected the development of the public sector HR function
Select and hire an employee within the public sector
Describe the steps of the classification processes
Identify types, characteristics, and funding of benefits
Work with various types of bargaining units
Regulatory/oversight agencies
Employ regulatory/oversight of employee safety
Support and provide employee development
Prepare students for the final exam

Student Learning Outcomes:
Identify the fundamentals of public sector human resources

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0

Total Hours
54.0

The Art of Politics and Policymaking
PBLC155:

3.0 Units

The purpose of this course is to provide students with a hands-on practical learning experience of public policy and politics in the context of an overall process of government and the transactional influences of politics.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes

Course Objectives:
Understand instructor expectations

Define public policy and explain why it is relevant to politics

Test policy options using logic models and common sense

Explain and apply transformational leadership theory

Understanding and describing how these decision models determine how you should engage in the decision-making process.

Utilize tools available to different politicians to shape policy and the constraints in their use

Discuss current events and policy debates and statistical concepts and tools

Cite land use, zoning, and economic development

Explore historical development, politics, power, governance, policy challenges and implications in the 21st century

Explain how stakeholders invoke framing in their political advocacy

List cities in the 21st Century and the nexus of economic and political power

Student Learning Outcomes:
Students will have a clear understanding of politics, policy, and liability.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0
Total Hours
54.0

Cooperative Work Experience Education
PBLC199:

1.0 - 4.0 Units

This course will provide students majoring in the Public Works the opportunity to apply knowledge and skills gained from college courses in a professional work setting. Students must be enrolled in a minimum of six Public Works units. Job site experience will train the student in additional job skills that will transfer classroom learning to the workplace. Credit may be accrued at the rate of one (1) to four (4) units per semester for a maximum of sixteen (16) units. Additionally, students must work 75 paid hours or 60 non-paid hours per unit earned. Open Entry/Open Exit

Requisites
Requisites:
Co-Requisite
Six (6) units in Public Works courses.

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.0

General Education Plan:
Learning Outcomes
Course Objectives:
Students and supervisors will identify measurable workplace goals/projects that reflect new or expanded job related responsibilities.

The focus of the workplace projects will involve one or more of the following: achieving organizational or department objectives such as improving workplace efficiency and productivity, increasing/decreasing revenue, maintain roads and flood control infrastructure for residents, graffiti abatement, striping and stenciling, spray against vegetation, pest control, and other duties as assigned.

File management and record research.
construction management and inspection
contract administration

Students will be able to maintain a record of internship experiences and time, review achievement of learning objectives and effectiveness of internship site and program with instructor and work site supervisor, and participate in all assignments related to career/job readiness as outlined in the course syllabus.

Student will be able to demonstrate an understanding of the employer evaluation process.

Student Learning Outcomes:
   Demonstrate an understanding of the various departments within public works including graffiti abatement, road maintenance, flood control, striping, stenciling roadways, spraying vegetation, pest control.
   Develop three learning objectives based on work-related duties with the assistance of the Career Technical Education Transitions Coordinator and the site supervisor.

Units & Hours
Minimum Units:
4.0

Maximum Units
Total Hours
300.0

Introduction to Philosophy
PHIL106:

3.0 Units
A survey of historical and contemporary ideas on ways to have to live the good life.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Philosophy

Learning Outcomes
Course Objectives:
Define the term “philosophy”, describe the rise of philosophy in the West, and discuss and define the four divisions of philosophy, and get a basic grasp of critical thinking and logic

Demonstrate critical thinking and knowledge of problems, concepts and arguments in metaphysics

Demonstrate critical thinking and knowledge of epistemology

Demonstrate critical thinking and knowledge of axiology

Student Learning Outcomes:
Demonstrate knowledge of the discipline of philosophy.
Demonstrate the ability to critically analyze and evaluate philosophy.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0

Total Hours
54.0

Honors Introduction to Philosophy
PHIL106H:

3.0 Units
An enriched approach designed for honors students in a seminar setting. A survey of historical and contemporary ideas on how to live the good life.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Philosophy

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Define the term "philosophy", describe the rise of philosophy in the West, and discuss and define the four divisions of philosophy.

Demonstrate knowledge of problems, concepts and arguments in metaphysics

Demonstrate knowledge of epistemology.

Demonstrate knowledge of axiology.

Student Learning Outcomes:
Demonstrate knowledge of the discipline of philosophy.
Demonstrate the ability to critically analyze and evaluate philosophy.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Ethics
PHIL108:

3.0 Units

Introduction to key historical and modern theories of philosophical ethics and the application of these theories to ethical issues facing society today. Assists in clarifying our thinking about morality/ethics. The course increases awareness of values in personal and contemporary issues.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Demonstrate knowledge of the key general concepts of philosophical ethics.

Demonstrate knowledge of Plato's Essentialist Ethics and Aristotle's Virtue Ethics.

Demonstrate knowledge of the theory of Natural Law.

Demonstrate knowledge of the ethical theory of Immanuel Kant.

Demonstrate knowledge of the theory of Utilitarianism as articulated by Jeremy Bentham and John Stuart Mill.
Demonstrate knowledge of the ethics of Existentialism.
Demonstrate knowledge of the key versions of modern Feminist ethics.
Demonstrate knowledge of the key ethical teachings of Hinduism, Buddhism, and Confucianism.
Critically analyze and evaluate positions on the ethical issues surrounding euthanasia, capital punishment and war.
Critically analyze and evaluate positions on the ethical issues surrounding abortion, cloning and stem-cell research.
Critically analyze and evaluate positions on the ethical issues surrounding sexual harassment, affirmative action and discrimination.
Critically analyze and evaluate positions on the ethical issues surrounding the treatment of animals, global warming and pollution.

**Student Learning Outcomes:**
- Demonstrate knowledge of the discipline of ethics.
- Demonstrate knowledge of how to critically analyze and evaluate the discipline of ethics.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Critical Thinking**

**PHIL110:**

4.0 Units

College level critical thinking, reading and composition. Promotes rational self awareness, independent thinking, and improved academic expression. Examines philosophical methods of reasoning and composition, and the uses of informal logic and criticism in personal life, college, work, and democratic society.

**Requisites**

**Requisites:**

**Prerequisite**

ENGL100 - Freshman Composition with Integrated Support

**Outcomes**
- Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**OR**

**Prerequisite**

ENGL101 - Freshman Composition

**Outcomes**
- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.
Prerequisite

ENGL101H - Honors Freshman Composition

Outcomes

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

4.0

General Education Plan:

Local - Plan A

Area E2: Communication/Analytical Thinking

CSU GE - Plan B

Area A3: Critical Thinking

IGETC - Plan C

Area 1B: Critical Thinking/Composition

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Santa Ana College - Shared Course

Shared Course with SAC

Learning Outcomes

Course Objectives:

Demonstrate an understanding of critical thinking and self evaluation.

Demonstrate knowledge of the thinking process and the general role of language.

Demonstrate an understanding of logic and identify the methods used in objective reasoning.

Analyze and evaluate arguments by employing methods used to detect common reasoning fallacies.

Demonstrate knowledge of the methods used in reading critically.

Analyze, compose and revise an argument.

Apply critical reasoning and persuasion in writing.

Write normative and descriptive analyses and arguments that utilize objective thinking.

Student Learning Outcomes:

Demonstrate knowledge of the discipline of critical thinking.

Demonstrate the ability to compose argumentative and persuasive essays that comport to the standards of critical thinking.

Units & Hours

Minimum Units:

4.0
Maximum Units
4.0

Total Hours
72.0

Introductory Logic
PHIL111:

4.0 Units
Beginning course in formal and applied logic. Covers cognitive language, formal argument, proof, basic propositional and predicate logic, and philosophy of logic. Emphasizes active student involvement and practical application to college life.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
Area E2: Communication/Analytical Thinking
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area A3: Critical Thinking

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Philosophy

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:
Demonstrate knowledge of the philosophy of logic and logical reading, writing, listening and problem solving, as contrasted with psychological persuasion and rhetoric, and demonstrate knowledge of how logic functions in everyday life, science and technology

Demonstrate knowledge of the basic concepts in logic: definition and claims; argument analysis and recognition; argument types and structures; deduction and induction in arguments; the nature and types of fallacious inference; the role of truth, and validity.

Demonstrate knowledge of categorical propositions and syllogisms; standard form of categorical propositions; quality, quantity, distribution; modern square of opposition; Venn diagrams for testing immediate inferences; standard form of categorical syllogisms.

Demonstrate knowledge of how to translate ordinary language into symbolized statements; logical operators and compound statements; truth functions; truth tables for testing consistency of statements and validity of arguments and indirect truth tables.

Demonstrate knowledge of deduction in propositional logic; rules of inference; rules of replacement; fallacious inference; conditional and indirect proof and how to prove logical truths.
Student Learning Outcomes:
Demonstrate knowledge of the discipline of logic.
Demonstrate the ability to critically analyze and evaluate logic.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
72.0

World Religions
PHIL112:

3.0 Units

A philosophical overview of the world’s great religions. Includes historical origin and growth of each religion, major doctrines, and influence. Religions dealt with include Primitive, Hinduism, Jainism, Buddhism, Taoism, Confucianism, Judaism, Christianity and Islam.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities
Area D: Cultural Breadth

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
 Demonstrate knowledge of the beliefs and practices of indigenous or primal religions.
 Demonstrate knowledge of the beliefs, history and development of Judaism
 Demonstrate knowledge of the beliefs, history and development of Christianity
 Demonstrate knowledge of the beliefs, history and development of Islam.
Demonstrate knowledge of the beliefs, history and development of Hinduism.
Demonstrate knowledge of the beliefs, history and development of Buddhism.
Demonstrate knowledge of the beliefs, history and development of Jainism.
Demonstrate knowledge of the beliefs, history and development of Taoism.
Demonstrate knowledge of the beliefs, history and development of Confucianism.

Apply critical analysis and evaluation to compare and contrast all religions and identify dominant and similar characteristics in the world's religions.

**Student Learning Outcomes:**
- Demonstrate knowledge of world religions.
- Demonstrate the ability to critically analyze and evaluate world religions.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours**
54.0

**Philosophy of Religion**
**PHIL115:**

3.0 Units

An introduction to the philosophical analysis of religious beliefs and concepts, including the nature of religion, the nature and existence of some kind of ultimate reality, the problem of evil, the meaning of religious language, the authenticity of religious experiences, the relation between religion and ethics, the relation between religion and science, and religious diversity.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
Area C: Humanities

**CSU GE - Plan B**
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**
Area 3B: Humanities

**Learning Outcomes**

**Course Objectives:**
Identify and critically evaluate various philosophical attempts to define religion and how it functions in society and culture.

Demonstrate the ability to understand and critically evaluate the major arguments for and against the existence of some kind of ultimate reality.

Examine the nature of ultimate reality by studying the concept of a maximally perfect reality.

Critically evaluate the nature of religious faith and the question of whether it is rational or irrational to accept religious beliefs on the basis of faith.

Explain and critically evaluate the philosophical issue of whether the occurrence of moral evil is consistent with the existence of some kind of ultimate reality.

Demonstrate the ability to understand and critically evaluate religious-language issues of metaphor, gender, and factual meaning.

Define the term "religious experience" and critically evaluate whether these are cases of genuine cognition of reality.

Explain and critically evaluate the philosophical issue of the nature of morality and whether or not morality is independent of religion.

Explain and critically evaluate whether there is a conflict between religion and science.

Demonstrate the ability to explain and critically evaluate the issue of whether all religions are valid paths to salvation.

**Student Learning Outcomes:**
- Demonstrate knowledge of the philosophy of religion.
- Demonstrate the ability to critically analyze and evaluate philosophy of religion.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**History of Philosophy**

**PHIL118:**

3.0 Units

An introduction to philosophy from a historical perspective: getting acquainted with the thoughts of the world's great philosophers.

Provides a survey of the dominant philosophies of the ancient, medieval, and modern worlds.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
- Area C: Humanities

**CSU GE - Plan B**
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Identify and explain the main models of philosophic and historical inquiries, and their problems.
Identify and explain the major fields and questions of philosophy.
Identify and explain the place of history of philosophy in the overall education of the philosopher, and the uses of philosophy in society and personal life.
Identify and explain the views of the major personalities of Greco Roman thought.
Identify and explain the significant social/cultural circumstances and their effects on ancient philosophizing, including: rise of the city state, founding of the "academic" tradition, the birth of philosophy and early "nature science."
Identify and explain the main problems of classic thinkers in his or her own terms, including: cosmological problem, problem of one and many, nomos/physis dispute, the sumum bonum, philosophy as speculative or practical, superstition and fear of death.
Identify and explain the emergence of the classical ethical world view.
Identify and explain the views of the main personalities of medieval and renaissance philosophy.
Identify and explain the historical background of medieval and early modern thought.
Identify and explain the difference between the medieval and early modern modes of thought and inquiry.
Identify and explain the interplay and conflicts between the Christian worldview and classical perspectives.
Identify and explain the views of the major figures in this period.
Critically analyze and evaluate the differences between the classical thinkers, the medieval thinkers and the modern thinkers.
Explain and critically evaluate the differences between the major thinkers of this period.
Identify and explain the central aspects of existentialism, historical materialism and the linguistic turn.
Explain and critically evaluate the distinct problems and solutions of this period of thought.
Explain the similarities and differences in the history of philosophy regarding the four basic fields of philosophy.
Explain philosophy, philosophical methodology and the historical importance and value of philosophy.

Student Learning Outcomes:
Demonstrate knowledge of the history of philosophy.
Demonstrate the ability to critically analyze and evaluate the history of philosophy.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0
Introduction to Social and Political Philosophy
PHIL120:

3.0 Units

A critical examination of rights theory, liberty, justice, individualism, community, state power, political authority, natural law, property, social contract theory, ideology, obedience, alienation, and various forms of social order (e.g., democracy, totalitarianism, theocracy, socialism) from the perspective of social and political philosophy, including multi-cultural and feminist viewpoints and critiques.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
  Area C: Humanities

CSU GE - Plan B
  Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
  Area 3B: Humanities

Learning Outcomes
Course Objectives:
Demonstrate knowledge of: ethical relativism, skepticism about knowledge and authority, ethnocentrism, patriotism, political cynicism; the link between political philosophy, the role of the polis, human nature and the good life in classical political thou

Critically reflect on the political nature, and both the potentially liberating and coercive function, of political philosophy itself

Demonstrate knowledge of: custom, law, community, nature, order and wildness in Asian thought; what it means to realize the good and one's full humanity: punishment, reward, virtue, liberty and coercion in the differing schools.

Demonstrate an understanding of the role of God, reason and passion, social order and justice, and trans-ethnic identity in natural law theory.

Demonstrate an understanding of the intersections of God, church and secular authority in early and medieval Christian thought.

Demonstrate an understanding of the role of “the state of nature” and the “state of civil order” in Western political thought, the legitimation of state authority via social contract, the interplay of gender and political power in social life, and how the

Demonstrate an understanding of the utilitarian justification of the modern liberal state, women's suffrage, and moral equality and friendship between the genders; the utilitarian critique of sexism, racism, and speciesism; the limits and proper uses of s

Explore the nature, limits, foundations and function of liberty.

Demonstrate an understanding Hegel's notion of right, community, historical evolution of identity and power, the role of tradition in social life and the nature of the individual in modern and pre-modern societies; the Marxist critique of the liberal stat

Demonstrate an understanding of Nietzsche's critique of master morality and slave morality, the political and moral function of ideas, and the exercise of power, domination, punishment and coercion in society and religion

Demonstrate an understanding of feminist critiques of Marxian analysis, communitarianism, liberalism, individualism and patriarchy in social contract theory.
Demonstrate an understanding of the current focus on theories of justice, the nature of individual rights and individual liberty, the role of economic dynamics in political philosophy, gender, justice, the family and social order.

Demonstrate an understanding of current models for exploring domination, totalitarianism, social transformation, media, political discourse, terrorism, imperialism and geopolitical dynamics.

**Student Learning Outcomes:**
- Demonstrate knowledge of social and political philosophy
- Demonstrate the ability to critically analyze and evaluate social and political philosophy

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Conceptual Physics**

**PHYS100:**

4.0 Units

A conceptual introduction to physics. Topics include: mechanics, fluids, thermodynamics, sound, light, electricity, magnetism, and modern physics. Recommended for all students interested in a conceptual approach to physics or students planning to take more advanced courses in physics.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
4.0

**General Education Plan:**

**Local - Plan A**
- Area A: Natural Sciences

**CSU GE - Plan B**
- Area B1: Physical Sciences
- Area B3: Laboratory Activity

**IGETC - Plan C**
- Area 5A: Physical Science
- Area 5C: Laboratory Activities

**UC Comparable Transfer Courses**
- UC Comparable Transfer Courses

**Learning Outcomes**
Course Objectives:

Develop the foundation necessary to solve problems in physics.

Explain the motion of particles with constant acceleration.

Explain the motion of objects based upon forces acting on the object.

Apply conservation of energy and momentum to various physical systems.

Predict the behavior of rigid bodies using the principles of classical mechanics.

Solve various problems involving systems exhibiting harmonic motion and wave motion.

Explore the basics of fluid dynamics using conceptual problems.

Explore the basics of thermodynamics and relate them to the real world using conceptual and quantitative problems.

Correctly predict the behavior of simple electric circuits and electromagnetic devices.

Explore the wave and ray nature of light and analyze the formation of images by various materials.

Demonstrate the correct use of laboratory equipment to observe and analyze various physical phenomena.

Student Learning Outcomes:

Correctly analyze natural phenomena using the concepts of physics.

Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours

Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

Introductory Physics I

PHYS150A:

4.0 Units

A trigonometry-based physics course. Topics include: mechanics, thermodynamics, fluids, oscillatory motion, and sound. Students that have successfully completed Physics 210 or Physics 279 may not enroll in Physics 150A.

Requisites

Prerequisite

MATH171 - Precalculus and Trigonometry

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
Local - Plan A
   Area A: Natural Sciences

CSU GE - Plan B
   Area B1: Physical Sciences
   Area B3: Laboratory Activity

IGETC - Plan C
   Area 5A: Physical Science
   Area 5C: Laboratory Activities

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Course Identifier (C-ID)
   Physics

Learning Outcomes

Course Objectives:
Demonstrate the correct use of laboratory equipment.
Solve various problems involving systems exhibiting harmonic motion and wave motion.
Apply conservation of energy and momentum to various physical systems.
Analyze gravitational forces between two or more objects.
Explore the basics of fluid dynamics using conceptual and quantitative problems.
Solve force problems using Newton's 2nd law and relate these solutions to the previous motion equations.
Develop the foundation necessary to solve problems in physics.
Predict the behavior of rigid bodies using the principles of classical mechanics.
Explain the motion of particles with constant and non-constant accelerations.
Explore the basics of thermodynamics and relate it to the real world using conceptual and quantitative problems.
Observe and analyze various physical phenomena.

Student Learning Outcomes:
   Analyze and solve problems using the concepts and mathematical equations of mechanics, fluids, waves, and thermodynamics.
   Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours

Minimum Units:
   4.0

Maximum Units
   4.0

Total Hours
   108.0

Introductory Physics I - Calculus
PHYS150AC:
   1.0 Units
This course expands on the topics covered in Physics 150A by adding the application of calculus to problems in physics. Topics will include motion graphs, motion with non-constant acceleration, variable forces, wave motion, and thermodynamics.

**Requisites**

**Prerequisite**

MATH180 - Single Variable Calculus I

OR

**Prerequisite**

MATH180H - Honors Single Variable Calculus I

AND

**Co-Requisite**

PHYS150A - Introductory Physics I

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**

Apply differential and integral calculus to analyze the motion of particles for both constant and variable acceleration.

Apply differential and integral calculus to analyze problems involving variable forces and rigid objects through the use of energy and momentum.

Apply differential calculus to the solution of problems involving harmonic and wave motion.

Apply differential and integral calculus to the solution of problems involving the concepts of thermodynamics.

**Student Learning Outcomes:**

Analyze and solve problems involving kinematics, forces, energy, and oscillations using differential calculus.

Analyze and solve problems involving systems of particles, rotational motion, energy, and thermodynamics using integral calculus.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours**
18.0

**Introductory Physics II**
PHYS150B :

4.0 Units

A trigonometry-based physics course. Topics include: light, electricity, magnetism and modern physics. Students that have successfully completed Physics 211 at Santa Ana College may not enroll in Physics 150B.

Requisites
Requisites:
Prerequisite

PHYS150A - Introductory Physics I

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
4.0

General Education Plan:
CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Physics

Learning Outcomes
Course Objectives:
Solve problems involving magnetic fields using algebra, calculus, and Ampere's law.
Analyze the wave properties of light.
Analyze various electric phenomena using vectors, algebra, calculus, and Gauss' law.
Analyze problems using the fundamental principles of quantum mechanics.
Solve problems involving objects moving at speeds near the speed of light.
Explain the relationship between electric and magnetic fields.
Analyze wave motion using various mathematical techniques and appropriate physical principles.
Explore the ray nature of light and analyze the formation of images by various materials.
Correctly predict the behavior of simple electric circuits and electromagnetic devices.
Demonstrate the correct use of laboratory equipment to observe and analyze various physical phenomena.

Student Learning Outcomes:
Analyze and solve problems using the concepts and mathematical equations of electricity and magnetism, light, special relativity, and quantum mechanics.
Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours

Minimum Units:
4.0

Maximum Units:
4.0

Total Hours:
108.0

Introductory Physics II - Calculus

PHYS150BC:

1.0 Units

This course expands on the topics covered in Physics 150B by adding the application of calculus to problems in physics. Topics will include electric fields, Gauss’ Law, Ampere’s Law, Faraday’s Law, light, and quantum mechanics.

Requisites

Requisites:

Prerequisite

PHYS150A - Introductory Physics I

AND

Prerequisite

PHYS150AC - Introductory Physics I - Calculus

AND

Co-Requisite

PHYS150B - Introductory Physics II

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:

1.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Solve electricity and magnetism problems using integral and differential calculus.

Apply differential and integral calculus to solve problems involving electromagnetic waves.

Solve for probabilities using integral calculus and wave functions obtained from Schrodinger’s Equation.

Student Learning Outcomes:
Analyze and solve physics problems involving electric current, electromagnetic induction, and wave equations using differential calculus.
Analyze and solve physics problems involving electric fields, magnetic fields, and probability using integral calculus.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Physics for Scientists and Engineers I

PHYS250A:

5.0 Units

Principles of classical mechanics including particle dynamics, forces, work, energy, momentum, rotational motion, equilibrium, harmonic motion, gravity and fluid dynamics. This course is designed for students majoring in physical sciences and engineering.

Requisites

Prerequisites:

MATH180 - Single Variable Calculus I

Objectives

Define continuity
Apply the definition of continuity to determine if a function is continuous at a real number
Graph functions and piecewise functions
Define the derivative as a limit
Apply the definition of the derivative as a limit to obtain the derivative of a function
Identify where a function is differentiable
Compute the derivatives of transcendental functions including trigonometric, exponential or logarithmic functions and inverse functions
Apply implicit and logarithmic differentiation to obtain the derivative
Apply differentiation formulas including constants, power rule, product rule, quotient rule and chain rule to compute derivatives
Interpret the derivative as slope of a tangent line and as a rate of change
Compute the tangent line
Apply the derivative to application problems for rates of change and related rates
Compute higher-order derivatives
Use differentiation to solve optimization problems
Apply differentiation to compute absolute and relative extrema, intervals of increasing and decreasing, point(s) of inflections and intervals of concavity
Graph functions using the methods of calculus
Compute antiderivatives
Calculate net area under a curve
Apply the Fundamental Theorem of Calculus Part I to obtain the derivative
Apply the Fundamental Theorem of Calculus Part II to evaluate definite integrals
Apply integration to obtain net change or the area
Apply the integral properties to evaluate definite and indefinite integrals
Evaluate integrals using the method of substitution

Outcomes

Analyze functions and their graphs using limits, derivatives, definite and indefinite integrals.
Apply basic definitions, properties and theorems of first semester Calculus to formulate elementary proofs and model and solve problems.
Prerequisite

MATH180H - Honors Single Variable Calculus I

Objectives

Define continuity
Apply the definition of continuity to determine if a function is continuous at a real number
Define the derivative as a limit
Apply the definition of the derivative as a limit to obtain the derivative of a function
Identify where a function is differentiable
Compute the derivatives of transcendental functions including trigonometric, exponential or logarithmic functions and inverse functions
Apply implicit and logarithmic differentiation to obtain the derivative
Apply differentiation formulas including constants, power rule, product rule, quotient rule and chain rule to compute derivatives
Interpret the derivative as slope of a tangent line and as a rate of change
Compute the tangent line
Apply the derivative to application problems for rates of change and related rates
Compute higher-order derivatives
Derive the differential and linear approximation formulas
Use the linear approximation and differential formula to estimate errors
Use differentiation to solve optimization problems
Apply differentiation to compute absolute and relative extrema, intervals of increasing and decreasing, point(s) of inflections and intervals of concavity
Compute antiderivatives
Calculate net area under a curve
Evaluate a definite integral as a limit
Apply the Fundamental Theorem of Calculus Part I to obtain the derivative
Apply the Fundamental Theorem of Calculus Part II to evaluate definite integrals
Apply integration to obtain net change or the area
Evaluate integrals using the method of substitution

Outcomes

Analyze functions and their graphs using limits, derivatives, definite and indefinite integrals.
Apply basic definitions, properties and theorems of first semester Calculus to formulate elementary proofs and model and solve problems.

AND

Advisory

PHYS100 - Conceptual Physics

or high school Physics

Objectives

Develop the foundation necessary to solve problems in physics.
Explain the motion of particles with constant acceleration.
Explain the motion of object based upon forces acting on the object.
Apply conservation of energy and momentum to various physical systems.
Predict the behavior of rigid bodies using the principles of classical mechanics.
Solve various problems involving systems exhibiting harmonic motion and wave motion.

Outcomes

Correctly analyze natural phenomena using the concepts of physics.
Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU
Weekly Lecture Hours:
5.0

General Education Plan:
Local - Plan A
  Area A: Natural Sciences

CSU GE - Plan B
  Area B1: Physical Sciences
  Area B3: Laboratory Activity

IGETC - Plan C
  Area 5A: Physical Science
  Area 5C: Laboratory Activities

UC Comparable Transfer Courses
  UC Comparable Transfer Courses

Course Identifier (C-ID)
  Physics

Learning Outcomes
Course Objectives:
Apply conservation of energy and momentum to various physical systems.

Predict the behavior of rigid bodies using the principles of classical mechanics.

Analyze gravitational forces between two or more objects.

Solve force problems using Newton's 2nd law and relate these solutions to the previous motion equations.

Explain the motion of particles with constant and non-constant accelerations.

Explore the basics of fluid dynamics using conceptual and quantitative problems.

Solve various problems involving systems exhibiting harmonic motion.

Demonstrate the correct use of laboratory equipment to observe and analyze various physical phenomena.

Develop the foundation necessary to solve problems in physics.

Student Learning Outcomes:
  Analyze and solve problems using the concepts and mathematical equations of mechanics.
  Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
126.0

Physics for Scientists and Engineers II
PHYS250B:
5.0 Units

Introduces the basic principles of thermodynamics, electricity and magnetism. The main topics are the laws of thermodynamics, kinetic theory of gases, electrostatics, circuits, magnetism, electro-magnetic induction, and Maxwell’s equations. This course is designed for students majoring in physical sciences and engineering.

Requisites

Prerequisite

MATH185 - Single Variable Calculus II

Objectives

Apply integration to application problems for work

Compute the average value of a function

Apply integration by parts, u-substitution, trigonometric substitution, and partial fraction expansion to evaluate integrals

Use differential equations in mathematical models

Solve separable first-order differential equations

Compute the slope of a tangent line

Apply definitions to convert between Cartesian coordinates and polar coordinates

Differentiate and integrate functions in polar form

Compute the slope of a tangent line, arc length, and area bounded by polar curves

Generate the Taylor Series for appropriate functions

Outcomes

Evaluate and approximate integrals using a variety of techniques and apply integration to solve problems involving area, volume, work, and differential equations.

Represent functions using parametric equations, polar equations, and Taylor series and apply calculus techniques to these representations.

AND

Prerequisite

PHYS250A - Physics for Scientists and Engineers I

Objectives

Develop the foundation necessary to solve problems in physics.

Explain the motion of particles with constant and non-constant accelerations.

Solve force problems using Newton’s 2nd law and relate these solutions to the previous motion equations.

Apply conservation of energy and momentum to various physical systems.

Predict the behavior of rigid bodies using the principles of classical mechanics.

Analyze gravitational forces between two or more objects.

Solve various problems involving systems exhibiting harmonic motion.

Explore the basics of fluid dynamics using conceptual and quantitative problems.

Demonstrate the correct use of laboratory equipment to observe and analyze various physical phenomena.

Outcomes

Analyze and solve problems using the concepts and mathematical equations of mechanics.

Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

5.0

General Education Plan:
CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Physics

Learning Outcomes
Course Objectives:
Correctly predict the behavior of simple electric circuits and electromagnetic devices.
Solve problems involving magnetic fields using algebra, calculus, and Ampere’s law.
Explain the relationship between electric and magnetic fields.
Explore the basics of thermodynamics and relate them to the real world using conceptual and quantitative problems.
Analyze various electric phenomena using vectors, algebra, calculus, and Gauss’s Law.
Demonstrate the correct use of test instruments such as digital multimeters, oscilloscopes, and function generators to study various electromagnetic phenomena.
Identify Maxwell’s equations and use them to analyze various electromagnetic phenomena.

Student Learning Outcomes:
Systematically analyze problems involving thermodynamic and electromagnetic phenomena by applying one or more problem solving techniques including calculus, conservation laws, and Maxwell’s equations.
Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
126.0

Physics for Scientists and Engineers III
PHYS250C:

5.0 Units
Introduces the basic principles of mechanical waves, sound, light, geometrical and wave optics, special relativity and quantum mechanics. This course is designed for students majoring in physical sciences and engineering.

Prerequisites
Prerequisite
PHYS250B - Physics for Scientists and Engineers II

Objectives
- Explore the basics of thermodynamics and relate them to the real world using conceptual and quantitative problems.
- Analyze various electric phenomena using vectors, algebra, calculus, and Gauss’s Law.
- Correctly predict the behavior of simple electric circuits and electromagnetic devices.
- Solve problems involving magnetic fields using algebra, calculus, and Ampere’s law.
- Explain the relationship between electric and magnetic fields.
- Identify Maxwell’s equations and use them to analyze various electromagnetic phenomena.
- Demonstrate the correct use of test instruments such as digital multimeters, oscilloscopes, and function generators to study various electromagnetic phenomena.

Outcomes
- Systematically analyze problems involving thermodynamic and electromagnetic phenomena by applying one or more problem solving techniques including calculus, conservation laws, and Maxwell’s equations.
- Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

AND

Advisory
MATH280 - Intermediate Calculus

Objectives
- Perform vector operations in two and three dimensions including sum, difference, dot product, cross product, magnitude, and triple product
- Compute vector projections in two and three dimensions
- Apply vector projections to problems from physics or engineering
- Differentiate and integrate vector-valued functions
- Find velocity and acceleration
- Analyze the relationship between acceleration vector and its tangential and normal components
- Solve problems related to motion of a projectile
- Determine the continuity of a function of several variables at a point and over the domain of the function
- Determine differentiability of a function of several variables
- Evaluate partial derivatives and higher-order partial derivatives
- Compute the directional derivative and gradient
- Evaluate double (two-dimensional) integrals in various coordinate systems including rectangular and polar.
- Evaluate triple (three-dimensional) integrals in various coordinate systems including rectangular, cylindrical, and spherical.
- Compute the curl and divergence of a vector field
- Determine if a vector field is conservative and if so, find the potential function
- Compute surface integrals in vector fields
- Apply surface integrals to flow (flux) applications
- Use Stokes’ theorem and the divergence (Gauss’) theorem to determine surface integrals in vector fields

Outcomes
- State and apply basic definitions, properties and theorems of multivariable Calculus
- Apply vector operations in two and three dimensions and use vector methods to analyze plane and space curves, and curvilinear motion.
- Apply standard techniques of multivariable differentiation and integration to solve application problems

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
CSU GE - Plan B
Area B1: Physical Sciences
Area B3: Laboratory Activity

IGETC - Plan C
Area 5A: Physical Science
Area 5C: Laboratory Activities

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Physics

Learning Outcomes

Course Objectives:
Introduce the foundations of quantum mechanics and analyze problems using its principles.
Introduce the basic concepts of Einstein’s Theory of Special Relativity.
Explore the ray nature of light and analyze the formation of images by various materials.
Analyze the wave properties of light.
Analyze wave motion using various mathematical techniques and appropriate physical principles.
Demonstrate the correct use of laboratory equipment to observe and analyze various physical phenomena.

Student Learning Outcomes:
Systematically analyze problems involving wave phenomena by applying one or more problem solving techniques, including calculus and various wave equations.
Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
126.0

American Government and Politics
POLT101:

3.0 Units

Requisites

Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

- Area B1: Social and Behavioral Sciences: American Institutions
- Area B2: Social and Behavioral Sciences: Social Science Elective

**CSU GE - Plan B**

- Area D: Social Sciences
- Area US2: U.S. Constitution and Government
- Area US3: California State and Local Government

**IGETC - Plan C**

- Area 4: Social and Behavioral Sciences
- Area US2: U.S. Constitution and Government
- Area US3: California State and Local Government

**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**

Political Science

**Learning Outcomes**

**Course Objectives:**

- Evaluate how politicians articulate the policy making process.
- Analyze the values which public officials use for their reasoning patterns.
- Evaluate the values individuals use for their own reasoning patterns.
- Think abstractly and logically relate how concepts translate into concrete public policies and political philosophies.
- Discuss the meaning of politics, government, political system.
- Identify the major tenets of American democracy.
- Compare the political concepts of the Declaration of Independence with the tenets of democracy.
- Analyze the compromises of the Constitutional Convention in regard to the concepts of the Declaration of Independence and the Articles of Confederation.
- Define federalism and be able to show why and how the Constitution establishes such a federal political system.
- Trace the history of the incorporation of the Bill of Rights.
- Identify the major rights of the accused.
- Distinguish between civil liberties, civil rights, political rights and responsibilities.
- Examine the role of the U.S. Supreme Court as the umpire of the federal system in regard to the definition, promotion, and protection of fundamental freedoms.
- Contrast the original dual federalism with today's meaning of federalism.
- Trace the development of federalism through the nationalization of civil liberties.
- Define public opinion and attitudes shaping public opinion.
- Define political socialization and identify the major agents of the Role process.
Examine the impact of mass media on politics.
Discuss the relationship of elections, consent, and accountability.
Identify the major functions performed by a political party.
Distinguish between a political party and an interest group.
Identify the basic differences between the democratic and republican parties.
Understand the role of coalitions in American party politics.
Know how the parties control the nominating process
Evaluate the role of the electoral college and the impact of a direct popular election of the president.
Analyze the competing political ideologies existing in American politics.
Demonstrate familiarity with the basic structure of each branch of government.
Identify the primary functions to be performed by each branch in the making and implementation of political decisions.
Recognize the dynamics of decision making and the role played by each branch.
Identify the fundamental restrictions on achievement of goals and performance of functions.
Examine the interdependence of the three branches.
Demonstrate an understanding of how government operates at the Federal level, as well as state and local governments.
Demonstrate an understanding of how diversity, political culture, and political socialization are used as a comparative tool for tracking the similarities and differences between the federal and state governments’ structure and operations.

Student Learning Outcomes:
Successfully distinguish the various responsibilities of the three branches of American government within the democratic historical context.
Evaluate the cause and effect relationship of electoral politics on public policies.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors American Government and Politics
POLT101H:
3.0 Units
A student-oriented exploration of the historical and contemporary principles of American government and politics. Study groups and individual computer-based research focus on basic political concepts of American national and state governments. Satisfies graduation requirement for American Institutions and state requirements for California state government. Previous Title: Political Science 101H, Honors Introduction to American Government (2018)

Requisites
Requisites:
Prerequisite
A high school or college GPA of 3.0 or above
Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
  Area B1: Social and Behavioral Sciences: American Institutions
  Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
  Area D: Social Sciences
  Area US2: U.S. Constitution and Government
  Area US3: California State and Local Government

IGETC - Plan C
  Area 4: Social and Behavioral Sciences
  Area US2: U.S. Constitution and Government
  Area US3: California State and Local Government

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Political Science

Learning Outcomes
Course Objectives:
Evaluate how politicians articulate the policy making process.

Discuss the meaning of politics government, political system.

Identify the major tenets of American democracy.

Compare the political concepts of the Declaration of Independence with the tenets of democracy.

Analyze the compromises of the Constitutional Convention in regard to the concepts of the Declaration of Independence and the Articles of Confederation.

Define federalism and be able to show why and how the Constitution establishes such a federal political system.

Trace the history of the incorporation of the Bill of Rights.

Identify the major rights of the accused.

Distinguish between civil liberties, civil rights, political rights and responsibilities.

Examine the role of the U.S. Supreme Court as the umpire of the federal system in regard to the definition, promotion, and protection of fundamental freedoms.

Contrast the original dual federalism with today’s meaning of federalism.

Trace the development of federalism through the nationalization of civil liberties.

Define public opinion; identify Public opinion; attitudes shaping public opinion.

Define political socialization and identify the major agents of the Role process.

Examine the impact of mass media on politics.

Discuss the relationship of elections, consent, and accountability.
Identify the major functions performed by a political party.

Distinguish between a political party and an interest group.

Identify the basic differences between the democratic and republican parties.

Understand the role of coalitions in American party politics.

Know how the parties control the nominating process.

Evaluate the role of the electoral college and the impact of a direct popular election of the president.

Political Parties in California.

Initiative, referendum and Recall: The Rise of Progressive Politics

Campaign finance and elections at both the Federal and State level.

Analyze the competing political ideologies existing in American politics.

Be familiar with the basic structure of each branch of government.

Know the primary functions to be performed by each branch in the making and implementation of political decisions.

Recognize the dynamics of decision making and the role played by each branch.

Identify the fundamental restrictions on achievement of goals and performance of functions.

Examine the interdependence of the three branches.

Governor vs. the Presidency: similarities and differences

State legislature vs. the U.S. Congress: similarities and differences

State Court system vs. Federal Court System: similarities and differences

Understand how government operates at the Federal level.

This is an introductory course to the study of American Government and politics. The seminar approach will be used to study American politics.

This is an introductory course to the study of American Government and politics. The seminar approach will be used to study American politics.

Student Learning Outcomes:

Distinguish the various responsibilities of the three branches of American government within the democratic historical context.

Evaluate the cause and effect relationship of electoral politics on public policies.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Introduction to Political Science

POLT110:

3.0 Units

An introduction to political science designed to familiarize students with basic political concepts, political ideologies, political systems, and subfields within political science.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
   Area D: Social Sciences

IGETC - Plan C
   Area 4: Social and Behavioral Sciences

Learning Outcomes
Course Objectives:
Explain the development of political science and its subfields
Identify the key concepts in political science
Compare and contrast the various methods in political science
Evaluate and analyze normative and empirical approaches
Identify and analyze basic political systems and their differences
Analyze political behavior in international affairs

Student Learning Outcomes:
   Evaluate and demonstrate an understanding of the major concepts in the fields of political science such as the nature of politics (political theory), the ways different states set their agenda (comparative politics), diplomatic relations between states; n Evaluate and understand the major research trends in the subfields of political science

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Model United Nations
POLT150:
4.0 - 6.0 Units
Requisites

Requisites:

Prerequisite

POLT101 - American Government and Politics

OR

Prerequisite

POLT101H - Honors American Government and Politics

OR

Prerequisite

POLT220 - International Politics

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

6.0

General Education Plan:

CSU GE - Plan B

Area D: Social Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

IGETC - Plan C

Area 4: Social and Behavioral Sciences

Learning Outcomes

Course Objectives:

Recognize and recite the principles and practices of the United Nations.

Apply and prepare common solutions to world problems.

Define Human Rights

Defend global educational policies

Participate in public speaking forums where global issues are discussed

Demonstrate the art of persuasion, diplomacy, debate, negotiation and conflict resolution

Use voting blocs to persuade and defend written policies

Compile and organize caucus consensus that find common solutions to global problems.

Develop global literacy on issues concerning regional and international rights, relief and aid.

Develop Human Rights arguments using case studies and historical precedence.

Understand and become sensitive to the needs and aspirations of various cultures, people and nations.

Advise, speak and write on global issues.
Interpret national response to global concerns in relation to regional demographic ideals.

Apply meta-theoretical approaches to conflict resolution, writing, public speaking and debate

Apply instruction in the new role of Delegate.

Identify the winning elements of competitive speech

Provide useful peer evaluation

Demonstrate acceptable behavior at tournaments

Apply new research methodologies, specifically how to review primary sources, statistical data, international, UN and scholarly journals

Provide a written critique of video-taped individual performances.

Critique and discuss past great political debates.

**Student Learning Outcomes:**

- Demonstrate knowledge of the structure of the United Nations organization, NGOs, IGOs, and varied reference resources.
- Identify the impact of economic and social development particularly in developing countries.
- Critically analyze, solve, write and speak on problems and symptoms of developing nations.
- Recognize the role of women and minorities in the developing world.

**Units & Hours**

**Minimum Units:**

6.0

**Maximum Units**

6.0

**Total Hours**

108.0

**American Political Thought**

POLT200:

3.0 Units

An inquiry into the major influences that have shaped American political thought. Emphasis is on an historical analysis of political thought contributing to contemporary politics. A thorough examination of the significance of political thought on political parties and political events is conducted.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

CSU GE - Plan B

Area D: Social Sciences

IGETC - Plan C

Area 4: Social and Behavioral Sciences
UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:

Explain the roots of democracy

Explain and analyze liberal and conservative ideologies.

Explain and analyze the main principles of the Declaration of Independence.

Demonstrate a knowledge of Thomas Paine's revolutionary ideas.

Identify and describe the main issues that divided the Federalists and the Anti-Federalists.

Explain and analyze the main ideas in the Federalist Papers.

Identify and describe the main issues that divided Jefferson and Hamilton.

Explain and analyze the main forces that gave rise to Jacksonian democracy.

Identify and explain the main issues with regard to the slavery debate.

Identify democratic tendencies in the colonies.

Explain and analyze Social Darwinism.

Demonstrate a comprehensive knowledge of capitalism.

Describe the criticisms of capitalism.

Explain the rise of progressive thought.

Identify and describe the main principles of African-American thought.

Explain the socialist critique of capitalism.

Explain and analyze the New Deal.

Describe the forces that gave rise to the Welfare State.

Identify and explain the main issues driving early feminist thought.

Student Learning Outcomes:

Demonstrate knowledge of major political ideas which have shaped political behavior in the past as well as the present.

Analyze political concepts by placing current political events in the context of American political thought.

Units & Hours

Minimum Units:

3.0

Maximum Units

3.0

Total Hours

54.0

Introduction to Comparative Politics

POLT201:

3.0 Units

A study of the histories, political cultures, and governmental arrangements of various nations and regions around the world. Comparative study is made of the industrialized democracies, the former communist countries, and the developing, and non-developing countries.
Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

Course Identifier (C-ID)
Political Science

Learning Outcomes
Course Objectives:
Identify and analyze the impact of geopolitics and historical traditions

Describe major crises which nations go through in their political development

Illustrate the importance of political socialization and political attitudes

Contrast the presidential v. parliamentary systems

Describe politics of social cleavages

Compare and contrast the experiences of Canada, the United Kingdom, France, Germany, and Japan with the American experience in the following areas:
impact of geography and history
key governmental institutions
prevailing political attitudes
interaction between political parties, interest groups and their governments
current political controversies

Compare and contrast the experiences of the nations or regions such as Russia and the former Soviet Union, eastern Europe, Indo-China, and the People's Republic of China with the American experience in the following areas:
impact of geography and history
key governmental institutions
prevailing political attitudes
interaction between political parties, interest groups and their governments
current political controversies

Compare and contrast the experiences of nations or regions such as Mexico and Central/South America, India and South Central Asia, South Africa and sub-Saharan Africa, Iraq and the Middle East with the American experience in the following areas:
impact of geography and history
key governmental institutions
prevailing political attitudes
interaction between political parties, interest groups and their governments

current political controversies

**Student Learning Outcomes:**
- Qualify and quantify different political systems and cultures.
- Analyze the significance of multiple influences leading to governmental change.
- Evaluate the importance of globalization and its advantages and disadvantages for nations.
- Pre-test and post test administered.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**International Politics**
**POLT220:**

3.0 Units

Introduction to basic principles and issues of international politics. Focus is on concepts of security, power, diplomacy, war, terrorism and globalization. Examines problems of rich versus poor nations in context of the new world order.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**CSU GE - Plan B**
Area D: Social Sciences

**IGETC - Plan C**
Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**
Political Science

**Learning Outcomes**

**Course Objectives:**
Identify the distinctions and concepts relating to nation, state, government, society, country, and sovereignty
Describe the basic possible patterns an international system may take, such as multinationalism and transnationalism.

Describe the politics of nation-building, unification, national character industrialization, and the establishment of national goals.

Identify the "stages" of nation-building, the obstacles to change, and the problems change causes both to the newly developing system and to the international community.

Identify and describe the instruments of power, the exercise of power, and the indices of power.

Describe what power entails both empirically and non-empirically.

Identify how power may be measured and how power is applied and why.

Identify how the global economy affects power.

Describe the importance of political ideology in assisting national unification and its effects on the maintenance of peace in the international community.

Identify the functions of ideology in nation-building, and the consequences of ideology in retaining peace in the international community.

Describe the main patterns and consequences of imperialism and how globalization affects the relations between nations.

Analyze the impact of modern military technology on the balance of power and the nature of war.

Identify and describe the leading psychological, biological, economic, and political explanations of the causes of war.

Analyze the functions of war in both a nation and within the international system.

Describe how nuclear and modern technology has changed the nature and the stakes of war.

Identify and describe the main models of diplomatic behavior and the difference between open vs. closed diplomacy.

Describe the principles of the Law of the Sea and Space Law and how they relate to the sovereignty of the nation-state.

Identify the functions and effectiveness of organizations like the United Nations and its various committees or sub-organizations.

Identify the role and impact of nongovernmental organizations (NGOs) and intergovernmental organizations such as the European Union.

Apply the principles of international relations.

**Student Learning Outcomes:**

- Assess the way major systems of government operate as international actors.
- Evaluate the present conflicts in the world and their impact on rights of civilians.
- Analyze the impact of various political ideologies in international affairs.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Women in American Politics**

**POLT221:**

3.0 Units

A historical and philosophical study of the role women play in the politics of the United States as voters, policy makers, and activists. Attention will be devoted to topics of gender in education and the workplace, the politics of abortion, same sex marriage, and surrogate motherhood. The course will consider how race, class, age, and education affect the politicization of women.
Requisites
Requisites:
Advisory

POLT101 - American Government and Politics

OR

Advisory

POLT101H - Honors American Government and Politics

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Identify and describe the major events that have shaped the changes in the representation of women in government and policymaking
Identify and analyze the impact of amendments pertaining to the rights of women in the US Constitution
Describe the efforts behind those amendments by influential leaders
Describe the dynamics of group-centered politics and techniques associated with effective mobilization by women
Analyze the foundations of women's participation as it relates to female socialization norms in the US
Identify the characteristics related to voter behavior among women and the reasons explaining why and how women do or do not engage in suffrage and other forms of partisanship
Describe the culture of advocacy and lobbying
Identify the patterns of activism among women
Identify and analyze the typology of leadership and the impact of gender and gender-bias on leadership
Identify the obstacles facing working women in modern society and the efforts in progress in combating them in an effective way
Describe the legislation related to women's needs as mothers and care-takers and the efforts made to reform antiquated policies
Identify the challenges pertaining to discrimination against women in education and employment, and legislation designed to combat those problems
Identify current law in regard to all marital and child custody laws, as well as sexual education and reproductive rights
Describe the evolution of policy reform as it relates to those rights.
Analyze the gender roles and the gender socialization of women as they pertain to culture and heritage, and all expectations of various relationships involving women.
Describe and analyze the prevalence of acts and events that threaten the physical and emotional safety of women
Identify the educational and legislative tools available to combat those types of problems
Identify and describe how women can empower future generations of women, and the legacies they leave behind

Student Learning Outcomes:
- Evaluate the role of women in American politics, past, present, and future.
- Analyze issues regarding gender equality and feminist politics.
- Discuss and resolve public policies having special impact on women of all ages.
- Assess ways to promote a more gender-friendly environment both inside and outside of the classroom.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Political Theory
POLT230:

3.0 Units
The course will explore the history of political theory from Plato to the present. Such concepts as liberty, equality, power, authority and justice will be examined.

Requisites

None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
- Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
- Area D: Social Sciences

IGETC - Plan C
- Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
- UC Comparable Transfer Courses

Course Identifier (C-ID)
- Political Science

Learning Outcomes
Course Objectives:
Analyze political concepts and explain how they are relevant to contemporary issues
Evaluate the study of political theory, based on original texts and other sources, as a means for understanding important political phenomena
Analyze political theory and theoretical texts and explain how they are relevant to contemporary issues
Analyze political theory and theoretical texts and explain how they are relevant to contemporary issues
Differentiate the value of these concepts and apply them to the analysis of a civil society
Evaluate the contribution of each political theory towards a comprehensive understanding of political life and political institutions
Analyze the relevance of 19th century socialist concepts to contemporary issues

Classical theorists
Plato
Aristotle
Saint Augustine
Thomas Aquinas

Student Learning Outcomes:
Analyze and interpret concepts in political theory
Discuss key historical developments in political theory

Units & Hours
Minimum Units:
3.0

Maximun Units
3.0

Total Hours
54.0

Advanced Model United Nations
POLT250:
4.0 - 6.0 Units

An advanced course in the study of the United Nations. The focus will be on mentorship of novice members, advanced research, team events training, individual events training and research for intercollegiate United Nations conferences and competitions. Non-Governmental Organizations (NGOs), Intergovernmental Organizations (IGOs), International Criminal Court (ICC), International Court of Justice (ICJ) and various other international bodies are covered. Prepares students for international current event debates, parliamentary debate and conflict resolution. Students are required to attend Model United Nations conferences.

Requisites
Requisites:
Prerequisite
POLT150 - Introduction to Model United Nations

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
6.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Define and comprehend international economic institutions and the role of economic development agencies such as World Bank, International Monetary Fund, World Trade Organization

Examine different economic systems and organization of international economy Globalization, Hegemonic Stability and role of hegemon, Neoliberalism and role of structural adjustment, mercantilism and neomercantilism, sustainable development and underdevelo

Compare paradigm and theoretical perspectives on international political economy and international organizations

Highlight the impact of the Global War on Terrorism on the field of international diplomacy

Examine the importance of national sovereignty and how it relates to discussions on UN involvement in humanitarian affairs

Analyze the role of confidence building measures in international diplomacy, especially as a starting point for negotiations

Evaluate the importance of international law when implementing policy in diverse regions

Differentiate between binding and nonbinding resolutions within international law

Recognize the increasing role of multinational corporations (MNCs) in the development of the global economy and the backlash this role has created in the developing world

Examine UN law regarding refugees, women and children

Give formal speeches when in front of a large, foreign audience.

Speak, as a committee, on policy prescriptions to gain feedback and insight on their solutions to major world problems.

Present extensive proposals on global policy changes and solving pressing issues

Apply proper speech techniques when addressing foreign audiences and within small group settings

Maximize the likelihood of cooperation and coherence in caucus setting

Evaluate the role of the diplomat when confronted with an unfavorable situation within formal caucusing

Outline the process and policy for favorable negotiation tactics within the parlance of international relations with specific cases

Examine the role of developing nations and developed nations in global affairs

Investigate the importance and relevance of UN and US policies

Apply meta-theoretical approaches to conflict resolution, writing, public speaking and debate

**Student Learning Outcomes:**

Demonstrate well developed knowledge and role of the United Nations organization, Non-Governmental Organizations (NGOs), Intergovernmental Organizations (IGOs), and varied case studies of international diplomacy, political economy, and ethnic struggles.

Investigate the viability for democracy and its institutions through the practices and methods used by the United Nations utilizing case studies and nation-state profiles.
Critically analyze and examine the importance of national sovereignty, economic and social development particularly in developing countries and how it relates to discussions on UN involvement in humanitarian affairs, civil liberty violations with regard to

**Units & Hours**

**Minimum Units:**
6.0

**Maximum Units**
6.0

**Total Hours**
216.0

**Effective Parenting**

**PRNT532:**

0.0 Units

Provides parents with an overview of child development milestones. Includes varied strategies for problem solving, effective communication, positive discipline and child-centered activities. Raises awareness of substance abuse, gangs, suicide, and peer pressure. Encourages parents to take an active role to ensure the academic success, health and safety, and social well-being of their children. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
- Identify course objectives
- Understand developmental stages and characteristics
- Select child-centered activities to encourage social and linguistic skills
- Investigate behavior modification strategies
- Understand developmental stages and characteristics
- Examine childhood fears, sibling rivalry, and relationships with peers
- Understand developmental stages and characteristics
- Formulate ways to discuss peer pressure with adolescents
- Explain tendencies toward gang related activities, suicide, and substance abuse
- Outline nutritional needs of children
- Analyze development of self-esteem in children and discuss factors that foster a positive or negative self-image
- Explore internet safety & issues of child molestation
- Examine parent-child communication patterns as related to developmental stages, unique personalities, and emotional needs
- Discuss intrinsic versus extrinsic motivation and the learning process
- Compare discipline and punishment
Evaluate utilization of rewards and positive reinforcement

Design effective discipline model

Describe child abuse and assess signs of abuse

Outline stress and anger management techniques, and apply knowledge to generate positive family interaction and maintain a harmonious environment

Analyze the importance of healthy parent-child attachment

Assess the effects of separation and/or divorce on family dynamics

Categorize various ways to actively participate in the academic development and achievement of children

Critique school programs and services as related to individual development and unique learning needs of child

Summarize and discuss class objectives

Appraise personal application of objectives

**Student Learning Outcomes:**

- Demonstrate knowledge of the developmental stages, characteristics, fears and pressures in early and middle childhood and adolescence.
- Apply appropriate behavior modification and discipline strategies to specific situations.
- Select effective communication strategies for specific situations.

**Units & Hours**

**Total Hours**

27.0

**Preparation for Childbirth**

**PRNT544:**

0.0 Units

Provides prospective parents with information regarding the intellectual, physical, and emotional components of the birth process. Emphasizes exercise techniques for relaxation, labor, birth, and post-natal care. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Learning Outcomes**

**Course Objectives:**

- Identify the physiological and emotional changes in pregnancy
- Recognize the minor discomforts of pregnancy and learn coping strategies
- Identify food in a well-balanced diet
- Understand possible complications of pregnancy and indications for induction
- Define labor and delivery
- List the causes of labor
- Identify premonitory signs of labor
- Compare and contrast true and false labor
Define effacement, dilation and station

Define the stages of labor and understand the feelings and behaviors that accompany each stage

Learn and engage in exercises to aid in relaxation, birth, correct body alignment and circulation

Describe different presenting positions, understand the nature of Caesarean section birth, and identify different medical aids available for labor and delivery

Explain hospital admission procedures

Demonstrate an understanding of feelings that are experienced during delivery and practice exercises and comfort measures

Describe the physiological and emotional changes during the post-partum period

Learn exercises that will be beneficial during post-partum

Describe various birth control options

Describe the benefits of breastfeeding for the mother and baby

Identify basic anatomy and describe basic physiology of the breast

List the possible challenges with breastfeeding and identify sources of information and assistance

List the nutritional needs of the lactating mother

Describe the nursing needs and cycles of the infant

Describe the physical characteristics of the newborn

Recognize the normal sleep and activity states of the newborn

Describe basic infant care

List the recommended immunizations received by infants

Describe general safety concerns and related laws

Identify important growth and development milestones in the first few months

Describe signs of an ill infant and demonstrate an understanding of when to call the doctor

**Student Learning Outcomes:**

- Demonstrate knowledge of the intellectual, physical and emotional aspects of pregnancy and the birth process.
- Describe how to care for the post-partum mother and newborn child.

**Units & Hours**

**Total Hours**

36.0

**Survey of Chemistry and Physics**

**PSC100:**

4.0 Units

An introduction to the basic principles of physics and chemistry including matter, physical and chemical properties, energy, motion, thermodynamics, electricity and magnetism, light, atomic structure, bonding, solutions and chemical reactions. The inter-dependence of chemistry and physics will be emphasized. Designed for non-science majors, concepts are introduced in lab through inquiry and further developed during discussion.

**Requisites**

**Requisites:**

**Advisory**

MATH080 - Intermediate Algebra
Advisory

**MATH085 - Intermediate Algebra with Integrated Support**

OR

Advisory

Qualifying profile from the Mathematics placement process.

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
4.0

**General Education Plan:**

**Local - Plan A**
- Area A: Natural Sciences

**CSU GE - Plan B**
- Area B1: Physical Sciences
- Area B3: Laboratory Activity

**IGETC - Plan C**
- Area 5A: Physical Science
- Area 5C: Laboratory Activities

**Course Identifier (C-ID)**
- Physics

**Learning Outcomes**

**Course Objectives:**
- Demonstrate an understanding of fundamentals of measuring area, volume, and mass.
- Demonstrate an understanding that density is a physical property of matter that is defined as the ratio of an object’s mass to its volume.
- Describe the relationship between the volume of fluid and the volume of a container.
- Perform calculations involving scientific notation and conversion factors.
- Analyze relationships using graphs.
- Identify the relationship between a manipulated variable and a responding variable.
- Classify pure substances as elements or compounds.
- Describe the characteristics of an element and the symbols used to identify elements.
- Distinguish pure substances from mixtures.
- Classify mixtures as heterogeneous or homogeneous.
- Classify mixtures as solutions, suspensions, or colloids.
- Describe physical and chemical properties of matter.
- Describe methods used to separate mixtures.
Describe evidence that indicates a physical or chemical change is taking place.

Classify materials as solids, liquids, or gasses.

Describe early models of the atom.

List the main points of Dalton’s atomic theory and describe his evidence for the existence of atoms.

Explain how Thomson and Rutherford used data from experiments to produce their atomic models.

Identify three subatomic particles and compare their properties.

Distinguish the atomic number of an element from the mass number of an isotope and use these numbers to describe the structure of atoms.

Describe Bohr’s model of the atom and the evidence for energy levels.

Relate the energy levels of an atom to the emission spectra.

Describe how Mendeleev arranged the elements in his table.

Identify general properties of metals, nonmetals, and metalloids.

Describe how properties of elements change across a period in the periodic table.

Relate the number of valence electrons to groups in the periodic table.

Relate the number of available shells to the period.

Predict the reactivity of some elements based on their locations within a group.

Draw the Lewis structure for any atom.

Explain and apply the octet rule.

Describe how an ionic bond forms and how ionization energy affects the process.

Predict the composition of an ionic compound from its chemical formula.

Describe how covalent bonds form.

Draw the Lewis structure for a covalent molecule.

Explain the law of constant composition for a compound.

Distinguish between vectors and scalars.

Use a vector diagram to find the resultant and equilibrant of two vectors.

Distinguish between distance and displacement.

Compare and contrast average speed and instantaneous speed.

Interpret distance-time and speed-time graphs.

Distinguish between linear motion with constant speed to constant accelerated motion.

Calculate the speed of a particle while undergoing free fall.

Calculate the distance a particle falls while undergoing free fall.

Describe the path of a projectile and explain how the horizontal motion is independent of the vertical motion.

Describe Newton’s first law of motion and its relation to inertia.

Describe Newton’s second law of motion and use it to calculate acceleration, force, and mass values.

Relate the mass of an object to its weight.

Explain how action and reaction forces are related according to Newton’s third law of motion.

Calculate the momentum of an object and describe what happens when momentum is conserved during a collision.

Describe the conditions that must exist for a force to do work on an object.
Calculate the work done on an object.
Describe and calculate power.
Explain why the efficiency of a machine is always less than 100%.
Describe the relationship between work and energy.
Relate kinetic energy to mass and speed and calculate these quantities.
Analyze how potential energy is related to an object’s position and give examples of gravitational and elastic potential energy.
Solve equations that relate an object’s gravitational potential energy to its mass and height.
Give examples of the major forms of energy and explain how each is produced.
Explain how heat and work transfer energy.
Relate the motion of the particles that make up a material to the internal energy of a material.
Calculate heat, temperature change or mass using the specific heat equation.
Calculate thermal energy changes or specific heat using calorimetry measurements.
Describe conduction, convection and radiation and identify which of these is occurring in a specific situation.
Classify materials as thermal conductors or thermal insulators.
Describe how electric charges are transferred and explain why electric discharges occur.
Describe the factors that affect resistance.
Explain how voltage produces electric current.
Calculate voltage, current and resistance using Ohm’s law.
Analyze circuit diagrams for series circuits and parallel circuits.
Solve equations that relate electric power to current, voltage and electrical energy.
Interpret diagrams of magnetic field lines around one or more bar magnets.
Describe earth’s magnetic field and its effect on compasses.
Explain the behavior of ferromagnetic materials in terms of magnetic domains.
Describe how electric current is generated by electromagnetic induction.
Compare ac and dc generators and explain how they work.
Summarize how electrical energy is produced, transmitted and converted for use in the home.

Student Learning Outcomes:
- Correctly analyze natural phenomena using the concepts of physics and chemistry.
- Investigate physical phenomena using appropriate equipment and methods, make valid comparisons with theoretical predictions, and communicate those results.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

Introduction to Psychology
PSYC100:

3.0 Units

An introduction to the major theories, methods, concepts, ethical issues, and findings in the major fields in psychology including (but not limited to): research methods, biological bases of behavior, perception, learning, memory, cognition, emotion, motivation, development, personality, social, and abnormal psychology.

Requisites

None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B

Area D: Social Sciences

IGETC - Plan C

Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

Psychology

Learning Outcomes

Course Objectives:

Critically analyze and apply research methods to psychological studies, including ethical and cultural considerations

Identify multiple schools of thought within psychology (e.g., cognitive, behavioral, sociocultural, psychoanalytic, etc.)

Identify major structures of the neuron and their functions

Identify major structures of the brain and their functions

Distinguish between the central and peripheral nervous systems, identify major divisions within each, and describe their functions

Identify major neurotransmitters and their functions

Explain the various states of consciousness

Discuss stages of sleep, regulation of the sleep-wake cycle, and sleep disorders and disturbances

Describe the process of information transmission from sensory memory to short term memory to long term memory

Distinguish between classical and operant conditioning

Discuss and apply the basic principles of classical conditioning, operant conditioning and social cognitive learning

Discuss the difference between sensation and perception

Explain what impacts the processing of sensation (e.g., perceptual thresholds)
Apply various organizational factors that are involved in perception (e.g., figure versus ground, movement perception, depth perception, and perceptual constancy).

Identify and critically analyze multiple forms of and theories on intelligence

Examine the interrelationship between motivation and emotion

Compare and contrast between biological and psychosocial motivation

Discuss genetic and sociocultural influences on development as well as major changes in each developmental stage from prenatal to adulthood

Identify and explain major theories of development (e.g., Piaget, Freud)

Explain how psychodynamic, humanistic and sociocognitive development concepts impact personality development

Analyze what impacts attitude development and the connection attitudes have to behavior

Discuss what influences development and reduction of prejudices

Distinguish between various forms of social influence (i.e., conformity, obedience, etc.)

Identify conditions that influence an individual's behavior in groups

Explain various ways one's own as well as others' behavior can be interpreted

Identify contributing factors to aggressive behavior

Explain the connection between stress, coping strategies and lifestyle patterns as they relate to health/disease

Identify the major characteristics of various categories of disorders and of specific disorders (e.g., anxiety, depressive, dissociative, schizophrenia, personality, etc.)

Describe the criteria for mental disorders of the American Psychological Association's Diagnostic and Statistical Manual (DSM)

Discuss major approaches to therapy (e.g., psychoanalytic, humanistic, cognitive-behavioral and biological)

Student Learning Outcomes:

Demonstrate familiarity with the major concepts, theories, methods, and findings in psychology.

Apply the scientific principles of psychology to everyday behaviors.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors Introduction to Psychology
PSYC100H:

3.0 Units

Content-enriched course for honors students emphasizing application and critical analysis of psychological concepts. An introduction to the major theories, methods, concepts, ethical issues, and findings in the major fields in psychology including (but not limited to): research methods, biological bases of behavior, perception, learning, memory, cognition, emotion, motivation, development, personality, social, and abnormal psychology.

Requisites

Requisites:
Advisory
A high school or college GPA of 3.0 or above.

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
Area B2: Social and Behavioral Sciences: Social Science Elective

**CSU GE - Plan B**
Area B2: Life Sciences

**IGETC - Plan C**
Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**
UC Comparable Transfer Courses

**Course Identifier (C-ID)**
Psychology

**Learning Outcomes**

**Course Objectives:**
Critically analyze and apply research methods to psychological studies, including ethical and cultural considerations
Identify multiple schools of thought within psychology (e.g., cognitive, behavioral, sociocultural, psychoanalytic, etc.)
Identify major structures of the neuron and their functions
Identify major structures of the brain and their functions
Distinguish between the central and peripheral nervous systems, identify major divisions within each, and describe their functions
Identify major neurotransmitters and their functions
Explain the various states of consciousness
Discuss stages of sleep, regulation of the sleep-wake cycle, and sleep disorders and disturbances
Discuss the difference between sensation and perception
Explain what impacts the processing of sensation (e.g., perceptual thresholds)
Apply various organizational factors that are involved in perception (e.g., figure versus ground, movement perception, depth perception, and perceptual constancy).
Identify and critically analyze multiple forms of and theories on intelligence
Examine the interrelationship between motivation and emotion
Compare and contrast between biological and psychosocial motivation
Describe the process of information transmission from sensory memory to short term memory to long term memory
Differentiate between classical and operant conditioning
Discuss and apply the basic principles of classical conditioning, operant conditioning and social cognitive learning
Discuss genetic and sociocultural influences on development as well as major changes in each developmental stage from prenatal to adulthood
Identify and explain major theories of development (e.g., Piaget, Freud)
Explain how psychodynamic, humanistic and sociocognitive development concepts impact personality development

Analyze what impacts attitude development and the connection attitudes have to behavior

Discuss what influences development and reduction of prejudices

Distinguish between various forms of social influence (i.e., conformity, obedience, etc.)

Identify conditions that influence an individual’s behavior in groups

Explain various ways one’s own as well as others’ behavior can be interpreted

Identify contributing factors to aggressive behavior

Explain the connection between stress, coping strategies and lifestyle patterns as they relate to health/disease

Identify the major characteristics of various categories of disorders and of specific disorders (e.g., anxiety, depressive, dissociative, schizophrenia, personality, etc.)

Describe the criteria for mental disorders of the American Psychological Association’s Diagnostic and Statistical Manual (DSM)

Discuss major approaches to therapy (e.g., psychoanalytic, humanistic, cognitive-behavioral and biological)

**Student Learning Outcomes:**
- Demonstrate familiarity with the major concepts, theories, methods, and findings in psychology.
- Apply the scientific principles of psychology to everyday behaviors.

### Units & Hours

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

### Introduction to Child Psychology

**PSYC157:**

3.0 Units

Survey of human development from conception through adolescence. Covers major theories of development (cognition, perception, language, personality, etc.) and their application to parenting, teaching, and other interactions with children. (No credit if student has taken Child Development 107.)

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**
Learning Outcomes

Course Objectives:
Understand the domains of human development and how they interact and change throughout childhood
Identify the major theories in child development and their relevance in studying child development
Examine the strengths and weakness of the major theories in child development
Identify the various research designs and ethics studying child development
Understand how genetics influence development
Identify the most common genetic and chromosomal abnormalities
Identify normal prenatal development and the various factors that affect prenatal development
Identify physical milestones and understand normal biological development throughout childhood
Examine how environmental factors can influence biological/physical development
Compare and contrast between Piagetian, socio-cultural, and information-processing views of cognitive development
Understand the processes of language acquisition as well as what can influence it
Understand how intelligence is measured and what can affect measurement outcomes
Identify the difference between normative and atypical cognitive child development
Identify basic emotions and emotional regulation
Identify and examine the theories (psychoanalytic, ethological and social-cognitive) of personality development
Examine the principles of attachment and what can affect attachment
Understand the development of self-concept and how it interacts with personality development
Identify the changes in family (parent and sibling), peer, and social relationships throughout childhood
Understand the development of moral reasoning
Examine influences of gender development and concepts of sex-role knowledge and sex-role behavior
Understand how child development principles can be used in schools and aftercare programs

Student Learning Outcomes:
Demonstrate familiarity with the major issues, methods, theories and findings in child psychology.
Apply the principles of child psychology to solve problems in parenting, child care, and early education.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0

Total Hours
54.0

Introduction to Lifespan Psychology
PSYC160:

3.0 Units
An overview of human development from conception through death, including biological and environmental influences. Psychological theories and research regarding physical, cognitive, social and emotional development over the lifespan will be examined.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area D: Social Sciences
Area E1: Lifelong Learning

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Learning Outcomes
Course Objectives:
Identify the major theories in lifespan development and their strengths and weakness
Apply psychological research methods to lifespan development
Understand the impact genetics have on biological development
Explain the stages of prenatal development
Examine the dangers that might negatively impact prenatal development and pregnancy
Discuss the interaction between genetics and socialization, and their connection to biological development
Describe critical aspects of motor, sensory and language development that occur during the first two years
Identify and explain various attachment styles

Discuss neural development during the first two years of life

Explain neural development in early childhood and its connection to emotions

Discuss the main cognitive abilities that are developed and focused upon in early childhood

Examine diverse ways of parenting and their impact in early childhood

Understand the impact of aggression on children, including maltreatment and abuse

Define the difference between sex and gender

Discuss the theories that impact gender identity development

Identify ways in which emotional intelligence develops in early childhood

Discuss neural and motor development as they relate to middle and late childhood

Understand the distinction between aptitude and achievement

Critically examine and discuss various intelligence theories and tests, including their pro's and con's

Identify effective ways to work with children with special needs

Examine how interactions with peers impact one's experiences in middle and late childhood

Discuss the cognitive and emotional development that is characteristic of middle and late childhood

Discuss the cognitive and psychological aspects of development that are unique to teenage years

Examine identity development in adolescence

Understand the challenges teens face during adolescence (e.g., suicide, eating disorders, sexual relationships, etc.)

Describe the physical and biological changes that occur during adolescence (e.g., puberty)

Understand the stressors that are characteristic of early adulthood and their impact on one's emotions, mental health and physical health

Examine the development of love relationships in early adulthood

Discuss the challenges those in early adulthood often experience in relationships (e.g., communication, dealing with conflict, etc.)

Explain the unique experience of individuals transitioning into early adulthood

Discuss the unique life changes and challenges that occur during middle adulthood

Describe the physical changes that occur in middle adulthood

Explain ways in which relationships with partners and family members may change in middle adulthood

Discuss the neurocognitive changes that occur late in life

Identify the various aging processes that are experienced in later adulthood

Explain the various challenges that are unique to late adulthood (e.g., elder care and abuse, inability to care for oneself, neurocognitive and physical challenges, etc.)

Discuss the role of elderly individuals in families and communities

Identify important ways to plan for the aging process and death

Explain what individuals go through as they experience the grieving process

Discuss important considerations when looking at various topics as they relate to the aging process and dying (e.g., euthanasia)

**Student Learning Outcomes:**

- Demonstrate familiarity with the major issues, methods, theories and findings in lifespan psychology.
- Engage in the practical application of theories in developmental psychology to various stages across the lifespan.

**Units & Hours**
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Multicultural Psychology
PSYC170:
3.0 Units
Introduces students to important issues related to cultural diversity in the field of psychology. Major areas of psychology will be explored from a multicultural perspective, including research, mental health, social psychology, and identity development. Exploration of historically underrepresented populations in the U.S. will be emphasized.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area D: Cultural Breadth
CSU GE - Plan B
   Area D: Social Sciences
IGETC - Plan C
   Area 4: Social and Behavioral Sciences
Santa Ana College - Shared Course
   Shared Course with SAC

Learning Outcomes
Course Objectives:
Understand the importance of integrating multicultural perspectives into psychology
Identify the main goals of multicultural theory and their relevance in studying human behavior and mental processes
Critically examine research studies for cultural bias
Understand the connection between the purpose of a study, the cultural environment and research design
Identify culturally sensitive ways for implementing research and for interpreting and applying research findings
Examine how diverse worldviews impact human behavior, interpretation and social interactions, including conflict and misunderstanding
Understand how privilege and oppression shape one’s worldview
Evaluate personal worldview(s) and the impact this has on one’s interactions with and views of others
Understand how cultural differences impact one's communication style and interpretation of messages
Identify how culture-specific styles of communication (both verbal and non-verbal) can impact social interactions and misunderstanding
Examine various acculturation models and their application to various groups
Understand the acculturation of immigrants and refugees and the costs associated with this
Evaluate the adaptation and acculturation process to mainstream U.S. culture for underrepresented culture groups
Identify the impact of acculturation and/or assimilation on one's as well as others' experiences and identity development
Understand the impact prejudice and discrimination have on one's as well as others' behavior and cognitions
Identify ways in which prejudice and discrimination have been used to reinforce privilege and oppression in the U.S.
Examine ways in which personal perspectives and experiences have been impacted by prejudice and discrimination
Evaluate ways to increase one's own level of multicultural competence and self-awareness
Understand the connection between identity development, the development of one's worldview and the experience of discrimination (e.g., racism, sexism, etc.) in the United States
Apply identity development models to one's as well as others' experiences and development in a culturally-sensitive manner
Explain how discrimination, prejudice and other barriers impact utilization of medical and mental health care services by underrepresented groups in the U.S.
Describe the importance of multicultural considerations regarding mental illness, including diagnosis and treatment
Identify biased practices in the mental health and medical health care systems in the U.S.
Critically examine ways that the U.S. medical and mental health care systems can become more inclusive
Identify ways for creating and supporting culturally sensitive and inclusive environments
Examine one's as well as others' multicultural competence and ways for increasing it
Evaluate and explain how various concepts within multicultural psychology have personally impacted one's as well as others' experiences, behaviors and attitudes in a culturally sensitive manner

Student Learning Outcomes:
Demonstrate familiarity with the major issues, methods and findings within multicultural psychology.
Engage in the practical application of multicultural psychology principles.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Psychology of Gender
PSYC180:
3.0 Units
This course will examine psychological research and theory on gender with consideration of sociocultural and historical influences. Topics to be covered will include, but will not be limited to, the following: gender identity development, masculinity and femininity, sexual orientation, gender roles, stereotypes, prejudice, and discrimination, as well as gender differences in physiology, communication, mental health, the workplace and relationships. Additional focus will be given to the effects of race, ethnicity, socioeconomic status and other forms of culture on gender.

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Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
   Area D: Cultural Breadth

CSU GE - Plan B
   Area D: Social Sciences

IGETC - Plan C
   Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Discuss the distinction between gender, sex, and sexual orientation
Identify and explain the major gender theories and the differences between each
Examine the social impact of race, culture and prejudice on gender, sex and sexual orientation
Understand the historical influences that have shaped contemporary perspectives on feminism, gender identity, and masculinity and femininity
Explain the major differences between the various types of studies
Discuss the importance of the scientific method in the study of gender
Critically examine how prior and current research fall short in the study of gender
Examine the distinctions between genders as they relate to health and risk-taking behaviors
Identify the biological, hormonal, genetic and physiological variations among sexes, sexual orientations, and gender identities
Discuss how mental illness can be perceived, defined and treated differently among various cultures and genders
Identify how classism, racism, heterosexism, transphobia and cultural background impact one’s mental and physical health as well as one’s treatment-seeking behaviors
Discuss the sociocultural and historical forces behind sexism and heterosexism
Identify diverse gender identities and sexual orientations and related development theories
Analyze the impact of gender stereotypes, prejudice and discrimination on one’s gender identity development and related experiences
Understand the impact of intersectionality on one’s experiences as a gendered individual
Exercise greater empathy and understanding for diverse experiences around sexual orientation and gender identity
Discuss aspects where research has identified variations between genders (i.e., cognitive abilities, social behaviors, social and moral development and emotions)
Explain the development of distinctions in communication among genders
Identify major ways genders tend to vary in both nonverbal and verbal communication styles

Evaluate one’s as well as others’ use of biased language and identify ways to create more inclusive communication

Identify how relationships across genders can be both different and similar to each other

Explain how conflict manifests in both friendships and love relationships, and identify effective strategies for managing conflict

Discuss gender-based relationship patterns

Examine the impact of sexual orientation, heterosexism and sexism on relationships

Identify types of violence and related theories of aggression, including how they manifest themselves in relationships

Discuss the impact sexism and heterosexism have on the experience of discrimination, sexual harassment and assault, and relationship violence

Explain both individual and social factors affecting achievement

Identify ways that stereotypes, prejudice, racism, sexism and heterosexism impact the achievement and workplace experiences of various genders

**Student Learning Outcomes:**
- Demonstrate familiarity with the major issues, methods, and findings within the psychology of gender.
- Critically examine and apply concepts and principles within the psychology of gender.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Psychology of Human Sexuality**

**PSYC190:**

3.0 Units

An overview of human sexuality through a psychological lens with additional focus on biological, sociocultural, and historical perspectives and influences. Topics to be explored will include, but will not be limited to, the following: sexual anatomy and physiological arousal; sexual attitudes and values; sexual behaviors, dysfunction, disorders and treatments; relationships and communication; interconnections to cultural identities (e.g., race, gender identity, sexual orientation, age, religion, etc.); sexual violence; contraception and pregnancy, and sexually transmitted infections and prevention. Current sex norms and various aspects of interpersonal and individual sexual adjustment will also be discussed. (No credit if a student has taken IDS 155.)

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**
Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area D: Social Sciences
Area E1: Lifelong Learning

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Learning Outcomes

Course Objectives:
- Explain the distinction between sex, sexuality, sexual orientation and gender identity
- Critically examine research methods in human sexuality, including conducting ethical research, research concerns, and various methods for collecting and evaluating research data
- Understand the interconnection between one's sexuality and various aspects of identity (e.g., race, gender identity, sexual orientation, etc.)
- Identify female and male sexual anatomy and their functions
- Explain the physiological changes that occur during sexual stimulation
- Identify and explain various gender identities across the spectrum
- Apply gender identity development models to one's as well as others' experiences
- Understand the impact of sexism on various gender identities
- Identify and explain various sexual orientations across the spectrum
- Understand the impact of heteronormativity and heterosexism
- Apply theories of sexual orientation development as well as the coming out process to increase one's understanding for self and others
- Understand critical sexual developmental concerns throughout the lifespan
- Examine changes in sexual behaviors and sexuality as they pertain to specific stages in life
- Identify and apply types and styles of love
- Discuss various aspects that impact and can help to improve communication in intimate relationships
- Types of relationship violence and ways to establish and maintain healthy, non-violent relationships
- Explain couple sex styles
- Understand the difference between sexual variation, addiction and paraphilia
- Identify various paraphilias and related treatment
- Identify and explain sexual dysfunction and their related therapies
- Identify and explain various methods for birth control
- Discuss various types of birthing options (e.g., water, C-Section, natural, Doula, Midwife, etc.)
- Explain prenatal development and the birthing process
- Identify various types of STIs (bacterial, viral, vaginal, ectoparasitic infestations) and related treatments
Explain ways to prevent transmission of STIs

Understand the distinction between sexual harassment, abuse and assault

Explain ways to prevent sexual harassment, abuse and assault

Critically discuss the laws that protect against sexual discrimination, harassment, violence and coercion

Identify the ways in which sexual harassment, discrimination, violence and coercion are connected to sexism, heterosexism and heteronormativity

Student Learning Outcomes:
   - Demonstrate familiarity with the major issues, methods and findings within the psychology of human sexuality.
   - Critically examine and apply concepts and principles within human sexuality.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Biological Psychology
PSYC200:

3.0 Units

Explores relationships between physiological structures of the body and human behavior. Focuses on the organization and function of the brain, spinal cord, peripheral nervous system, glands, sensory and perceptual systems. Relates physiological functioning to motivated behavior, addiction, and psychological disorders.

Requisites

Prerequisite
PSYC100 - Introduction to Psychology

OR

Prerequisite
PSYC100H - Honors Introduction to Psychology

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
CSU GE - Plan B
Area B2: Life Sciences
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences
Area 5A: Physical Science

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Learning Outcomes

Course Objectives:
Explain the foundational elements of physiological psychology, including research methods, ethics, genetics and interdisciplinary connections.

Identify and discuss the basic tenets of physiological psychology, including neural structures and functions as well as nervous systems, and their connection to psychological functions.

Discuss the biochemical effects of pharmaceuticals and illicit drugs, and how these impact the development of drug addiction.

Explain the physiological structures and functions involved in perception and mobility.

Identify the biological structures and biochemistry involved in the maintenance of sleep-wake cycles, the functionality of reproductive systems, and the experience and management of emotions.

Discuss physiological and biochemical explanations for eating disorders, neurological disorders and mental illness.

Student Learning Outcomes:
Demonstrate familiarity with the major issues, methods, and findings in Biological Psychology.

Identify basic neuroanatomical structures and describe their function.

Apply the principles of biological psychology to everyday behaviors.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Research Methods in Psychology
PSYC220:

4.0 Units

Emphasizes methods of study in psychology including: sound and ethical experimental design, analysis of variables contributing to experimental results, data treatment, and communicating findings.

Requisites

Requisites:
Prerequisite

MATH219 - Statistics and Probability

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OR

**Prerequisite**

MATH219H - Honors Statistics and Probability

OR

**Prerequisite**

MATH220 - Statistics and Probability with Integrated Review

AND

**Prerequisite**

PSYC100 - Introduction to Psychology

OR

**Prerequisite**

PSYC100H - Honors Introduction to Psychology

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

4.0

**General Education Plan:**

CSU GE - Plan B

Area D: Social Sciences

IGETC - Plan C

Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Course Identifier (C-ID)**

Psychology

**Learning Outcomes**

**Course Objectives:**

Explain the general principles of the scientific method and the logic of their application.

Discuss ethical considerations in research.

Examine and form a hypothesis.

Examine the procedures that are critical in applying the rules of science to research in psychology.

Explain the requirements of research.

Identify independent, dependent, random, control, and confound variables.

Explain concepts of sampling, surveying, and basic experimental design.
Apply and discuss descriptive and inferential statistics (e.g., correlational analyses and t-tests).

Discuss concepts of factorial designs and multi-level experiments.

Conduct data analyses of complex designs with special consideration to analysis of variance and/or regression analyses.

Design and conduct an original research project.

Collect, analyze, and interpret data using appropriate statistical design.

Complete a final APA-style manuscript.

**Student Learning Outcomes:**

- Identify the main issues, research methods, and ethical considerations in psychology.
- Conduct simple, controlled, empirical investigations, using sound experimental design.
- Use simple statistical tests to investigate hypotheses arising from empirical studies.
- Write concise scientific reports in American Psychological Association (APA) format.

**Units & Hours**

**Minimum Units:**

4.0

**Maximum Units:**

4.0

**Total Hours:**

108.0

**Psychology of Adjustment**

**PSYC230:**

3.0 Units

Application of theory and research in psychology to deal effectively with the adjustment demands of everyday life. Covers topics such as: interpersonal relationships, stress, health, time management, and working, with consideration for the influence of factors such as culture, gender, ethnicity, historical cohort, and socio-economic status. Includes exercises for increasing self-awareness, self-motivation, and self-management of everyday problems. Former Title: Psychology 230, Psychology and Effective Behavior (2020)

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

- Area F1: Lifelong Understanding and Self-Development

**CSU GE - Plan B**

- Area D: Social Sciences
- Area E1: Lifelong Learning

**IGETC - Plan C**

- Area 4: Social and Behavioral Sciences
Course Identifier (C-ID)
Psychology

Learning Outcomes

Course Objectives:
Analyze behavioral and adjustment patterns using major psychological concepts related to adjustment, self-direction and self-modification

Utilize theoretical approaches to develop and implement a self-modification plan to improve maladaptive behavioral and cognitive patterns, including strategies to counteract relapse

Examine behavioral and cognitive patterns and how they can lead to maladaptive habits and coping strategies

Explore ways to develop healthier and more effective behavior and cognitions

Examine personality and one's sense of self-efficacy and how these can impact interactions and relationships with others

Explore how effective behavior can help improve not only the self, but one's relationships and impact on societal problems as well

Student Learning Outcomes:
Demonstrate familiarity with the major methods, theories, issues, and concepts in the psychology of adjustment.

Apply effective strategies for assessing and managing one's own behavior and mental processes.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Social Psychology
PSYC240:

3.0 Units

An exploration of individual human behavior in relation to the social environment, examining the power of the situation, social interaction and social groups. Emphasized topics will include: aggression, prejudice, attraction, attitudes, group dynamics, self-development and social cognition. (No credit if student has taken Sociology 240.)

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Learning Outcomes

Course Objectives:
Discuss the roots of social psychology as a science

Explain various perspectives that contribute to social psychology as a field (e.g. multicultural perspectives, various psychological approaches, etc.)

Distinguish the difference between experimental research and correlational studies

Explain the process of scientific method in the field of Social Psychology

Discuss ethical considerations in research, including multicultural perspectives

Explore independent, dependent and confounding variables as well as reliability and validity (i.e., external and internal)

Discuss self-concept and influencing factors that shape one's self-concept (e.g., culture, identity development, etc.)

Explain the major theories that explore what influences the development of self-concept (e.g., social comparison, Two Factor Theory of Emotion, etc.)

Identify strategies that are used to maintain one's self-concept (e.g., self-serving bias, false consensus effect, self-presentation and impression management strategies, etc.)

Examine how individuals develop an understanding (or misunderstanding) for others and their social environment (i.e., social perception)

Discuss the factors that impact social cognition

Explain how internal and external attributions are shaped and how they are used to interpret behavior

Identify the ways culture and cultural identity impact social cognitions

Identify the major factors that influence attitudes and attitude development, including cognitive, emotional and cultural aspects

Explain the connection between attitudes and behaviors

Explore the ways in which attitude change can occur

Examine the major factors (e.g., authority, situational influences, emotions, culture, etc.) that impact social influence (i.e., conformity, compliance and obedience)

Discuss the impact of social and cultural norms on one's behavior

Identify the factors that shape group identity and membership, and how these influence social dynamics

Explain the simultaneous impact of groups on individuals and individuals on groups in various situations (e.g., social dilemmas, situations of conflict, etc.)

Examine the distinction between prejudice, stereotypes and discrimination and how these impact social and interpersonal interactions

Discuss various types of prejudice (e.g., in group, social, emotional, cognitive, etc.) and their functions

Explain the development of prejudices and stereotypes as well as how these can be unlearned

Identify the ways stereotypes, stigma and prejudice affect one’s self-concept and behavior

Discuss the social and psychological impact of prejudice, stereotypes and discrimination (e.g., racism, sexism, etc.)

Explore the ways in which cultural identity (e.g., race, socioeconomic status, gender identity, sexual orientation, etc.) influences social dynamics

Identify the various factors that influence aggressive behavior (e.g., biology, learning, media, situation, environment, etc.)
Explain multiple theories on aggression and the distinctions between each

Discuss types of aggression and ways for reducing aggressive behaviors and tendencies

Explore the factors that influence interpersonal attraction (e.g., gender, proximity, exposure, culture, etc.)

Discuss aspects that affect relationships (e.g., attachment styles, challenges, violence, gender roles, culture, gender identity, cognitions, emotions, etc.)

Examine the concept of love and theories on love/affection

Explain “true” altruism and prosocial behavior

Discuss the multiple factors (e.g., situational, cognitive-emotional, cultural, etc.) that impact prosocial behavior

Examine theories on prosocial behavior and its influences

Student Learning Outcomes:
- Demonstrate familiarity with the major issues, methods and findings within social psychology.
- Critically analyze social interactions and dilemmas utilizing concepts and principles within social psychology.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to Abnormal Psychology

PSYC250:

3.0 Units

This course is an introduction to the scientific study of psychopathology and atypical behaviors. An investigation of abnormal behavior from an integrative approach utilizing the biological, psychological and sociocultural perspectives. A comprehensive survey of theory and research in abnormal psychology with identification, etiology, intervention and prevention being presented.

Requisites

Prerequisite

PSYC100 - Introduction to Psychology

OR

Prerequisite

PSYC100H - Honors Introduction to Psychology

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0
General Education Plan:
CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes
Course Objectives:

- Identify the criteria for abnormal behavior and psychological disorders
- Identify and differentiate components of abnormality including psychological dysfunction, impairment, personal distress and atypical cultural behavior
- Identify the historical concepts of abnormal behavior and its origins in the supernatural, biological and psychological traditions
- Analyze the connection between the historical concepts of abnormal behavior and current etiology and treatment of psychological disorders
- Identify the major theories contributing to the understanding of psychopathology, including the strengths and weaknesses of each
- Analyze how culture, social factors, gender and developmental stages influence psychopathology
- Identify the use of the multidimensional model and an integrative approach in addressing human behavior in abnormal psychology
- Identify the various methods of assessment including interviews, psychological tests, behavioral and cognitive assessments, and physiological tests as well as the validity and reliability of each
- Describe the various methods of assessments and when they are utilized
- Identify the various concepts for the diagnosis of psychological disorders
- Analyze the relevance, criticisms and practice of diagnostic practice
- Identify various research designs (including their strengths and weaknesses) and ethics in psychopathology
- Identify the characteristics and symptoms of the various anxiety disorders
- Examine the etiology of the anxiety disorders using the integrative approach
- Compare and contrast the various treatments for anxiety disorders
- Identify the characteristics and symptoms of trauma and obsessive compulsive related disorders
- Examine the etiology of trauma and obsessive compulsive related disorders using the integrative approach
- Compare and contrast the various treatments for trauma and obsessive compulsive related disorders
- Examine combined treatment options for disorders and when they are appropriate to execute
- Analyze how the various disorders impact functioning, interpersonal relationships and overall quality of life
- Identify the characteristics and symptoms of somatic symptom disorder and related disorders
- Examine the etiology of somatic symptom disorder and related disorders using the integrative approach
- Compare and contrast the various treatments for somatic symptom disorder and related disorders
- Describe the difference between malingering and factitious disorder and when it is considered abuse
Analyze how the various disorders impact functioning, interpersonal relationships and overall quality of life
Identify the characteristics and symptoms of the dissociative disorders
Examine the etiology of the various dissociative disorders using the integrative approach
Compare and contrast the various treatments for dissociative disorders
Identify issues and trends of comorbidity with dissociative identity disorder and other disorders
Analyze how the various disorders impact functioning, interpersonal relationships and overall quality of life
Identify the characteristics and symptoms of the various mood disorders
Examine the etiology of the mood disorders using the integrative approach
Compare and contrast the various treatments for mood disorders
Examine combined treatment options (pharmacological vs. psychosocial) for mood disorders and when they are appropriate to execute
Analyze how the various disorders impact functioning, interpersonal relationships and overall quality of life
Identify the risk factors and contributing factors related to suicide
Identify the characteristics and symptoms of the various eating disorders
Examine the etiology (biopsychosocial) of eating disorders using the integrative approach
Compare and contrast the various treatments for eating disorders and the priority of treatment with anorexia nervosa
Identify the characteristics and symptoms of sleep wake disorder
Examine the etiology of sleep wake disorders using the integrative approach
Compare and contrast the various treatments for sleep wake disorders
Analyze how the various disorders impact functioning, interpersonal relationships and overall quality of life
Describe the sexual response cycle and sexual behavior in the context of gender and cultural differences
Identify the characteristics and symptoms of various sexual dysfunctions
Examine the etiology of sexual dysfunctions using the integrative approach
Compare and contrast the various treatments for sexual dysfunctions
Identify the characteristics and symptoms of paraphilic disorders
Examine the etiology of paraphilic disorders using the integrative approach
Compare and contrast the various treatments for paraphilic disorders and their effectiveness
Examine gender development and gender dysphoria
Compare and contrast the various psychoactive substances categories (e.g., depressants, stimulants, opioids, cannabis, hallucinogens and other drugs of abuse)
Analyze the components of withdrawal and tolerance and how it relates to physical dependency in some psychoactive drug categories and addiction
Identify the characteristics, symptoms and specifiers of the various substance use disorders
Examine the etiology of substance use disorders using the integrative approach
Compare and contrast the various treatments for substance disorders
Identify the characteristics and symptoms of impulse control disorders
Examine the etiology of impulse control disorders using the integrative approach
Compare and contrast the various treatments for impulse control disorders
Identify the characteristics and symptoms of schizophrenia and other psychotic disorders
Examine the etiology schizophrenia and other psychotic disorders using the integrative approach

Compare and contrast the various treatments for schizophrenia and other psychotic disorders

Examine the impairment of schizophrenia and other psychotic disorders and the need of inclusive intensive treatment

Examine the categorical and dimensional approaches to the diagnosis of personality disorders and the strengths and weaknesses of each approach

Describe how personality disorders are different from other psychological disorders

Identify and understand the gender differences and comorbidity issues with personality disorders

Identify the characteristics and symptoms of the various personality disorders

Examine the etiology of the personality disorders using the integrative approach

Compare and contrast the various treatments for various personality disorders

Examine combined treatment options for personality disorders and when they are appropriate

Analyze how the various disorders impact functioning, interpersonal relationships and overall quality of life

Identify the characteristics and symptoms of the various neurodevelopmental and neurocognitive disorders

Examine the etiology of the neurodevelopmental and neurocognitive disorders focusing on genetics, brain development, brain functioning and psychosocial factors

Compare and contrast the various treatments for neurodevelopmental and neurocognitive disorders

Identify medical conditions that can cause neurocognitive disorders

Identify and examine legal and ethical issues involving criminal and civil commitment

Describe insanity defense and proof of competence

Examine ethical issues in therapy and research.

Identify trends in rights to receive treatment and right to refuse treatment

**Student Learning Outcomes:**

Demonstrate familiarity with the symptoms, etiology, treatment and diagnostic criteria of various psychological disorders as set out in the latest edition of the Diagnostic Statistical Manual of Mental Disorders (DSM).

Apply how abnormal behavior/psychological disorders impair biopsychosocial functioning, resulting in interpersonal problems and an overall reduction in quality of life; incorporating social, cultural and ethical concerns.

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**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Real Estate Principles**

**RE102:**

3.0 Units

Provides basic information about real estate and prepares students for advanced study in specialized courses. Includes deeds, titles, agency, contracts, mathematics, finance, appraisal, escrow, leases. Required for the California real estate salesperson license.

**Requisites**
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Identify the importance of real estate
Identify forms of ownership and methods of describing land
Identify the different encumbrances and their effect on land value on use
Describe the roles and responsibilities within an agency
Describe the essentials of contracts
Perform calculations used in real estate
Describe the importance and techniques of lender participation in real estate transactions
Describe the roles and responsibilities of lending institutions
Identify the principles of determining or changing property values
Describe approaches to estimating value and depreciation
Describe the functions of escrow
Identify the types of insurance policies and which items they cover
Identify and describe the issues related to property management
Identify the ordinances and regulations that apply to land use
Identify the issues involving taxes and real estate
Describe the steps involved in purchasing a home
Describe the place in the market for mobile homes.
Identify the roles and requirements of people working in real estate
Identify and describe case studies in the current field of real estate

Student Learning Outcomes:
Using critical thinking skills and college level concepts to differentiate between real and personal property; to determine the essentials of contracts; to perform the mathematics necessary for real estate functions.
Providing examples of how to estimate of property values; to explain the function of escrow; to compare and contrast the types of leases; to interpret zoning ordinances.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
Legal Aspects of Real Estate
RE103:

3.0 Units

California real estate law including contracts, ownership, estates, easements, landlord-tenant, trust deeds, liens, agency, security devices, and land use. Applies towards: (1) required course for the California real estate salesperson licensing and (2) California real estate broker’s license requirements.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Describe the sources of law and land titles
Identify and describe the elements of a contract as pertains to real estate
Describe the roles and responsibilities within an agency
Identify the duties and liabilities of licensees to principals and third parties
Identify and describe the issues and regulations regarding acquisition, conveyance and escrow
Identify and describe the various ownership forms and their implications
Identify and describe the legal aspects of various real estate agreements
Describe the legal aspects of judgements as applied to real estate
Identify and describe the regulations involving land use
Describe issues and regulations involving adjoining owners
Describe issues and regulations involving the landlord-tenant relationship

Student Learning Outcomes:
Explain the elements of a contract and determine the duties and liabilities, through role playing.
Execute proper real estate contracts following the California Department of Real Estate guidelines, with specific criteria provided.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0
Real Estate Practice
RE105:

3.0 Units

Operation of the real estate business and the role of the agent. Includes listing, prospecting, sales techniques, use of current real estate forms; financing, title insurance, escrow, and taxation. This course is required for the educational requirement for the California real estate salesperson license and may be applied toward the California real estate broker license requirements.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Identify and describe the regulations and relationships within the real estate industry

Explain the structure and requirements within a real estate office
Identify and describe the various aspects of listing and prospecting
Analyze and complete necessary forms and statements
Identify and describe good practices in selling and marketing
Identify the necessary steps in preparing an offer
Describe the procedures and legal aspects of financing real estate
Describe the legal and practical aspects of assessments and taxation
Accurately perform various real estate calculations
Identify the components of the seller’s net sheet and the buyer’s net sheet
Describe the legal and practical aspects of special types of sales
Identify and describe types of title insurance
Describe the procedures and legal aspects of escrow

Student Learning Outcomes:
   Explain and demonstrate the processes and procedures expected of a real estate salesperson.
   Judge the validity of sales communications and how the buyer, seller and professional interact using actual case studies.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
Real Estate Finance
RE106:

3.0 Units

Analysis of real estate financing. Covers the mortgage market, lenders, conventional and government-backed loans, processing and closing loans, foreclosures. Applies towards the partial fulfillment for the educational requirements for (1) California real estate salesperson license and (2) California real estate broker license.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Describe the importance of real estate finance and the various influences on real estate value

Describe how the various institutional lenders, agencies, and regulations influence real estate

Describe how noninstitutional lenders influence real estate values

Identify the advantages, disadvantages, and legal aspects of alternative mortgage instruments

Identify the advantages, disadvantages, and legal aspects of different types of loans

Explain the issues and impact of the secondary mortgage market

Describe the valuation process and the various approaches

Estimate income and expenses

Identify and describe the aspects of qualifying a borrower

Identify the procedures involved in processing, closing, and servicing real estate loans

Describe various lending problems and their effect on real estate values

Explain the nature and processes of construction loans

Apply principles of financing mathematics

Identify and describe alternative financing techniques

Describe aspects of financing

Estimate income, expenses, and cash flow

Student Learning Outcomes:

Critique the influence banks, mortgage companies, and institutional lenders have on the real estate market using current materials from professional journals, business publications, and internet sources.

Provide a list of comprehensive strategies to a prospective buyer for financial options in the purchase of real property.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Real Estate Economics
RE110:

3.0 Units

Covers the factors influencing real estate values. Includes business cycles, regional and community growth, influences on real estate development. Applies towards the partial fulfillment for the educational requirements for (1) California real estate salesperson license and (2) California real estate broker license.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Describe the interrelationship between economics and real estate
Identify examples and the impact of government intervention in the economy
Describe the Federal Reserve and its effect on real estate activity
Identify important economic features of real estate
Identify sources and procedures for analyzing real estate markets
Describe the factors and forces that affect growth and value
Describe the economics, trends, and impacts of property taxation on real estate development
Identify concerns about land-use controls
Describe the impact of construction activity
Describe the various required reports and their economic impact
Describe real estate investment principles
Describe how real estate economic factors affect investments
Identify other factors that may impact investments

Student Learning Outcomes:
Identify the economic base for regional and community real estate economics to determine the real estate cycles and the impact on the community and the financial base.
Report on the impact of the economic structure using investment principles, an income stream to determine viability of real property as an investment.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Real Property Management
RE112:
3.0 Units

Principles and practices of managing residential, apartment, commercial, and income properties. Covers property management, leases and contracts, collections, rent schedules, tenant selection and supervision, and budgets. Applies towards the partial fulfillment for the educational requirements for (1) California real estate salesperson license and (2) California real estate broker license.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Learning Outcomes
Course Objectives:
Describe the history and opportunities of the property management profession
Describe how outside economic forces can affect a property manager
Complete residential leases and credit applications
Complete a management agreement
Compute management fees
Identify performance objectives
Analyze case study data
Apply information from regional and neighborhood analyses to a management plan
Analyze alternatives
Prepare an investment analysis
Describe good practices for managing residential apartments
Describe good practices for managing shopping centers
Describe good practices for managing office buildings
Describe good practices for managing condominiums
Describe good practices in a variety of management situations
Identify good practices for handling maintenance
Describe the various administrative aspects of a property management office
Describe how to apply landlord/tenant laws to various situations
Describe good practices in dealing with human relationships in management situations

Student Learning Outcomes:
- Complete various types of lease hold estates, types of leases, and the requirements of valid leases.
- Develop a lease agreement with management fees for residential and commercial properties.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Appraisal Principles and Procedures
RE114:

3.5 Units
The principles and procedures of appraisal used to estimate market values; location analysis, standards and ethics, and the sales comparison, cost, and income approaches for residential properties. The course applies 60 hours of educational instruction towards the requirements for licensure from the California Office of Real Estate Appraisal (OREA). The course is required for the appraisal licenses for Trainee, Residential, Certified Residential, and Certified General license. The course meets the requirement for the Department of Real Estate (DRE) Brokers License and qualifies as one of the required courses for the Salespersons License.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.5

General Education Plan:
Learning Outcomes
Course Objectives:
- Describe basic concepts and characteristics of real property
- Demonstrate an understanding of legal descriptions
- Read and interpret real estate contracts and leases
- Describe and analyze the contributing factors of property valuation
Determine the value of real property
Identify classical economic principles and the application and illustration of those principles as they related to real property
Compare and contrast the analysis of supply, demand, and the market
Apply ethics in the practice of appraisals
Identify the procedures necessary to complete a real property appraisal
Describe the purpose, use, and scope of the necessary steps
Identify legal parameters
Determine a valuation and its validity to past appraisals
Complete survey for the geographic and/or geologic characteristics of the land or site
Identify other characteristics and possible improvements
Select and correctly complete applications inherent to the appraisal process

Student Learning Outcomes:
Utilize the appraisal process principles to determine the outcomes on the appraisal of residential property in the local area using local economic data.
Apply the appraisal process in determining a current appraisal on a residential property using skills and knowledge derived from this course.

Units & Hours
Minimum Units:
3.5
Maximum Units
3.5
Total Hours
63.0

Residential Real Estate Appraisal
RE116:
3.5 Units
Studies in residential market analysis and highest and best use; residential appraiser site valuation and cost approach; and residential sales comparison and income approach. The course applies 60 hours of educational instruction towards the requirements for licensure from the California Office of Real Estate Appraisal (OREA). The course is required for the appraisal licenses for Trainee, Residential, Certified Residential, and Certified General license. The course meets the requirement for the Department of Real Estate (DRE) Brokers License and qualifies as one of the required courses for the Salespersons License.

Requisites
Requisites:
None
Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.5

General Education Plan:
Learning Outcomes

Course Objectives:
- Identify and describe market fundamentals and characteristics
- Describe the use of supply analysis and demand analysis
- Describe the applications for highest and best use valuation analysis
- Describe the methodology of site valuation
- Identify the advantages and disadvantages of the cost approach in estimating valuation
- Compare and utilize the different valuation approaches
- Apply the fundamentals and tools of financing
- Describe the various types of appraisals, their associated reports, and their uses
- Describe the process of converting gross income to value for single-family and small multi-family residences
- Explain the use of all evidence to support the value indicators
- Describe the relevance of different appraisal techniques to a specific appraisal
- Identify and analyze case studies of relevant examples of appraisals in determining value

Student Learning Outcomes:
- Compare supply analysis and demographic analysis to determine the market value of residential real estate for appraisal purposes.
- Complete a residential property evaluation using appropriate techniques.

Units & Hours

Minimum Units:
3.5

Maximum Units:
3.5

Total Hours:
63.0

Residential Report Writing and Case Studies

RE117:

1.0 Units

Residential report writing and case studies in appraisal to include theories, techniques, and procedures of using various residential forms and reports for appraisal. The course applies 16 hours of educational instruction towards the requirements for licensure from the California Office of Real Estate Appraisal (OREA). The course is required for the appraisal licenses for Trainee, Residential, Certified Residential, and Certified General license.

Requisites

None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0
General Education Plan:
Learning Outcomes
Course Objectives:
Complete narrative documents in a thorough and professional manner
Identify the essential elements to be included in professional appraisal reports
Identify and complete forms and reports in compliance with the USPAP
Identify and analyze applicable case studies

Student Learning Outcomes:
Correctly complete reports and documents in an appraisal of real property in California by using the required forms.
Determine the application of the Uniform Standards of Professional Appraisal Practice in various situations.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Fundamentals of Escrow
RE151:

3.0 Units
This course covers the principles and current practices of the escrow process in California. Topics include terminology, documentation, escrow instructions, encumbrances, interest adjustments, reconveyance, mortgages, insurance, taxes, and fees, other processing details pertinent to the handling of an escrow from inception to closing including fiduciary and ethical responsibilities. This course is one of the elective courses for the real estate salesperson or broker license requirement as set forth by the California Bureau of Real Estate (BRE).

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:
Private Institution Comparable Transfer Courses
Private Institution Comparable Transfer Courses

Learning Outcomes
Course Objectives:
Define and list the duties of an escrow holder
Explain the confidential nature of an escrow holder
Paraphrase the laws of an agency as applied to an escrow holder
Describe the status of an escrow holder
Completion of forms for opening escrow
Preparation and explanation of escrow documents
Define approximately 50 words or phrases used in the escrow business
Examine and explain title reports
Explain different ways to hold title to real property
Differentiate between title and possession
Summarize the role of the title company
Identify and explain different types of escrow
Discuss and explain escrow to a diverse clientele and colleagues
Identify and explain legally required opening documents
List the requisites of a valid escrow
Outline their timeline to process an escrow
Compute proration and fees
Describe the escrow closing procedure

Student Learning Outcomes:
   Identify various deeds and explain the fees on a seller’s settlement statement.
   Explain the fees on a buyer’s settlement statement and describe the tax consequences in a 1031 tax deferred exchange.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Real Estate License Preparation
RE153:
3.0 Units
Real estate licensure preparation. Fundamental information regarding the practice of real estate with an emphasis on real estate law, principles, practice, and other topics covered in the state licensure examination. An important preparation for those intending to take the California real estate salesperson’s or broker’s license examination. Former Title: Real Estate 053, Real Estate License Preparation (2020)

Requisites
Requisites:
Prerequisite
RE102 - Real Estate Principles

OR

Prerequisite
RE105 - Real Estate Practice

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Solve problems that require distinguishing between real and personal property.

Solve problems that require understanding the process of transfer of title by sale, gift, inheritance.

Solve problems that require understanding of concepts and terminology related to land descriptions, encumbrances, easements, liens, various types of leases, and other industry-related language.

Solve problems that require knowledge of contracts and agreements used in real estate.

Solve problems that require knowledge of the procedures of escrow.

Solve problems that require knowledge of appraisal concepts and procedures.

Solve problems that require knowledge of the agency, dual agency, subagency.

Complete mock licensure examinations with a score of 70% or better.

Solve problems that require understanding of real estate finance, notes and mortgages.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Real Estate Soft Skills

RE160:
1.0 Units

Students will enhance basic soft skills, workplace skills, interpersonal skills, communication skills, and leadership skills.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0

Learning Outcomes
Course Objectives:

Employ complex communication skills that increase productivity.

Collaborate, in person and virtually, to complete tasks.

Integrate expertise in technical knowledge and skills with thinking and reasoning strategies to create, innovate, and devise solutions.

Behave in a professional manner appropriate to organizational expectations.

Exercise initiative and self-direction.

Interact effectively with people of different cultures, generations, and other diverse backgrounds and characteristics to develop organizational mission, goals, and objectives.

Evaluate varying organizational cultures and their effects on personal success.

Observe laws, rules, and ethical practices.

Student Learning Outcomes:

Apply effective and workplace-appropriate interpersonal skills and identify strategies to employ when working with peers and superiors.

Identify which professional strengths and skills they have and give evidence and examples of these.

Relate their soft skills/competencies to what employers look for in employee recruitment and selection processes.

Employ strategies and resources for continually enhancing and developing their skills and experience.

Units & Hours

Minimum Units:

1.0

Maximum Units

1.0

Total Hours

18.0

Real Estate Cooperative Work Experience/Career Internship

RE171:

5.5 Units

Through a set of learning objectives established by the student, on-the-job supervisor and instructor, students will extend their classroom-based occupational learning by working at a job related to their major and to their occupational goal. One to four units of Real Estate Cooperative Work Experience/Career Internship require 60 - 240 non-paid hours of work or 75 - 300 paid hours of work per semester. Open Entry/Open Exit

Requisites

Requisites:

Advisory

RE102 - Real Estate Principles

AND

Advisory

RE105 - Real Estate Practice

Transferability & General Education Options

Transferable:

Transferable to CSU only
Weekly Lecture Hours:
5.5

General Education Plan:

Learning Outcomes

Course Objectives:
Evaluate their performance, and review the employer evaluation (must include both employer and student signature).

Discuss and grade the reflective essay.

Discuss with the faculty the evaluation and experience who will then determine if credit should be granted and determine the final grade to be submitted to the Admissions office.

Write measurable learning objectives related to personal and internship site needs including what is to be accomplished, how it will be accomplished, how it will be evaluated and completion date.

Identify an appropriate internship site.

Interview at an internship site and represent one's self professionally.

Dress appropriately for internship site and interview.

Maintain a record of internship experiences and time.

Review achievement of learning objectives and effectiveness of internship site and program with instructor and work site supervisor.

Participate in all assignments related to the career/job.

Student Learning Outcomes:

Student, instructor, and employer will cooperatively develop a minimum of three learning objectives based upon the position and type of work that is available through the employer.

Document experiences and progress toward pre-determined goals and objectives.

Units & Hours

Minimum Units:
5.5

Maximum Units
5.5

Total Hours
300.0

Introduction to Academic Reading

READ101:

3.0 Units

Instruction toward students' mastery of higher-level vocabulary, reading comprehension at the level of proficiency, critical evaluation of college-level text, and improvement of reading rate.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
General Education Plan:
Local - Plan A
Area G2: Reading Proficiency

Learning Outcomes
Course Objectives:
Interpret the meaning of unfamiliar, advanced-level vocabulary through context clues and word analysis
Develop language awareness and comprehension
Recognize, relate, and examine words by academic disciplines
Increase reading rate by reducing regressions
Employ skimming, eliminating sub-vocalization, and reading in phrases
Experiment with adjustments of reading rate according to the purpose for reading and difficulty of the academic text
Analyze paragraphs, identifying the main ideas as well as major and minor details
Develop organizational strategies for effective academic reading
Participate in pre-, during, and post-reading activities to assess one’s own reading comprehension
Create focus questions to effectively gather and retain information
Distinguish between facts and opinions
Analyze text with stated and implied main ideas
Construct inferences and draw conclusions
Identify thought patterns in higher-level text, e.g., cause and effect, comparison/contrast
Recognize thesis, main ideas, and supporting evidence
Formulate the implied main idea of a paragraph
Recognize author’s writing patterns
Determine the point of view
Analyze and evaluate the author’s argument
Demonstrate the ability to organize the relationship of ideas in an essay via graphic illustrations; interpret graphic aids

Student Learning Outcomes:
  Apply reading skills in the comprehension and critical analysis of college-level readings.
  Apply active reading strategies to college-level readings.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Academic Reading
READ102:
3.0 Units

Introduces a repertoire of reading strategies aimed at preparing students for comprehension of complex college-level reading material. Advanced reading strategies provide the foundation for the development of critical reading and the recognition of patterns of academic thought. Reading strategies for specific disciplines, including the Social Sciences, Business, Humanities and the Arts, Mathematics and the Natural Sciences are presented.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Local - Plan A

Area E2: Communication/Analytical Thinking

Area G2: Reading Proficiency

Learning Outcomes

Course Objectives:

Apply active reading strategies

Read and exhibit comprehension through written strategies

Compare and contrast reading strategies to explore a wide range of academic texts

Identify patterns of academic thought

Employ knowledge of organizational patterns to process information effectively

Analyze and evaluate the author’s message and techniques

Evaluate arguments and critique content in academic texts and readings

Assess critical reading and thinking skills before, during, and after reading

Utilize textbook format and features to facilitate learning

Interpret various types of graphics

Evaluate online sources

Analyze data in visual aids (i.e. tables, graphs) and draw conclusions about validity

Develop writing techniques to study an academic text (i.e. notetaking, highlighting, annotating, summarizing, metacognition)

Apply reading techniques specific to the Social Sciences, Liberal Arts and Humanities, Business, Mathematics, and in Life and Physical Sciences

Envision possible applications of learned skills to other academic disciplines

Analyze a variety of texts for main ideas, while differentiating between major and minor details

Create inferences based on clues and evidence in academic texts, while utilizing prior knowledge

Differentiate between fact and opinion; including, expert opinion

Compare, contrast, and make connections between academic texts, topics, and perspectives

Analyze and critically evaluate academic readings, research, references, and sources

Student Learning Outcomes:
Apply reading skills to readings in specific disciplines to include textbooks, newspapers, and journal articles. Apply critical reading and academic reading strategies to readings in specific disciplines to include textbooks, newspaper and journal articles.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Expanding ESL Reading Skills
READ128:

1.0 Units

This course is designed to help students approach intermediate-level reading materials in their ACE/ESL courses by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for American College English (ACE) courses, including: ACE 052 and ACE 053.

Requisites
Requisites:
Advisory

ACE052 - Expanding Academic Writing and Reading

Students are advised to concurrently enrolled in American College English 052

OR

Advisory

Qualifying profile from the placement process.

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0

General Education Plan:

Learning Outcomes

Course Objectives:
Recognize and describe the organization of a textbook.

Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material, and use vocabulary at an intermediate ESL level.

Develop and apply a repertoire of strategies to expand personal and academic vocabulary.

Identify personal and academic skills necessary to complete course assignments.

Analyze ESL readings to understand literal meaning as well as logical inferences.

Critically read, evaluate, and respond to a variety of ESL readings.

Differentiate between facts and opinions.
Employ various reading strategies to better understand content, specifically making meaning from ESL texts by utilizing several Reading Apprenticeship techniques.

Recognize which metacognitive skills enable text comprehension.

**Student Learning Outcomes:**

- Critically preview, highlight, and annotate texts.
- Differentiate between main ideas and supporting details.
- Employ critical thinking and reading skills to better understand intermediate-level readings in English.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours**
18.0

**Refining ESL Reading Skills**

**READ129:**

1.0 Units

This course is designed to help students approach low-advanced reading materials in their content area courses by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for American College English (ACE) courses, including: ACE 093 and ACE 102.

**Requisites**

**Requisites:**

*Advisory*

ACE102 - Refining Academic Writing and Reading

Students are advised to concurrently enroll in American College English 102.

OR

*Advisory*

Qualifying profile from the placement process.

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

- Recognize and describe the organization of a textbook.

- Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material, and use vocabulary at a high-intermediate ESL level.

- Develop and apply a repertoire of strategies to expand personal and academic vocabulary.
Identify personal and academic skills necessary to complete course assignments.

Analyze texts for their deeper meanings, especially as they relate to specific disciplines.

Analyze purpose and tone in a variety of academic texts and select an appropriate voice for readers in their responses.

Critically read, evaluate, and respond to a variety of academic texts.

Employ various reading strategies to better understand content.

Recognize which metacognitive skills enable text comprehension.

**Student Learning Outcomes:**
- Critically preview, highlight, and annotate texts.
- Differentiate between main ideas and supporting details.
- Employ critical thinking and reading skills to better understand high-intermediate level readings in English.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units**
1.0

**Total Hours**
18.0

**Reading Strategies for Across the Curriculum**

**READ130:**

1.0 Units

This course is designed to help students approach difficult reading materials in their content area courses by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for discipline specific courses.

**Requisites**

**Requisites:**
- **Advisory**

Students should be concurrently enrolled in another discipline course.

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Approach a textbook in the pursuit of extracting meaning.

Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, and selecting comprehension strategies appropriate to the reading material.

Develop and apply a repertoire of strategies to expand personal and academic vocabulary.
Analyze course assignments to identify the personal and academic skills and resources necessary to execute and successfully complete the task.

Analyze texts for their deeper meanings, especially as they relate to specific disciplines.

Analyze purpose and tone in a variety of academic texts and select an appropriate voice for readers in their responses.

Critically read, evaluate, and respond to a variety of academic texts.

Employ various reading strategies to better understand content from discipline textbooks, specifically making meaning from texts by utilizing several Reading Apprenticeship techniques.

Examine, analyze, and evaluate comprehension of academic texts through metacognitive skills.

**Student Learning Outcomes:**
- Critically preview, highlight, and annotate texts.
- Differentiate between main ideas and supporting details.
- Employ critical thinking and reading skills to better understand textbooks across the curriculum.

**Units & Hours**

**Minimum Units:**
1.0

**Maximum Units:**
1.0

**Total Hours:**
18.0

**Reading in Apprenticeship**

**READ131:**

1.0 Units

This course is designed to help students approach challenging and varied reading tasks on topics related to Apprenticeship courses by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for discipline-specific courses in Career Education-Apprenticeship, which includes: Carpentry, Cosmetology, Electrician, Maintenance Mechanic, Operating Engineers, Power Lineman, and Surveying.

**Requisites**

**Advisory**

Students should be concurrently enrolled in an SCC Apprenticeship course

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Recognize and describe the organization of a textbook.

Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material in Apprenticeship texts.
Develop and apply a repertoire of strategies to expand Apprenticeship and academic vocabulary.

Analyze Apprenticeship course assignments to identify the skills and resources necessary to execute and successfully complete the task.

Analyze Apprenticeship texts to understand literal meaning as well as logical inferences.

Critically read, evaluate, and respond to a variety of Apprenticeship readings.

Differentiate between facts and opinions.

Restate text ideas demonstrating an ability to identify the purpose of a text.

Employ various reading strategies to better understand content, specifically making meaning from Apprenticeship texts.

Recognize which metacognitive skills enable text comprehension.

**Student Learning Outcomes:**

- Critically preview, highlight, and annotate texts.
- Differentiate between main ideas and supporting details.
- Employ critical thinking and reading skills to better understand textbooks across the Apprenticeship curriculum.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units**

1.0

**Total Hours**

18.0

**Reading in Career Education**

**READ132:**

1.0 Units

This course is designed to help students approach challenging and varied reading tasks on topics related to Career Education courses by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for discipline-specific courses in Career Education (CE), which includes: American Sign Language, Biotechnology, Business and Computer Related Programs, Careers in Education, Child Development, Code Enforcement, Criminal Justice, Digital Media Arts, Graphic Design, Gemology, Public Works, Real Estate, Survey/Mapping Sciences, TV/Video Communications, and Water Utility Science.

**Requisites**

**Requisites:**

Advisory

Students should be concurrently enrolled in an SCC Career Education (CE) course.

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Recognize and describe the organization of a textbook.
Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material in Career Education texts.

Develop and apply a repertoire of strategies to expand Career Education and academic vocabulary.

Analyze and apply a repertoire of strategies to expand Career Education and academic vocabulary.

Analyze Career Education course assignments to identify the skills and resources necessary to execute and successfully complete the task.

Analyze Apprentice texts to understand literal meaning as well as logical inferences.

Critically read, evaluate, and respond to a variety of Career Education readings.

Differentiate between facts and opinions.

Restate text ideas demonstrating an ability to identify the purpose of a text.

Employ various reading strategies to better understand content, specifically making meaning from Career Education texts.

Recognize which metacognitive skills enable text comprehension.

**Student Learning Outcomes:**

- Critically preview, highlight, and annotate texts.
- Differentiate between main ideas and supporting details.
- Employ critical thinking and reading skills to better understand textbooks across the Career Education curriculum.

**Units & Hours**

**Minimum Units:**

1.0

**Maximum Units:**

1.0

**Total Hours:**

18.0

**Reading in the Social Sciences**

**READ134:**

1.0 Units

This course is designed to help students approach challenging and varied reading tasks on topics related to Social Science areas by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for discipline-specific courses in Cultural, Behavioral, and Social Sciences, which includes: Anthropology, Chicano Studies, Economics, Ethnic Studies, Gender Sexuality, and Women's Studies, Geography, History, Global Studies, International Development, Political Science, Psychology, and Sociology.

**Requisites**

**Requisites:**

**Advisory**

Students should be concurrently enrolled in an SCC Cultural, Behavioral, or Social Science course.

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

1.0

**General Education Plan:**

**Learning Outcomes**
Course Objectives:
Recognize and describe the organization of a textbook.

Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material in Social Science texts.

Develop and apply a repertoire of strategies to expand Social Science and academic vocabulary.

Analyze Social Science course assignments to identify the skills and resources necessary to execute and successfully complete the task.

Analyze Social Science texts to understand literal meaning as well as logical inferences.

Critically read, evaluate, and respond to a variety of Social Science readings.

Differentiate between facts and opinions.

Restate text ideas demonstrating an ability to identify the purpose of a text.

Employ various reading strategies to better understand content, specifically making meaning from Social Science texts.

Recognize which metacognitive skills enable text comprehension.

Student Learning Outcomes:

Critically preview, highlight, and annotate texts.
Differentiate between main ideas and supporting details.
Employ critical thinking and reading skills to better understand textbooks across the Social Science curriculum.

Units & Hours
Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Reading in STEM
READ136:
1.0 Units

This course is designed to help students approach challenging and varied reading tasks on topics related to STEM areas by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for discipline-specific courses in Science, Technology, Engineering, and Mathematics (STEM), which includes: Anatomy, Astronomy, Biology, Chemistry, Environmental Science, Geology/Earth Science, Kinesiology, Microbiology, Nutrition and Dietetics, Oceanography, Physics, and Computer Science; Aerospace, Architectural, Biomedical, Chemical, Civil, Computer, Electrical, Environmental, Geomatics, Industrial, and Mechanical Engineering; Algebra, Calculus, Liberal Arts Math, Statistics and Probability, and Trigonometry.

Requisites

Advisory
Students should be concurrently enrolled in an SCC STEM course.

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
1.0
General Education Plan:
Learning Outcomes

Course Objectives:
Recognize and describe the organization of a textbook.

Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material in STEM texts.

Develop and apply a repertoire of strategies to expand STEM vocabulary.

Analyze STEM course assignments to identify the skills and resources necessary to execute and successfully complete the task.

Analyze STEM texts to understand literal meaning as well as logical inferences.

Critically read, evaluate, and respond to a variety of STEM readings.

Differentiate between facts and opinions.

Restate text ideas demonstrating an ability to identify the purpose of a text.

Employ various reading strategies to better understand content, specifically making meaning from STEM texts.

Recognize which metacognitive skills enable text comprehension.

Student Learning Outcomes:

Critically preview, highlight, and annotate texts.

Differentiate between main ideas and supporting details.

Employ critical thinking and reading skills to better understand textbooks across the STEM curriculum.

Units & Hours
Minimum Units:
1.0

Maximum Units:
1.0

Total Hours:
18.0

Reading in the Humanities
READ138:
1.0 Units

This course is designed to help students approach challenging and varied reading tasks on topics related to the Humanities areas by introducing several effective reading strategies, such as those from the Reading Apprenticeship Project. This is a support course for discipline-specific courses in the Humanities, which includes: Art, Communication, English, Literature, Modern Languages, Performing Arts, and Philosophy.

Requisites
Requisites:
Advisory

Students should be concurrently enrolled in an SCC Humanities course.

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
General Education Plan:

Learning Outcomes

Course Objectives:
Recognize and describe the organization of a textbook.

Employ active reading strategies, including activating prior knowledge, setting a purpose for reading, predicting outcomes, selecting comprehension strategies appropriate to the reading material in Humanities texts.

Develop and apply a repertoire of strategies to expand vocabulary used in the Humanities.

Analyze Humanities assignments to identify the skills and resources necessary to execute and successfully complete the task.

Analyze Humanities texts to understand literal meaning as well as logical inferences.

Critically read, evaluate, and respond to a variety of readings in the Humanities.

Differentiate between facts and opinions.

Restate text ideas demonstrating an ability to identify the purpose of a text.

Employ various reading strategies to better understand content, specifically making meaning from texts in various Humanities courses.

Recognize which metacognitive skills enable text comprehension.

Student Learning Outcomes:
Critically preview, highlight, and annotate texts.
Differentiate between main ideas and supporting details.
Employ critical thinking and reading skills to better understand textbooks across the Humanities curriculum.

Units & Hours

Minimum Units:
1.0

Maximum Units
1.0

Total Hours
18.0

Critical Reading

READ150:

3.0 Units

This course addresses the relationship between critical reading and critical thinking, including emphasis on the development of critical reading and thinking skills that facilitate the interpretation, analysis, criticism, and advocacy of ideas encountered in academic reading.

Requisites

Requisites:
Advisory

ENGL101 – Freshman Composition

Previous or concurrent enrollment in English 101

Outcomes
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.
Advisory

**ENGL101H - Honors Freshman Composition**

*Previous or concurrent enrollment in English 101 H*

**Outcomes**
Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

OR

Advisory

**ENGL100 - Freshman Composition with Integrated Support**

*Previous or concurrent enrollment in English 100*

**Outcomes**
Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**Transferability & General Education Options**

**Transferable:**
Transferable to CSU only

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

Local - Plan A
Area E2: Communication/Analytical Thinking
Area G2: Reading Proficiency

CSU GE - Plan B
Area A3: Critical Thinking

Santa Ana College - Shared Course
Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**
Apply levels of cognition in reading
Recognize barriers to critical thinking
Effectively use reading strategies
Identify the thesis/main idea and supporting evidence
Understand grammatical and syntactical considerations in reading
Recognize various types of support
Determine author's purpose, point of view/biases, and tone
Distinguish denotation from connotation, fact from opinion and reasoned judgment
Identify and analyze figurative language
Make accurate inferences

Draw connections that synthesize two or more texts

Use real-world argumentative essays, editorials, advertising, propaganda, electronic media and/or multi-media to:

Analyze arguments by identifying claims, assumptions, support, appeals, and fallacies

Evaluate the strength of an argument

**Student Learning Outcomes:**

- Apply critical reading and thinking skills to the interpretation, analysis, and evaluation of ideas encountered in academic readings and settings.
- Apply active reading strategies to the interpretation, analysis, and evaluation of readings encountered in an academic setting.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Critical Reading and Analysis**

**READ151:**

3.0 Units

Critical Reading and Analysis is a course for students from all academic disciplines who seek to develop the relationship between critical reading and critical thinking through logical reasoning and analysis. Students gain experience in research strategies, annotation, metacognition, and formal critical response writing.

**Requisites**

**Requisites:**

**Prerequisite**

*ENGL100 - Freshman Composition with Integrated Support*

**Outcomes**

- Use the writing process to compose essays—including research papers in MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**OR**

**Prerequisite**

*ENGL101 - Freshman Composition*

**Outcomes**

- Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.
- Analyze written and visual texts for content, structure, rhetorical strategies, visual and written techniques, and grammatical precision.

**OR**
**Prerequisite**

ENGL101H - Honors Freshman Composition

**Outcomes**

Use the writing process to compose essays—including research papers in the MLA format—that contain unity, coherence, development, logic, grammatical precision, and selection of appropriate sources and their correct use.

Analyze written and visual texts for content, structure, rhetorical strategies, visual, and written techniques and grammatical precision.

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**UC Comparable Transfer Courses**

**Local - Plan A**

Area E2: Communication/Analytical Thinking

Area G2: Reading Proficiency

**CSU GE - Plan B**

Area A3: Critical Thinking

**IGETC - Plan C**

Area 1B: Critical Thinking/Composition

**Learning Outcomes**

**Course Objectives:**

Apply levels of cognition in reading.

Recognize barriers to critical thinking.

Effectively use reading strategies to annotate, paraphrase, and summarize.

Utilize metacognitive practices to increase transfer and adapt learning to new contexts and tasks.

Identify the thesis/main idea and supporting evidence.

Understand grammatical and syntactical considerations in reading.

Recognize various types of support.

Determine author's purpose, point of view/biases, and tone.

Assess the validity, logic, and relevance of a text.

Recognize the author or speaker's use of ambiguous and slanted language in argument and the effect on the reasoning.

Distinguish denotation from connotation.

Distinguish factual statements from judgmental statements and knowledge from opinion.

Identify and analyze figurative language.

Make accurate inferences.

Draw connections that synthesize two or more texts.

Compare and contrast text to text, text to self, text to world, and text to media.
Critically read, analyze, compare, and evaluate a variety of complex texts.

Analyze arguments by identifying claims, assumptions, support, emotional appeals, and logical fallacies.

Evaluate the strength and of an argument.

Distinguish between and use both deductive and inductive reasoning and evaluate validity and soundness of arguments.

Develop strategies of information competence with digital technologies.

Conduct research using library resources, online databases, Internet sites, and print materials; evaluate reliability and accuracy of information.

Identify and analyze hidden assumptions in arguments in various social, historical, cultural, and psychological or aesthetic contexts.

Compose formal critical response essays which require argumentation, persuasion, refutation, interpretation, evaluation, and support with appropriate reasons and evidence.

Incorporate counterarguments, refutations, and concessions into argument.

Recognize and utilize logos, ethos, and pathos appeals into persuasive writing.

Utilize appropriate academic style, diction, and tone.

Exhibit a mature style appropriate for academic writing with no disruptive errors in English grammar, usage, or punctuation.

Compose formal critical response essays to academic readings, scholarly articles, persuasive speeches, editorials, and internet media sources.

Create formal analysis and write evaluation essays.

Revise personal conclusions based on the critical reflection of explicit and implicit arguments.

Assess similarities and differences in point of view.

Student Learning Outcomes:

- Apply critical reading and thinking skills to the interpretation, analysis, and evaluation of ideas encountered in academic readings and settings.
- Compose a written rhetorical analysis in response to an author's claim and presented evidence.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Health and Safety Awareness and Application
SAFE200:

30.0 Hours

Provides information and a discussion forum related to current and relevant health and safety topics, issues, and/or concerns. Students will use teamwork, research techniques, decision making, and communication skills to enhance learning. Open Entry/Open Exit.

Requisites

None

Learning Outcomes

Course Objectives:
Understand the role of ethical behavior and learn responsibilities as related to health and safety

Delivers a relevant presentation, complete a project, or prepare for certification in order to apply skills as needed in emergencies.

Understand how to organize and structure tasks, work individually and/or in teams for effective performance and attainment of goals.

Increase self-awareness, become informed, and build research and information processing skills as they relate to current health and safety topics, issues, and/or concerns.

Apply appropriate problem-solving strategies and critical thinking skills to assist with decision making in health-related topics, issues and/or concerns

Understand the use of technological resources to gain access to information and collect data, perform tests, and analyze data.

Attentively and extend ideas presented through analysis, evaluation, and elaboration.

**Student Learning Outcomes:**

- Be health and safety conscious.
- Share health and safety awareness, plans, attitudes and techniques with others.

### Hours

**Total Hours**

30.0

### Emergency Planning & Safety

**SAFE850:**

30.0 Hours

Adheres to emergency planning and safety guidelines of appropriate federal, state and county authorities, specifically as they apply to the state of California. This course includes basic guidelines for dealing with emergency situations and handling safety issues arising from natural or man-made causes such as earthquakes, brush fires, home/building fires, freeway travel safety, floods and landslides.

Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Gain a broader awareness and understanding of types of criminal and terrorist incidents and learn safety measures
- Become aware of outdoor safety concerns and learn safety preparation and tips for the outdoors
- Understand the nature and hazards of fire in various settings and preventative measures for fire emergencies, along with the knowledge to help children, the elderly, the sick and persons with disabilities
- Become aware of major home safety concerns and prepare with preventative measures
- Understand the nature and danger of earthquakes and other natural calamities
- Gain knowledge of safety concerns in various settings and appropriate safety measures from experience of others
- Apply practical knowledge of outdoor safety techniques to specific outdoor scenarios and situations
- Learn safety preparations and recommendations
- Understand the rationale for safety consciousness and the need for emergency planning
- Gain an understanding of travel safety concerns and learn ways to prevent accidents
- Understand the distinct roles of city, county, state and federal government and non-governmental agencies during emergencies and personal responsibilities
Gain knowledge of the role of government agencies during natural calamities

**Student Learning Outcomes:**
- Demonstrate proficiency of safety awareness.
- Share safety attitude/awareness/preparation plans with others.

**Hours**

**Total Hours**
30.0

**Health Issues & Concepts**

SAFE877:

72.0 Hours

Provides a basic foundation in the following health topics: mental, family, and social health; the stages of the life cycle; medicine and drugs; diseases and disorders. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Define stress and describe effective coping strategies
- Identify legal and illegal drugs and describe their effect on the body
- Define mental health
- Review course objectives
- Explain the need for relationships and to build healthy ones
- Review student syllabus
- Review student learning outcomes
- Describe the causes, treatment, and prevention of communicable and noncommunicable diseases
- Explain the difference between communicable and noncommunicable diseases
- Discuss the many aspects of marriage and parenthood
- Identify and describe the various stages of the life cycle from before birth through end of life
- Define addiction and co-dependency, and discuss avenues for recovery
- Identify mental disorders
- Identify the characteristics of today's family

**Student Learning Outcomes:**
- Identify and analyze real or potential health and safety problems and develop possible solutions.
- Demonstrate knowledge of personal responsibility and physical well-being.

**Hours**

**Total Hours**
72.0

**Substance Abuse**

SAFE898:
18.0 Hours

Provides instruction and discussion on the following components: addictive substances, physiology of addiction, stages of addiction, coping strategies, family systems, cognitive/behavioral principles, family relationships, and relapse prevention. Open Entry/Open Exit.

Requisites

There are no requisites.

Learning Outcomes

Course Objectives:

- Describe the physical and psychological effects of other drugs such as inhalants, steroids, and sports drugs.
- Identify stages of addiction.
- Distinguish between use, abuse, misuse, dependence, and addiction.
- Describe physical symptoms of alcoholism including tolerance, and withdrawal.
- Describe the physical and psychological effects of depressants, benzodiazepines, opioids.
- Identify the theory of family systems and the five survival roles that emerge in the family of the addict.
- Recognize the physical and psychological effects of hallucinogens, lysergic acid diethylamide, MDMA, PCP.
- Identify behaviors that might result in exposure to HIV and other diseases.
- Recognize the social aspects of alcoholism including sense of self, relationships, and issues around attachment, parenting, and interpersonal violence.
- Discuss the Controlled Substance Act of 1970.
- Review student syllabus.
- Identify the stages of recovery.
- Discuss over the counter drugs and prescriptions.
- Describe risk factors for substance abuse including environment, inherited factors, and brain chemistry.
- Describe different treatment modalities of peer support, professional counseling, 12-step groups, inpatient and outpatient rehabilitation, social model residential treatment, intervention, relapse prevention programs and identify when to use them.
- Identify psychological symptoms of alcoholism including denial, rationalization, isolation, blame, anti-social behaviors, and self-defeating behaviors.
- Review student learning outcomes.
- Review course objectives.
- Describe the effects of substance abuse on the developmental stages from adolescence to adulthood, including social, emotional, interpersonal, and educational development.
- Describe federal, state and local laws related to regulation, prevention, and treatment of alcohol and drug abuse.
- Identify the physical and psychological effects of stimulants, cocaine, MDMA, amphetamines.

Student Learning Outcomes:

- Describe the continuum of addiction and recovery.
- Demonstrate knowledge of substance abuse and how it affects society.

Hours

Total Hours

18.0

Introduction to Sociology
SOC100:

3.0 Units

The scientific study of human societies and behavior focusing on the process of social interaction, patterns of social inequality, and the influence of social institutions on individuals as members of social groups. Special emphasis provided to explain factors promoting social stability and social change. Field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)
Sociology

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the definition of sociology, the sociological imagination, theoretical perspectives in sociology, and major theorists.

Identify the relationship between language and culture, including cultural norms, values, and sanctions.

Discuss the issues sociologists face in research including ethics, topics, methodologies, and objectivity.

Explain the social construction of deviance and the role theory plays in explaining deviance within society.

Develop and understanding of the importance of socialization and its role in the development of a sense of self.

Describe sociological understanding of social class, models of social class, and perspectives of poverty.

Evaluate the differences between sex and gender and contemporary issues of gender stratification.

Create a comprehensive understanding of the ways in which race and ethnicity are socially constructed in the US, and the consequences of the practice of racism and ethnocentrism.

Understand the institution of education and theories of sociology of education.

Articulate the principles of Malthusian theories and the process of urbanization.

Recognize the change in economic and work opportunities over time, and the power of workers to exert their will in the workplace.

Elucidate the impact of the distribution of power in the United States.
Consider the impact of group life on an individual experience, and how group dynamics shape social expectation and opportunity.

Explore the sociological theories of health and medicine and identify issues in health care.

Illustrate an understanding of collective behaviors, social movements, and related social conditions.

Detail the consumption of media and its impact on cultural standards and political knowledge.

Student Learning Outcomes:
- Demonstrate familiarity with the major concepts, theories and theorists, methods and findings in sociology.
- Demonstrate an ability to apply the major sociological perspectives, theories, and concepts in explaining social phenomenon, experiences, interactions, and institutions.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors Introduction to Sociology
SOC100H:

3.0 Units

A seminar-style, content enriched course to provide a critical and extensive exploration of the sociological perspective, methods, and theories of social interaction, stability and change. Focuses on the importance of sociology for understanding individuals in a social context and provides a comprehensive understanding of and scientific way of thinking about society. Field trips may be required.

Requisites

Requisites:
Prerequisite
A high school or college GPA of 3.0 or above

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Sociology

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the definition of sociology, the sociological imagination, theoretical perspectives in sociology, and major theorists.

Identify the relationship between language and culture, including cultural norms, values, and sanctions.

Discuss the issues sociologists face in research including ethics, topics, methodologies, and objectivity.

Explain the social construction of deviance and the role theory plays in explaining deviance within society.

Develop and understanding of the importance of socialization and its role in the development of a sense of self.

Describe sociological understanding of social class, models of social class, and perspectives of poverty.

Evaluate the differences between sex and gender and contemporary issues of gender stratification.

Create a comprehensive understanding of the ways in which race and ethnicity are socially constructed in the US, and the consequences of the practice of racism and ethnocentrism.

Understand the institution of education and theories of sociology of education.

Articulate the principles of Malthusian theories and the process of urbanization.

Recognize the change in economic and work opportunities over time, and the power of workers to exert their will in the workplace.

Elucidate the impact of the distribution of power in the United States.

Consider the impact of group life on an individual experience, and how group dynamics shape social expectation and opportunity.

Explore the sociological theories of health and medicine and identify issues in health care.

Illustrate an understanding of collective behaviors, social movements, and related social conditions.

Detail the consumption of media and its impact on cultural standards and political knowledge.

Student Learning Outcomes:
Demonstrate familiarity with the major concepts, theories & theorists, methods and findings in sociology.
Demonstrate an ability to apply the major sociological perspectives, theories, and concepts in explaining social phenomenon, experiences, interactions, and institutions.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Death and Dying
SOC115:
3.0 Units:

This course includes various perspectives on death, both cross-cultural and historical. Examines beliefs, traditions, rituals and practices surrounding death in American society; health care systems (the hospital and the dying patient, hospice, etc.); death and the process of dying; bioethics – dying in the technology age; euthanasia, suicide, funerals, grief, and bereavement; the law and death, including living wills, organ donation, and autopsies; and life after death – old and new meanings. Field trips may be required.

Requisites
Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
   Area D: Social Sciences
   Area E1: Lifelong Learning

IGETC - Plan C
   Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the framework of sociology in the study of death and dying.

Describe the field of thanatology including a comprehensive look at influence by varying disciplines.

Illustrate the cultural impacts of thinking about, understanding, and experiencing death and loss.

Classify the relationship and understanding of death through the constructed life course.

Construct the role of religion, and specific cultural practices and beliefs around dying and death, and social experiences with death and dying.

Demonstrate the multifaceted approach to the dying process including political realities, and how death comes to be socially constructed and loss experienced.

Interpret new approaches to illness and terminal diagnoses, including hospice and palliative care, and the decision to receive such care.

Apply the effects of a for-profit medical system including who has greater access to care/end of life care, how technology impacts the cultural approach to dying, and the growth of gerontology/geriatrics in medicine.

Explore the varied cultural approaches to ethical questions around bodies, body usage, and body harvesting as well as the rights of individuals in euthanasia and assisted end of life decisions.

Describe the changing cultural understandings of suicide including trends, factors, and outcomes.

Summarize the cultural impacts of mourning, body disposal, and religious rituals.

Discuss the impact of profit industries on death, funeralization, and body disposal in America

Explain the American legal system as it related to death and dying, and the rights of surviving parties.

Recognize the grieving process, including stages of grief, and labels of normality as well as the impact of how death occurred on the bereaved.

Differentiate the experiences of grief based on the relationship of the deceased person to the bereaved.

Locate trends of cultural values, end of life care, and funeralization for the future.

Student Learning Outcomes:
   Demonstrate familiarity with the major concepts, theories & theorists, methods and findings in the study of the sociology of death, dying, and bereavement.
Apply the major sociological theories and perspectives in explaining social contexts and cultural practices of death, dying, and bereavement.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Social Problems
SOC116:

3.0 Units

An extensive survey of contemporary social trends and problems through sociological analysis concentrating on their causes, complexities, consequences, and possible solutions. Special emphasis will be placed on the problems in the U.S., with consideration of the global perspective. Field trips may be required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Sociology

Learning Outcomes

Course Objectives:
Define what a social problem is and understand the role theory and research play in that definition.

Explore the issues of urbanization and suburbanization on the environment, and the development of community globally and locally.

Identify the causes of racial inequality, and the role of intersectionality in determining social location.

Recognize the role of gender inequality in social opportunity, location, and experience.

Examine the problems of sexuality including the porn industry, and sex crimes through a lens of sociological theory.

Understand the role aging plays in social location and opportunity within the US.
Apply sociological theories to understand the inequalities that are maintained within institutions of education in the US.

Create an operational understanding of the role of media in portraying social problems, and disseminating narratives around groups of people.

Describe the impact of social class & poverty on opportunity and social experience within the US.

Differentiate between historical opportunity for work, and current opportunities for work within the US.

Determine the factors which create particular definitions and labels around crime, criminality, and deviance in the US.

Develop and understanding of current trends and habits of alcohol and drug use, and the role of social experience in impacting use, abuse, and addiction.

Construct and understanding of the problems of medicalization, and the ways in which health and healthcare are social constructs.

Explicate the result of environmental values with economic norms globally and locally.

Critically assess the role of media in shaping understandings of war, terrorism, and war waging policies.

Comprehend the problems that can arise within the confines of family, and the changing role of family within the US.

**Student Learning Outcomes:**

- Demonstrate familiarity with the major sociological concepts, theories & theorists, methods, and findings related to social problems.
- Critically analyze social problems by applying concepts and principles of sociology.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Introduction to Sociological Research Methods**

**SOC120:**

3.0 Units

This course introduces students to the principles of sociological research and design. Students will examine the roles of variables, hypotheses, and sociological theory in research, and discuss issues of ethics in research. It will review quantitative and qualitative methods of data collection, analysis, and reporting, including survey, observational, and experimental research methods. Optional field trips may be offered.

**Requisites**

**Requisites:**

**Prerequisite**

**SOC100 - Introduction to Sociology**

**OR**

**Prerequisite**

**SOC100H - Honors Introduction to Sociology**

**AND**

**Advisory**
MATH219 - Statistics and Probability

OR

Advisory

MATH219H - Honors Statistics and Probability

OR

Advisory

MATH220 - Statistics and Probability with Integrated Review

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
  Area B2: Social and Behavioral Sciences: Social Science Elective

CSU GE - Plan B
  Area D: Social Sciences

IGETC - Plan C
  Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
  UC Comparable Transfer Courses

Course Identifier (C-ID)
  Sociology

Learning Outcomes

Course Objectives:
Explain the basic principles for conducting social research.
Distinguish sociological paradigms and uses of inductive and deductive analyses.
Identify key ethical issues in social research.
Describe structure, elements, and dilemmas of research design.
Demonstrate knowledge of conceptualization, validity, reliability, and operational definitions.
Differentiate between indexes and scales, and identify particular scales and how they are constructed.
Critically assess the key events in the development of sampling including the ethical implications of sample designs.
Illustrate the methods for selecting and assigning subjects in an experiment.
Summarize the role of survey research including the ways surveys can be administered and the limitations of various types of surveys.
Distinguish the particular processes of conducting field research including relations to subjects, topics which are appropriate, and ethical concerns of field research.
Interpret the role of content analysis for both qualitative and quantitative research including the use of existing statistics, and the ethical issues involved in unobtrusive research.

Explicate the central role of measurement in evaluation research while identifying some of the different evaluation designs.

Provide examples of how qualitative data can be captured and coded, and also used to analyze quantitative data.

Recognize the ways in which data can be quantified including bivariate analysis and sociological diagnostics.

Summarize the function and structure of a literature review including the basic considerations of the writing of sociological research.

**Student Learning Outcomes:**

Demonstrate an understanding of the basic principles of sociological research including qualitative and quantitative methods. Critically evaluate the validity and reliability of methods used in sociological research.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Introduction to Statistics in Sociology**

**SOC125:**

3.0 Units

An introduction to the basic statistical methods and analyses commonly used in sociological and social justice research. Topics include: descriptive and inferential statistics usually include levels and types of measurement; measures of central tendency and dispersion; normal, t, and chi-square distributions; probability and hypothesis testing; correlation and regression. Applications of statistical software to sociology and/or other social science and social justice data required.

**Requisites**

**Requisites:**

**Prerequisite**

MATH080 - Intermediate Algebra

or qualifying profile from the Mathematics placement process

OR

**Prerequisite**

MATH085 - Intermediate Algebra with Integrated Support

or qualifying profile from the Mathematics placement process

OR

**Prerequisite**

MATH086 - Intermediate Algebra for Statistics and Liberal Arts

or qualifying profile from the Mathematics placement process

Transferability & General Education Options

**Transferable:**

Transferable to both UC and CSU
Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
   Area E2: Communication/Analytical Thinking
   Area G1: Mathematics Proficiency
CSU GE - Plan B
   Area B4: Mathematics/Quantitative Reasoning
IGETC - Plan C
   Area 2A: Mathematical Concepts and Quantitative Reasoning
   Area 4: Social and Behavioral Sciences
UC Comparable Transfer Courses
   UC Comparable Transfer Courses

Course Identifier (C-ID)
Sociology

Learning Outcomes

Course Objectives:
Differentiate between descriptive and inferential statistics including the ways in which each can be expressed though a sociological and social justice lens.

Explain the Wilcoxon Signed-Rank test in relation to comparing two related samples.

Understand bivariated data and the ways in which that data can be graphed.

Calculate probabilities using events and rules.

Demonstrate an understanding of the normal probability distribution.

Apply the central limit theorem to the understanding of sampling distributions.

Construct a confidence interval for $\mu$ and $p$ for large and small samples.

Describe data sets using various numerical measures.

Understand the vocabulary and concepts of a confidence interval to estimate a population mean.

Analyze experiment designs to best apply variance and block design.

Define linear regression and its role in determining a correlative relationship.

Distinguish between multiple regression model and linear regression model in using two or more variables.

Construct and compute a chi-square test of independence.

Determine which hypothesis test is most appropriate for the given large-sample.

Student Learning Outcomes:
   Demonstrate an understanding of inferential and descriptive statistics in sociological statistics.
   Identify and apply the most effective statistical methodologies to explain and predict social phenomenon and problems within social science fields.

Units & Hours

Minimum Units:
3.0

Maximum Units
Total Hours
54.0

Honors Introduction to Statistics in Sociology
SOC125H:

3.0 Units

An introduction to the basic statistical methods and analyses commonly used in sociological and social justice research. Topics include: descriptive and inferential statistics usually include levels and types of measurement; measures of central tendency and dispersion; normal, t, and chi-square distributions; probability and hypothesis testing; correlation and regression. Applications of statistical software to sociology and/or other social science and social justice data required.

Requisites

Requisites:

Prerequisite
A high school or college GPA of 3.0 or above

AND

Prerequisite
MATH080 - Intermediate Algebra

or qualifying profile from the Mathematics placement process

OR

Prerequisite
MATH085 - Intermediate Algebra with Integrated Support

or qualifying profile from the Mathematics placement process

OR

Prerequisite
MATH086 - Intermediate Algebra for Statistics and Liberal Arts

or qualifying profile from the Mathematics placement process

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A

Area E2: Communication/Analytical Thinking

Area G1: Mathematics Proficiency

CSU GE - Plan B

Area B4: Mathematics/Quantitative Reasoning

IGETC - Plan C

Area 2A: Mathematical Concepts and Quantitative Reasoning
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)

Sociology

Learning Outcomes

Course Objectives:
Differentiate between descriptive and inferential statistics including the ways in which each can be expressed through a sociological and social justice lens.

Describe data sets using various numerical measures.

Understand bivariate data and the ways in which that data can be graphed.

Calculate probabilities using events and rules.

Demonstrate an understanding of the normal probability distribution.

Apply the central limit theorem to the understanding of sampling distributions.

Construct a confidence interval for $\mu$ and $p$ for large and small samples.

Determine which hypothesis test is most appropriate for the given large-sample.

Understand the vocabulary and concepts of a confidence interval to estimate a population mean.

Analyze experiment designs to best apply variance and block design.

Define linear regression and its role in determining a correlative relationship.

Distinguish between multiple regression model and linear regression model in using two or more variables.

Construct and compute a chi-square test of independence.

Explain the Wilcoxon Signed-Rank test in relation to comparing two related samples.

Student Learning Outcomes:
Demonstrate an understanding of inferential and descriptive statistics in sociological statistics.
Identify and apply the most effective statistical methodologies to explain and predict social phenomenon and problems within social science fields.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Relationships, Marriages, and Family Dynamics

SOC130:

3.0 Units

In-depth examination of the sociological study of the process of developing intimate relationships leading to committed partnerships and marriages with emphasis on the intersectionality of communication, understanding relationship dynamics, parenting and reproduction, diverse family systems, familial conflict and stress, and changing familial structures. In addition, this course will determine the role of social institutions in establishing cultural norms around the development of relationships, marriages, and families.
Requisites
Requisites: None

Transferability & General Education Options

Transferable: Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area D: Social Sciences
Area E1: Lifelong Learning

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses

Course Identifier (C-ID)
Sociology

Learning Outcomes

Course Objectives:
Recognize the ways in which families are explored sociologically considering historical and contemporary situations.
Examine the ways in which families are sociologically researched considering theory, and demographics.
Identify the socialization process around gender, and the impact gender has on familial norms and relations.
Define the ways in which individuals sexually identify, and the role of social movements in changing sexual scripts.
Describe the ways in which love is defined sociologically, and the ways in which mates are found.
Understand the ways society lives outside of a traditional marriage arrangement, and the reasons and outcomes of those nontraditional living arrangements.
Apply the concept of the deinstitutionalization of marriage to social understandings and perceptions of marriage.
Determine the impact of becoming parents in the US today, the changes in fertility patterns, and the paths in which one can become a parent.
Differentiate between men's and women's roles in regards to work, household labor, and child rearing.
Create an understanding of the ways in which communication varies, and the role communication plays in conflict resolution and family cohesion.

Construct understandings of the diverse ways in which identity and social location impact the ways in which children are raised by parents.
Comprehend the role power plays in the existence and maintenance of violence and abuse within the family.
Develop an understanding of crisis, trauma, and ways of compensating for traumatic events.

Explicate the reasons divorce has changed over time in the US and the practices and concerns of relationship dissolution.
Critically assess the prevalence of stepfamilies, and the ways in which stepfamilies navigate roles, perceptions, and legal rights.
Explore the demographic shifts in the American population and the impact of the shift of the population on families.

**Student Learning Outcomes:**
- Demonstrate familiarity with the major sociological concepts, theories, methods and findings related to relationships, marriage and family dynamics.
- Engage in the practical application of sociological principles and theories to relationships, marriage and family dynamics.

### Units & Hours

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

### Introduction to Race and Ethnicity

**SOC150:**

3.0 Units

This course focuses on the application of sociological theories and concepts to the study of race, ethnicity, and racism within an intersectional context. It includes an examination of the cultural, political, historical, and economic practices and institutions that construct, perpetuate, or challenge racism, racialized inequalities, and interactive dynamics within and between various racial and ethnic groups. Special attention will be extended to the impacts of globalization, immigration, miscegenation, identity formation, and strategies to combat and decrease prejudice and discrimination.

### Requisites

**Requisites:**

Advisory

**SOC100 - Introduction to Sociology**

### Transferability & General Education Options

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area B2: Social and Behavioral Sciences: Social Science Elective

**CSU GE - Plan B**

Area D: Social Sciences

**IGETC - Plan C**

Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Course Identifier (C-ID)**

Sociology
Learning Outcomes

Course Objectives:
Define the distinct types of groups and produce concrete examples of each type.

Apply the theoretical perspectives and evaluate the consequences of subordinate group status.

Distinguish between stereotypes, prejudice, and discrimination and list contemporary examples of each.

Utilize the theories of prejudice and critique the methods that reduce prejudice.

Assess the different levels of discrimination and explain the impacts of racism.

Compare the historical trends in immigration and analyze how multiple statuses influence these migrations.

Identify the effects of government policies on Native Americans and examine their collective action efforts.

Summarize which historical policies have adversely impacted African Americans and show how this group challenges these issues.

Discuss Latino American identities and history in the United States and outline their representation within various institutions.

Demonstrate an understanding of the history and experiences of Asian Americans and determine their contribution within select institutions.

Illustrate knowledge of contemporary race and ethnic issues and appraise the plausibility of complete equality.

Student Learning Outcomes:

Demonstrate understanding of the major concepts, theories, methods, and findings in the study of the sociology of race and ethnicity.

Apply the major sociological theories and perspectives in explaining social contexts, experiences, and collective actions of racially and ethnically diverse groups.

Units & Hours

Minimum Units: 3.0

Maximum Units: 3.0

Total Hours: 54.0

Introduction to Gender and Sexualities

SOC220:

3.0 Units

This course applies sociological theory and method to the study of gender and sexuality in cross-cultural perspective. It includes historical and contemporary analysis of masculinities and femininities and their relationship to social institutions, such as the family, schools, the military, religion, mass media, and popular culture. It examines the impact of economic and political change on sexuality, and gender expectations and practices. The approach uses macro-level analysis of institutional effects on gender construction and sexuality, and micro-level analysis of socialization and “doing gender.” It considers how the intersecting axis of race, class, gender, and sexuality shape individual and group experience. Field trips may be required.

Requisites

Requisites: None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU
Weekly Lecture Hours:
3.0

General Education Plan:

Local - Plan A
Area B2: Social and Behavioral Sciences: Social Science Elective
Area F1: Lifelong Understanding and Self-Development

CSU GE - Plan B
Area D: Social Sciences
Area E1: Lifelong Learning

IGETC - Plan C
Area 4: Social and Behavioral Sciences

Course Identifier (C-ID)
Sociology

Learning Outcomes

Course Objectives:
Demonstrate an understanding of the discipline of sociology in the study of gender and sexuality.

Explain, identify, and critique biological essentialist arguments.

Illustrate an understanding of gender socialization processes and agents.

Develop an understanding of various sex and gender identities, as well as how the social construction of the human body impacts societal understandings of sexuality and sexual relationships.

Create an understanding of gendered language, linguistic domination, and language as a means of social change.

Recognize multiple masculinities, femininities, and their intersection with sexuality.

Elucidate the impact of social institutions on the construction of gender and sexuality.

Express an understanding of sociological theories of sexuality; name landmark studies and methodological issues in the study of sexuality.

Construct an intersectional understanding of sexual scripts and the impact of pornography and technology on sexual behavior and cultural understanding.

Explicate the impact of sex education on children, teens, and teen sexual behavior; discuss how adults develop and maintain knowledge of sex and sexuality.

Critically assess dominant cultural narratives and practices regarding the body and sexuality.

Describe and identify diverse sexual practices; understand the dynamics of power in shaping sexual relationships.

Explore and distinguish multiple cultural negotiations of sexual and gendered identities in contemporary society.

Define rape, discuss rape myths, and examine current issues of consent, legislation, and the effects of rape.

Investigate distinctions in love, friendship, and intimate relationships across gendered lines.

Detail the consumption and marketing of sex; outline the social, economic, and political consequences of sex work.

Student Learning Outcomes:
Demonstrate familiarity with the major concepts, theories, methods and findings in the study of the sociology of gender and sexualities.

Apply the major sociological theories and perspectives in explaining the intersection of gender and sexuality with multiple dimensions of difference.

Units & Hours

Minimum Units:
Maximum Units
3.0

Total Hours
54.0

Introduction to Social Psychology
SOC240:

3.0 Units
An exploration of the interlocking dynamics of the individual & society, and sociology. Through an examination of the power of the situation, social interaction, and social groups, topics include: aggression, prejudice, attraction, attitudes, group dynamics, self-development and social cognition. Field trips may be required. (No credit if student has taken Psychology 240.)

Requisites

Requisites:
Anti-Requisite

PSYC240 - Introduction to Social Psychology

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
Area D: Social Sciences

IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Learning Outcomes

Course Objectives:
Determine the impact of the collective on the individual through experience and thought.

Examine the research methods in social psychology, and their ethical concerns.

Critically analyze the development of the self and the powers of society to regulate and control an individual.

Identify ways in which individuals develop social cognition, and the influence of social experience in shaping one's cognition.

Describe the ways in which social psychologists explain behavior including attribution, priming, and social location.

Recognize how emotions are developed, regulated, and experienced.

Understand how attitudes are developed, defined, and influential over behavior.
Develop a comprehension of persuasion and the role of media and other message delivery entities in developing knowledge and resistance.

Define social influence and the situations which increase conformity and deviation.

Differentiate social relationships and the ways they are developed through attraction, relation, and understandings of love.

Apply critical analysis to the use of stigma, prejudice, stereotyping, and bias in social relationships and interactions.

Construct a knowledge of the roles of groups and group life in social life and social behavior.

Explore the creation of aggression and aggressive behaviors, and the use of aggression in the maintenance of power and domination.

Comprehend the determinants of altruistic behavior and the history of cooperation in group life.

Create an understanding of how individuals are socialized over their entire lives, and also the importance of childhood socialization and its lifelong impact.

Explicate the ways in which deviance and deviant behavior are socially constructed, and the ways in which deviance is understood to occur.

Student Learning Outcomes:
- Demonstrate familiarity with the major issues, methods, theories and theorists, and findings within social psychology.
- Critically analyze social interactions, identities, and dilemmas utilizing concepts and principles within social psychology.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Honors Introduction to Social Psychology
SOC240H:
3.0 Units

An exploration of the interlocking dynamics of the individual & society, and sociology. Through an examination of the power of the situation, social interaction, and social groups, topics include aggression, prejudice, attraction, attitudes, group dynamics, self-development, and social cognition. Field trips may be required. (No credit if a student has taken Psychology 240.)

Requisites

Requisites:

Prerequisite
A high school or college GPA of 3.0 or above

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
Area D: Social Sciences
IGETC - Plan C
Area 4: Social and Behavioral Sciences

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Psychology

Learning Outcomes

Course Objectives:
Determine the impact of the collective on the individual through experience and thought.

Examine the research methods in social psychology and their ethical concerns.

Critically analyze the development of the self and the powers of society to regulate and control an individual.

Identify ways in which individuals develop social cognition and the influence of social experience in shaping one's cognition.

Describe the ways in which social psychologists explain behavior including attribution, priming, and social location.

Recognize how emotions are developed, regulated, and experienced.

Understand how attitudes are developed, defined, and influential over behavior.

Develop a comprehension of persuasion and the role of media and other message delivery entities in developing knowledge and resistance.

Define social influence and the situations which increase conformity and deviation.

Differentiate social relationships and the ways they are developed through attraction, relation, and understandings of love.

Apply critical analysis to the use of stigma, prejudice, stereotyping, and bias in social relationships and interactions.

Construct a knowledge of the roles of groups and group life in social life and social behavior.

Explore the creation of aggression and aggressive behaviors, and the use of aggression in the maintenance of power and domination.

Comprehend the determinants of altruistic behavior and the history of cooperation in group life.

Create an understanding of how individuals are socialized over their entire lives, and also the importance of childhood socialization and its lifelong impact.

Explicate the ways in which deviance and deviant behavior are socially constructed, and the ways in which deviance is understood to occur.

Student Learning Outcomes:
Demonstrate familiarity with the major issues, methods, theories and theorists, and findings within social psychology.
Critically analyze social interactions, identities, and dilemmas utilizing concepts and principles within social psychology.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Introduction to LGBTQ Studies
SOC286:
3.0 Units
The Introduction to LGBTQ Studies offers an intersectional examination of issues related to the gay, lesbian, bisexual, transgender, and queer experience. Taught from the sociological perspective, this course includes historical and contemporary analyses of the LGBTQ+ community and their relationship to social institutions, and institutional power. The Introduction to LGBTQ Studies also surveys political, legal, and cultural values and actions with a focus on social justice. Field trips may be required.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

3.0

**General Education Plan:**

**Local - Plan A**

Area D: Cultural Breadth

**CSU GE - Plan B**

Area D: Social Sciences

**IGETC - Plan C**

Area 4: Social and Behavioral Sciences

**UC Comparable Transfer Courses**

UC Comparable Transfer Courses

**Learning Outcomes**

**Course Objectives:**

Summarize and utilize the sociological perspective as it relates to LGBTQ+ studies.

Identify the multiple identities and their historical evolution within the LGBTQ+ community.

Demonstrate a familiarity with early historical contexts around the LGBTQ+ experience.

Discuss the critiques of the medical model of gender and sexuality.

Develop an understanding of the importance of the Stonewall Riots and their impact on other major struggles for the LGBTQ+ community.

Articulate the history of sexuality studies and the critiques of scales which seek to identify levels of sexual orientation and identity.

Discern between assimilation and inclusion and the impact of assimilation, inclusion, and exclusion on the lived experience of the LGBTQ+ community.

Explore intersectional theory and its contributions to the queer rights movement.

Highlight the role of intersectional queer literature and art in the movement toward the normalization of queer existence.

Elucidate the role of queer transgressions in motivating and challenging political support and lack thereof.

Analyze the historical and contemporary existence and presentation of the LBGTQ+ community in television and film.

Determine how the internet helped further propel the queer community into a galvanized and organized political group.

Identify what a queer space is and how those spaces have evolved throughout the queer rights movement.

**Student Learning Outcomes:**

Demonstrate familiarity with the major concepts, theories, methods and findings in LGBTQ+ studies.

Apply the major sociological theories and perspectives to the issues and experiences within LGBTQ+ studies.

**Units & Hours**
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Elementary Spanish I
SPAN101:
5.0 Units

Introduction of the Spanish language and culture with emphasis on the development and acquisition of listening, speaking, reading and writing skills. Includes interaction and application of the language in cultural context at the beginning level. Designed for students with very little knowledge or no knowledge of Spanish. Spanish 101 is equivalent to two years of high school Spanish.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 6A: Language Other than English

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)
Spanish

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Produce oral and written communication on a variety of meaningful beginning level topics integrating vocabulary, idiomatic expressions, and correct use of grammatical patterns.

Understand and discuss characteristics of Spanish culture such as, geography, foods, traditions and customs, art, current events, daily life, and music.

Derive meaning of implicit and explicit written material at beginning level.
Obtain information about people, places and things.

Expand vocabulary and grammar to facilitate the development of the four skills: listening, speaking, reading, and writing.

Learn and apply variations of Spanish pronunciation.

State future plans.

Describe self, family and friends.

Express likes and dislikes.

Knowledge and command of the regular preterite tense to talk about events in the past.

**Student Learning Outcomes:**

- Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the beginning level.
- Recognize and understand vocabulary, verbs, grammatical structures, and culture to interpret and infer meaning of implicit and explicit written material at the beginning level.
- Employ vocabulary and syntax to communicate in writing on designated topics at the beginning level.
- Comprehend spoken messages in Spanish at the beginning level.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

108.0

**Elementary Spanish IA**

**SPAN101A:**

2.5 Units

Introduction to Spanish language and culture with emphasis on the development and acquisition of listening, speaking, reading and writing skills. Includes interaction and application of the language in cultural context at the beginning level. Designed for students with very little knowledge or no knowledge of Spanish. Spanish 101A and Spanish 101B together are equivalent in units and content to Spanish 101 and equivalent to two years of high school Spanish.

**Requisites**

None

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

2.5

**General Education Plan:**

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

**Course Identifier (C-ID)**

Spanish
Learning Outcomes

Course Objectives:
Understand and discuss characteristics of Spanish culture such as, geography, foods, traditions and customs, art, current events, daily life, and music.

Produce oral and written communication on a variety of meaningful beginning level topics integrating vocabulary, idiomatic expressions, and correct use of grammatical patterns moving toward Spanish 101B.

Derive meaning of implicit and explicit written material at the beginning level.

Obtain information about people, places, and things.

Express likes and dislikes.

Describe self, family, and friends.

State future plans.

Expand vocabulary and grammar to facilitate the development of the four skills: listening, speaking, reading, and writing.

Learn and apply variations of Spanish pronunciation.

Student Learning Outcomes:

- Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the beginning level.
- Employ vocabulary and syntax to communicate in writing on designated topics at the beginning level.
- Recognize and understand vocabulary, verbs, grammatical structures, and culture to interpret and infer meaning of implicit and explicit written material at the beginning level.
- Comprehend spoken messages in Spanish at the beginning level.

Units & Hours

Minimum Units:
2.5

Maximum Units
2.5

Total Hours
54.0

Elementary Spanish IB
SPAN101B:

2.5 Units

Continue introduction of Spanish language and culture with emphasis on the development and acquisition of listening, speaking, reading and writing skills. Includes interaction and application of the language in cultural context at the beginning level. Designed for students with very little knowledge or no knowledge of Spanish. Spanish 101A and Spanish 101B together are equivalent in units and content to Spanish 101 and equivalent to 2 years of high school Spanish.

Requisites

Requisites:

Prerequisite
SPAN101A - Elementary Spanish IA

Outcomes

- Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the beginning level.
- Employ vocabulary and syntax to communicate in writing on designated topics at the beginning level.
- Recognize and understand vocabulary, verbs, grammatical structures, and culture to interpret and infer meaning of implicit and explicit written material at the beginning level.
Comprehend spoken messages in Spanish at the beginning level.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
2.5

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 6A: Language Other than English

Course Identifier (C-ID)
Spanish

Learning Outcomes

Course Objectives:
Produce oral and written communication on a variety of meaningful beginning level topics integrating vocabulary, idiomatic expressions, and correct use of grammatical patterns.

Understand and discuss characteristics of Spanish culture such as, geography, foods, traditions and customs, art, current events, daily life, and music.

Derive meaning of implicit and explicit written material at beginning level.

Obtain information about people, places, and things.

Expand vocabulary and grammar to facilitate the development of the four skills: listening, speaking, reading, and writing.

Learn and apply variations of Spanish pronunciation.

State future plans.

Express likes and dislikes.

Knowledge and command of the regular preterite tense to talk about events in the past.

Student Learning Outcomes:

Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the beginning level.
Employ vocabulary and syntax to communicate in writing on designated topics at the beginning level.
Interpret and infer meaning of implicit and explicit written material at the beginning level.
Comprehend spoken messages in Spanish at the beginning level.

Units & Hours

Minimum Units:
2.5

Maximum Units
2.5

Total Hours
54.0
Honors Elementary Spanish I  
SPAN101H:

5.0 Units

Enhanced and enriched introduction of the fundamentals of the Spanish language and culture with emphasis on the development and acquisition of listening, speaking, reading, and writing skills. Includes interaction and application of the language in cultural context at the beginning level. Designed for students with very little knowledge or no knowledge of Spanish. Spanish 101H is equivalent to two years of high school Spanish.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 6A: Language Other than English

Course Identifier (C-ID)
Spanish

Santa Ana College - Shared Course
Shared Course with SAC

Learning Outcomes

Course Objectives:
Develop writing skills and organize thoughts through guided composition exercises

Write compositions integrating vocabulary, grammar, idiomatic phrases and cultural information introduced in class and researched by students using library material as well as electronic sources of information

Derive meaning of implicit and explicit written material at the beginning level

Synthesize written material

Obtain information about people, places, and things

Express likes and dislikes.

Describe self, family, and friends

Express feelings and emotional states.

State future plans.

Knowledge and command of the regular preterite tense to talk about events in the past.

Participate in discussions in a seminar format
Organize presentations about everyday life themes of cultural and personal interest

Produce oral and written communication on a variety of meaningful beginning level topics integrating vocabulary, idiomatic expressions, and correct use of grammatical patterns.

Expand vocabulary and grammar to facilitate the development of the four skills: listening, speaking, reading, and writing.

Understand and discuss characteristics of Spanish culture such as, geography, foods, traditions and customs, art, current events, daily life, and music.

Identify Spanish speaking countries, capitals and nationalities

Compare and contrast Spanish cultures to gain better understanding of the language, attitudes, and institutions

Acquire variations of Spanish pronunciation.

Differentiate between the Spanish sound system and that of their own first language

**Student Learning Outcomes:**

Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the beginning level.

Recognize and understand vocabulary, verbs, grammatical structures, and culture to interpret and infer meaning of implicit and explicit written material at the beginning level.

Employ vocabulary and syntax to communicate in writing on designated topics at the beginning level.

Comprehend spoken messages in Spanish at the beginning level.

**Units & Hours**

**Minimum Units:**

5.0

**Maximum Units**

5.0

**Total Hours**

108.0

**Elementary Spanish II**

SPAN102:

5.0 Units

A college level Spanish class focusing on further training of the Spanish Language and culture. Additional emphasis on the development and acquisition of listening, speaking, reading, and writing skills. Includes interaction and application of the language in cultural context. Designed for students who took Spanish 101. Spanish 102 is equivalent to the third year of high school Spanish.

**Requisites**

**Requisites:**

**Prerequisite**

SPAN101 - Elementary Spanish I

OR

**Prerequisite**

SPAN101H - Honors Elementary Spanish I

OR
Prerequisite

SPAN101A - Elementary Spanish IA

AND

Prerequisite

SPAN101B - Elementary Spanish IB

OR

Prerequisite

Two years of high school Spanish.

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6A: Language Other than English

Course Identifier (C-ID)
Spanish

Learning Outcomes

Course Objectives:
Strengthen skills, vocabulary, grammar and overall foundation acquired in Spanish 101
Distinguish meanings aurally with greater accuracy
Express more complex thoughts and questions with wider ranging vocabulary, grammar control and pronunciation
Read with speed and understanding
Recognize recurring language structures
Move away from translations and dictionary dependence
Summarize and paraphrase
Derive meaning of explicit and implicit written material
Engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions
Present information, concepts, and ideas to an audience of listeners on a variety of topics
Narrate and describe past real-life events from several perspectives
Express personal attitudes using the subjunctive
Communicate orally in a variety of meaningful life activities moving toward the intermediate high level of proficiency
Compose simple narratives
Write and present information, concepts and ideas to an audience of readers on a variety of topics integrating correct use of grammatical patterns (e.g. pronouns, agreement, present tense, past tense, subjunctive)
Communicate in writing in a variety of meaningful real life activities moving toward the intermediate high level of proficiency
Compare and contrast nuances of everyday life in the Hispanic world with those of the United States
Learn the Hispanic countries, capitals and nationalities
Compare and contrast common Hispanic hobbies and favorite pastimes with U.S.
Compare and contrast personal relationships in the U.S and the Hispanic world
Know and understand characteristics of Spanish speaking countries such as foods, historical dates and sites, traditions and customs, daily life, and music
Demonstrate ability to think critically in applying grammatical concepts to oral and written production

Develop the four skills: Listening, speaking, reading, and writing

Student Learning Outcomes:
Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the novice high level.
Recognize and understand vocabulary, verbs, grammatical structures, and culture to interpret and infer meaning of implicit and explicit written material at the novice high level.
Employ vocabulary and syntax to communicate in writing on designated topics at the novice high level.
Comprehend spoken messages in Spanish at the novice high level.

Units & Hours
Minimum Units: 5.0

Maximum Units 5.0

Total Hours 108.0

Spanish for Spanish Speakers 1
SPAN110:

5.0 Units

The course is designed for heritage speakers of Spanish or other linguistically qualified students. It provides instruction that builds upon the existing four basic language skills: listening, speaking, reading, and writing; placing emphasis on acquiring proficiency using formal Spanish at the intermediate level. The course will also focus on language challenges particular to heritage speakers such as orthography, the inappropriate mix of English and Spanish, and contrasts between standard Spanish and regional variations. It will also increase awareness of linguistic registers, discuss items beyond the familiar routine and develop an appreciation for Hispanic cultures as manifested in Spanish speaking countries and in the United States. This course is entirely conducted in Spanish.

Requisites
Requisites: None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 6A: Language Other than English

Course Identifier (C-ID)
Spanish

Learning Outcomes

Course Objectives:
Increase knowledge of Hispanic cultures
Critique and analyze literature, art, films music, and cultural traditions of Spain and Latin America.
Application of appropriate vocabulary and register to improve speaking fluency.
Adapt language to various setting and contexts.
Improve application of grammar and orthography in writing and speaking
Identify basic genres
Summarize and discuss author's use of word choice, simile and metaphors
Increase vocabulary and gain deeper understanding by using context clues

Student Learning Outcomes:
Demonstrate application of grammar, orthography, and register in writing and speaking.
Compare and contrast Hispanic Cultures
Distinguish between "Acento prosódico, ortográfico, and diacrítico".

Units & Hours

Minimum Units:
5.0

Maximum Units
5.0

Total Hours
90.0

Spanish for Spanish Speakers 2
SPAN111:

5.0 Units

This course continues to provide instruction that builds upon the existing reading, writing, speaking and listening skills, with emphasis on the mastery of formal written communication at the intermediate-advanced level while integrating authentic cultural and literary readings. The course will also continue to increase awareness of linguistic registers, discuss items beyond the familiar routine and expand upon their appreciation for Hispanic cultures as manifested in Spanish speaking countries and in the United States. This course is entirely conducted in Spanish.

Requisites
Requisites:
Prerequisite
SPAN110 - Spanish for Spanish Speakers 1

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6A: Language Other than English

Course Identifier (C-ID)
Spanish

Learning Outcomes
Course Objectives:
Evaluate, compare and contrast Hispanic cultures.
Analyze literature, art, and films,
Application of more sophisticated vocabulary and register to further develop oral fluency.
Apply appropriate vocabulary to summarize, analyze, and to communicate own perspective or position
Adapt language to various more sophisticated settings and contexts.
Application of advanced grammar, structures, and orthography in writing and speaking.
Analyze recurring themes in literature.
Identify theme, main idea, and supporting details
Analyze author’s purpose and evaluate author’s style of writing to influence different audiences

Student Learning Outcomes:
Distinguish between the Present-Indicative and the Subjunctive Mood.
Analyze art and literature
Evaluate, compare, and contrast Hispanic cultures

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0

Total Hours
90.0
Practical Communication in Spanish for Teachers
SPAN115:

2.0 Units

Course emphasizes development of basic reading, oral, and written communication skills in Spanish for realistic situations in a classroom environment. Course also familiarizes students with the culture of Spanish-speakers.

Requisites
Requisites:
Advisory
SPAN101 - Elementary Spanish I

OR

Advisory
SPAN101H - Honors Elementary Spanish I

OR

Advisory
SPAN101B - Elementary Spanish IB

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:
Learning Outcomes
Course Objectives:
Review of pronunciation of vowel and consonant sounds, as well as linkage of phrases and sentences for use in the classroom environment in order to effectively comprehend and communicate in Spanish.

Acquire new vocabulary, expressions and idioms within a cultural context to further develop listening comprehension as well as oral and written communication for practical use in the school environment.

Further develop listening and reading skills to grasp general ideas and to anticipate responses for practical situations in the classroom.

Applied use of phrases, idioms, vocabulary, expressions and grammar integrated in basic communication for the classroom context.

Develop a better understanding and sensitivity to differences and similarities between US and Hispanic culture.

Develop insight into the language and cultural practices specific for the classroom environment in order to effectively serve limited English proficient students.

Student Learning Outcomes:
Demonstrate understanding of basic grammar essentials, culture, vocabulary and expressions and apply them in oral and written communication for practical use in the school environment.
Recognize and comprehend spoken messages in Spanish at the beginning level.

Units & Hours
Minimum Units: 2.0

Maximum Units: 2.0

Total Hours: 36.0

Beginning Conversational Spanish
SPAN194:

3.0 Units

Development of conversational and composition skills. Review of language structure through discussions, conversations, readings and compositions dealing with Spanish speakers’ culture and current events.

Requisites

Prerequisite

SPAN101 - Elementary Spanish I
or Spanish 101B or two years of high school Spanish
OR

Prerequisite

SPAN101H - Honors Elementary Spanish I
or Spanish 101B or two years of high school Spanish.

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours: 3.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

Learning Outcomes

Course Objectives:
Expand vocabulary and practice through discussion and oral presentations
Write level-appropriate compositions for oral presentations
Comprehend Spanish speakers without resorting to translation
Respond appropriately with greater length and complexity
Appreciate the Spanish speakers’ culture and civilization through discussions

Student Learning Outcomes:
Integrate vocabulary, grammar, and culture in oral communication at the beginning level for interpersonal and public audience. Recognize and comprehend spoken messages in Spanish at the beginning level.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Advanced Conversational Spanish**  
**SPAN195A:**

3.0 Units

Further development of conversational skills. Review of language structures as well as reinforcement of new vocabulary and idioms through discussions of reading selections dealing with historical and current events to deepen appreciation of Hispanic cultures.

**Requisites**

**Requisites:**

**Prerequisite**  
SPAN102 - Elementary Spanish II

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**

Area C: Humanities

**CSU GE - Plan B**

Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**

Area 3B: Humanities

**Santa Ana College - Shared Course**

Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**

Apply appropriate grammar to communicate orally and in writing

Discuss reading selections

Compare and contrast historical and current events based on authentic reading selections

Listen for main ideas

Identify speakers
Use context to decipher unfamiliar words
Determine purpose of the conversation
Expand vocabulary and increase practice through discussions and oral presentations
Initiate, maintain and end a conversation
Develop an appreciation of the Spanish speakers' culture

**Student Learning Outcomes:**
- Demonstrate command of vocabulary, grammar, and culture to communicate in intermediate-low level interpersonal and presentational modes of communication.
- Recognize and comprehend spoken messages in Spanish at the intermediate-low level.
- Discuss, compare and contrast historical and current events based on authentic readings.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Advanced Conversational Spanish**
SPAN195B:

3.0 Units

In this course students continue to develop conversational skills. Provides avenues for the expression of ideas and discussions on an array of topics to deepen appreciation of Hispanic cultures.

**Requisites**

**Requisites:**

**Prerequisite**
SPAN195A - Advanced Conversational Spanish

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**

**Local - Plan A**
Area C: Humanities

**CSU GE - Plan B**
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

**IGETC - Plan C**
Area 3B: Humanities

**Santa Ana College - Shared Course**
Shared Course with SAC
Learning Outcomes

Course Objectives:
- Apply appropriate grammar to communicate orally and in writing
- Develop an appreciation of the Spanish speakers' culture
- Compare and contrast historical and current events based on authentic readings
- Listen for main ideas
- Identify speakers
- Use context to decipher unfamiliar words
- Discuss reading selections
- Have discussions based on listening activity
- Answer comprehension questions based on listening activity
- Expand vocabulary and increase practice through discussions and oral presentations
- Initiate, maintain, and end a conversation
- Participate in debates to defend and/or oppose a point of view
- Determine purpose of the conversation

Student Learning Outcomes:
- Demonstrate command of vocabulary, grammar, and culture to communicate in intermediate level interpersonal and presentational modes of communication.
- Recognize and comprehend spoken messages in Spanish at the intermediate level.
- Compare, contrast, and analyze literary works and/or films.

Units & Hours

Minimum Units:
3.0

Maximum Units:
3.0

Total Hours:
54.0

Intermediate Spanish I
SPAN201:

5.0 Units
A college-level Spanish class focusing on expansive review of usage and grammar, discussions of interpretive readings, conversation, and composition.

Requisites

Requisites:

Prerequisite

SPAN102 - Elementary Spanish II

or three years of high school Spanish

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU
Weekly Lecture Hours:
5.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English)Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6A: Language Other than English

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Spanish

Learning Outcomes

Course Objectives:
Review and refine grammatical concepts and structures
Apply challenging grammatical concepts when speaking, listening, writing and reading at the intermediate level.
Demonstrate thorough comprehension of grammar and verb tenses presented in the course.
Derive meaning of explicit and implicit written material
Analyze culturally authentic material.
Communicate beyond casual conversation
Express opinions and make suggestions on familiar topics, as well as some abstract issues
Develop and apply more complex discourse.
Apply appropriate vocabulary and structures to narrate, explain, describe and summarize.
Compare and contrast cultural nuances of the Hispanic world.
Examine and demonstrate an understanding of the culture in the Spanish speaking countries.
Produce writing which integrates vocabulary, idiomatic expressions, and correct use of grammatical structures at the intermediate level.
Continue developing and using the four skills: Listening, speaking, reading, and writing

Student Learning Outcomes:
Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the intermediate level.
Recognize and understand vocabulary, verbs, grammatical structures and culture to interpret and infer meaning of implicit and explicit written material at the intermediate level.
Employ vocabulary and syntax to communicate in writing on designated topics at the intermediate level.
Comprehend spoken messages in Spanish at the intermediate level.

Units & Hours
Minimum Units:
5.0

Maximum Units
5.0
Total Hours
108.0

Intermediate Spanish II
SPAN202:

5.0 Units

A college-level Spanish class focusing on a specialized review of grammar and composition, discussions in Spanish of history and culture based on literary materials.

Requisites
Requisites:

Prerequisite
SPAN201 - Intermediate Spanish I

or four years of high school Spanish

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
5.0

General Education Plan:

Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C2: Humanities (Literature, Philosophy, Languages, Other than English) Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3B: Humanities
Area 6A: Language Other than English

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Spanish

Learning Outcomes
Course Objectives:

Review and refine grammatical concepts and structures

Apply challenging grammatical concepts when speaking, listening, writing and reading at the high-intermediate level

Expand and apply vocabulary and expression into well organized discussions

Connect, compare and contrast literary works.

Develop analytical skills in Spanish.

Interact with more sophisticated authentic language in context.

Explore and demonstrate understanding of culture and civilization of Spanish speaking countries.
Apply and expand oral and written expression on topics discussed, students' opinions and their views on present, past, future and possible outcomes.

Apply idiomatic expressions, grammar, syntax, and vocabulary to produce writing at the high-intermediate level.

Produce writing at the high-intermediate level to narrate, describe, report, compare and contrast, summarize, and express personal opinion.

Compose coherent paragraphs and compositions which also demonstrate creativity and analytical thinking.

Develop and use the four skills: Listening, speaking, reading, and writing.

**Student Learning Outcomes:**
- Demonstrate understanding and command of Spanish language grammar, vocabulary, pronunciation, and syntax to communicate orally on designated topics at the intermediate high level.
- Recognize and understand vocabulary, verbs, grammatical structures and culture to interpret and infer meaning of implicit and explicit written material at the intermediate high level.
- Employ vocabulary and syntax to communicate in writing on designated topics at the intermediate high level.
- Comprehend spoken messages in Spanish at the intermediate level.

**Units & Hours**

**Minimum Units:**
5.0

**Maximum Units**
5.0

**Total Hours**
108.0

**College Spanish Composition**

**SPAN213:**

3.0 Units

Comprehensive review and application of Spanish grammar and emphasis on the development of writing based on discussions, cultural, and literary materials.

**Requisites**

**Requisites:**

**Prerequisite**
**SPAN201 - Intermediate Spanish I**

Previous or concurrent enrollment or three years of high school Spanish

**Transferability & General Education Options**

**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
3.0

**General Education Plan:**
Santa Ana College - Shared Course
Shared Course with SAC

**Learning Outcomes**

**Course Objectives:**
Strengthen expressive and editing skills to write more effectively and confidently.

Organize and develop a descriptive essay at the intermediate level.

Plan, organize, develop and write final version of a narrative essay at the intermediate level.

Plan, organize, develop and write an expository essay at the intermediate level.

Plan, organize, and write an analysis essay at the intermediate level

**Student Learning Outcomes:**

Write an analysis essay which demonstrates application of intermediate level structures, vocabulary, and idiomatic expressions. Demonstrate comprehension of written text containing intermediate level structures and vocabulary to write an analysis paper based on the reading.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Spanish for Public Personnel**

SPANN51 :

3.0 Units

Designed for those needing basic Spanish conversation and vocabulary in a specific field of work, such as law enforcement, fire safety, health, and education. Includes clear and concise communication for emergency situations. Not applicable to associate degree.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

Transferable:
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**

Communicate using basic vocabulary students will use in their specific work environments.

Integrate basic grammatical structure to communicate simple classroom expressions.

Communicate using vocabulary and expressions for a variety of professions as needed.

Identify people

Communicate information about people

Communicate using vocabulary about time and weather.

Communicate about situations involving food and related places.

Communicate using vocabulary of numbers that apply to a variety of situations.
Communicate using vocabulary related to traveling.

Communicate using vocabulary and expressions needed in health related situations.

Communicate using vocabulary and expressions in emergency situations related to law enforcement.

Communicate basic information related to teacher’s tasks.

Communicate and respond clearly in emergency situations using basic vocabulary needed in situations related to fire prevention and related emergencies.

Communicate clearly basic information related to law.

**Student Learning Outcomes:**

- Demonstrate understanding of basic grammar essentials, culture, vocabulary and expressions and apply them in oral and written communication for practical use in diverse work environments.
- Recognize and comprehend spoken messages in Spanish at the basic level.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Issues and Concepts for Adults With Developmental Disabilities**

**SSD200:**

100.0 Hours

Provides information related to topics of everyday interest and importance to adults with developmental disabilities. Examines issues of relevance and provides a forum for discussion and exploration of various topics, such as current events, cultural awareness and health. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

- Demonstrate increased positive communication
- Successfully communicate thoughts and ideas
- Demonstrate an appreciation of individual differences and the ability to share feelings and thoughts

Explore various issues and topics, including but not limited to:

- Health
- Budget
- Obtaining new skills
- Recreational options
- Current local, state, national and world events
- Culture

**Student Learning Outcomes:**

- Demonstrate how to think critically about issues of everyday relevance and importance.
- Respond to lecture content and engage in discussion with classmates.
Interact with others while respecting individual differences.

**Hours**

**Total Hours**

100.0

**Employment Preparation for Adults with Developmental Disabilities**

**SSD787:**

100.0 Hours

Assists adults with developmental disabilities attain a higher functional level for the purpose of employment. Teaches skills necessary to establish and maintain productive interpersonal relationships social interaction and etiquette related to home, community, and vocational settings. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Demonstrate knowledge and application of skills related to the use of classified ads, employment application forms, and resumes

Demonstrate proper hygiene, grooming, and attire as needed for the job setting

Appropriate responses when addressed or approached by others

Appropriate interactions with others

Appropriate behavior for social settings

Demonstrate an understanding of money management skills for the workplace

Demonstrate knowledge of safety procedures in the workplace

Demonstrate knowledge of using public and other community transportation

Adaptive techniques to overcome personal limitations

Self-help skills

Appropriate behavior in the workplace

Appropriate manners, social behavior, and self-control

Respect for others; boundaries

Problem-solving skills

**Student Learning Outcomes:**

Demonstrate manners, behavior and self-control appropriate for social and work-related situations.

Demonstrate the use of communication appropriate for social and workplace settings.

**Hours**

**Total Hours**

100.0

**Independent Living Skills for Adults with Developmental Disabilities**

**SSD788:**
100.0 Hours

Assists adults with developmental disabilities attain a higher functional level for independent living in these areas: health and nutrition, personal appearance, communication, manners, money management, safety and consumer awareness, transportation, social interaction, and practical reading, writing and math skills related to home and community settings. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
Demonstrate an understanding of: basic health practices, basic nutritional guidelines.

Demonstrate an understanding of proper hygiene, grooming and attire

Demonstrate an understanding of: appropriate responses when addressed or approached by others, appropriate interactions with others, appropriate behavior for social settings

Demonstrate an understanding of appropriate manners, social behavior, and self-control

Demonstrate an understanding of money management skills

Demonstrate an understanding of: safety procedures, comparative shopping skills, awareness/recognition of fraudulent situations

Demonstrate an understanding of how to use public transportation and other community transportation resources

Demonstrate an understanding of: Problem solving, adaptive techniques to overcome personal limitations, self-help skills, appropriate social behavior

Demonstrate an understanding of functional reading, writing and math skills for everyday needs

**Student Learning Outcomes:**

- Demonstrate understanding of life skills competencies by selecting appropriate responses and strategies in real-life situations.
- Demonstrate effective communication skills in real-life situations.

**Hours**

**Total Hours**

100.0

**Physical Activities for Adults with Developmental Disabilities**

**SSD793:**

100.0 Hours

Assists adults with developmental disabilities acquire the skills necessary to maximize physical capabilities through physical activities tailored to their abilities. Students will be guided through independent and group activities to develop fitness awareness. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
Demonstrate an understanding of appropriate personal fitness goals

Demonstrate an understanding of the purpose and benefits of regular exercise

Participate in fitness activities to: improve balance and posture, and improve ability to imitate body movements

Demonstrate improved ability to move with confidence and poise
Demonstrate improvement in relaxation of parts of the body
Improve flexibility
Increase muscular endurance and strength
Improve motor ability
Acquire a general understanding of the basic physiology underlying physical exercise
Demonstrate appropriate relaxation of parts of the body, using progressive relaxation techniques for stress management and tension relief

**Student Learning Outcomes:**
- Apply relaxation techniques in an appropriate manner and at appropriate times.
- Participate in regular physical activity for general health maintenance.

**Hours**
**Total Hours**
100.0

**Plane Surveying**
**SURV118:**

4.0 Units

History of and careers in surveying. Introduction to survey measurements, distance, direction and elevations with math review. Fundamentals of traverse computations and adjustment. Recording field measurements by hand and electronically.

**Requisites**
**Requisites:**
Advisory

**MATH160 - Trigonometry**

**Transferability & General Education Options**
**Transferable:**
Transferable to both UC and CSU

**Weekly Lecture Hours:**
4.0

**General Education Plan:**
**UC Comparable Transfer Courses**

**Course Identifier (C-ID)**
Engineering

**Learning Outcomes**
**Course Objectives:**
- Identify basic surveying concepts, surveying history and career information.
- Identify program information and career direction.
- Examine introductory applied mathematics for surveyors.
- Identify basic concepts of measurements and their associated errors.
- Explain the content and layout of field notes.
Calculate linear measurements made by using survey tapes and chains.

Apply correction formulas and field procedures.

Explain the field procedures associated with distance measurements including the handling and caring of survey tapes, making linear measurements and preparing field notes.

Calculate elevations by differential leveling methods.

Explain the field procedures associated with differential leveling including the setting-up of an automatic level, making measurements, and preparing field notes.

Identify the basic concepts of angles and directions.

Calculate angular measurements to determine direction.

Identify and calculate bearings and azimuths.

Explain the field procedures associated with direction and angular measurements including the setting up of a theodolite, measuring horizontal and vertical angles, and preparing field notes.

Identify the basic concepts of traversing, measurement adjustment, and determination of coordinates for control station.

Explain the field procedures associated with traversing including methods for making distance, elevation and angular measurements between control stations.

Identify the basic concepts of GPS and the use and advantages of the system.

Explain the field procedures associated with GPS surveys.

Perform a typical field survey using the equipment and methods learned during the semester.

Discuss the theory of electronic distance and angular measurements.

Explain the field procedures associated with making distance and angular measurements with electronic total stations.

Calculate areas and coordinates using coordinate geometry.

Calculate and prepare closure reports.

Distinguish and apply corrections to measurements and their associated errors.

Prepare the content and layout of field notes.

Demonstrate the proper handling and care of steel tapes and other distance measuring equipment.

Accurately measure, record, analyze and evaluate linear distances using proper field procedures.

Calculate and apply corrections to linear distance measurements.

Prepare field notes documenting linear measurements.

Demonstrate the proper handling and care of automatic levels and other leveling equipment.

Correctly set up and operate an automatic level and make measurements.

Accurately measure, record, analyze and check differential leveling measurements.

Prepare field notes documenting differential leveling measurements and elevations.

Demonstrate the proper handling and care of theodolite instruments.

Correctly set up and operate a theodolite and make horizontal and vertical angular measurements.

Accurately measure, record, analyze and evaluate angular measurements.

Prepare field notes documenting angular measurements.

Accurately measure, record, analyze and evaluate courses of a traverse between control stations.

Prepare field notes documenting traverse measurements.

Compute coordinates for each of the traverse stations.
Demonstrate the proper handling and care of GPS receivers.
Correctly set up and operate a GPS receiver.
Accurately measure, record, analyze and evaluate GPS measurements.
Prepare field notes documenting GPS measurements.
Demonstrate the proper handling and care of total station instruments.
Correctly set up and operate a total station instrument and make slope, horizontal and vertical angular and distance measurements.
Accurately measure, record, analyze and evaluate total station measurements.
Prepare field notes documenting total station measurements.

**Student Learning Outcomes:**
- Identify and explain the basic parts and functions of common land surveying instruments by way of a multiple field exercises.
- Prepare survey field notes by compiling, tabulating, and assessing data as measured during common land surveys by way of multiple field exercises.
- Evaluate the results and determine the accuracy of common land surveys by way of field exercises and examinations.

**Units & Hours**

**Minimum Units:**
4.0

**Maximum Units**
4.0

**Total Hours**
108.0

**Advanced Plane Surveying**
**SURV119:**

4.0 Units


**Requisites**

**Requisites:**

**Prerequisite**

**SURV118 - Plane Surveying**

or possession of a valid Certificate as a Land Surveyor-In-Training (LSIT) issued by any state

**Advisory**

**MATH160 - Trigonometry**

**Transferability & General Education Options**

**Transferable:**
Transferrable to both UC and CSU

**Weekly Lecture Hours:**
4.0
General Education Plan:
Course Identifier (C-ID)
Engineering

Learning Outcomes

Course Objectives:
Demonstrate a comprehensive understanding and application of traverse surveys.
Demonstrate an understanding and application of topographic surveys.
Identify and demonstrate the procedures for planning and executing a control survey, an understanding of instruments and equipment, and the methods for acquiring data for control surveys.
Demonstrate an understanding of the application of boundary and public land surveys.
Demonstrate an understanding and application of construction surveys.
Apply calculative methodologies to horizontal and vertical curves.
Plan and accurately execute a traverse and produce a report of the traverse survey with computations and adjustments.
Plan and accurately execute a topographic survey and produce a topographic contour map using field data from a topographic survey.
Plan and accurately execute a control survey including its final documentation.
Plan and accurately execute a construction survey including its final documentation.
Plan and accurately execute a horizontal curve layout survey and a vertical curve layout survey, including final documentation for both activities.

Student Learning Outcomes:
Successfully complete this course will be able to calculate the accuracy and precision necessary to complete a common survey task and then select the appropriate land surveying instrument(s) to complete the task.
Apply their knowledge of coordinate geometry by determining the appropriate methodology necessary to layout stakes for the construction of a building foundation, as well as horizontal and vertical alignments.

Units & Hours
Minimum Units:
4.0

Maximum Units
4.0

Total Hours
108.0

Introduction to Geographic Information Systems
SURV155:

3.0 Units
This course introduces basic scientific principles of Geographic Information Systems (GIS) as they relate to working with data that have important spatial orientation and organization. Geographic concepts and theories are used to develop scientific methods for proper communication of the data and the solution of problems that have spatial relationships. The adaptability of GIS to a wide variety of applications useful for many disciplines is presented. The course covers basic concepts in mapping and orientation, the development of map scales and comparison of different coordinate systems and data error analysis.

Requisites
Requisites:

Anti-Requisite
GEOG155 - Introduction to Geographic Information Systems

AND

Advisory

Familiarity with PC and Windows operating environment

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

CSU GE - Plan B
Area D: Social Sciences

Course Identifier (C-ID)
Geography

Learning Outcomes

Course Objectives:
Describe characteristics and the history of Geographic Information Systems.
Describe how Geographic Information Systems are used to solve a wide variety of Socioeconomic and Business related issues.
Interpret map projections.
Identify, compare and contrast vector and raster GIS.
Describe the use of data layers within GIS.
Identify and evaluate GIS data sources and the importance of metadata.
Describe the process by which addresses are parsed into latitude and longitude coordinates.
Identify issues with georeferencing.
Evaluate different sources of GIS data.
State plane coordinates in a digital format.
Use equivalent, conformal, and other standard map projections.
Describe how to setup and manage a geospatial database.
Identify geoprocessing techniques (e.g., clip, dissolve, buffer).
Evaluate the use of geoprocessing.
Differentiate basic analytical functions such as join, union, and buffer.
Ask a geographic question
Identify a problem of geospatial nature
Identify relevant geographic data.
Design a plan to acquire relevant geographic data
Analyze data using GIS
Apply geographic knowledge to this specific application
Present results.
Utilize the basics of industry-standard ArcGIS software.
Import and format spatial data for use in GIS.
Demonstrate practical applications of data input.
Analyze and use aerial photography.
Use street addresses to demonstrate the utility of geocoding.
Digitize, scan, and collect data in the field.
Convert digital data to a uniform projection and scale.
Import and merge tabular data to create maps.
Create basic GIS map products using a variety of geographic scales.
Perform common map projections used in mapping.
Query, edit and maintain a geospatial database.
Identify and apply geoprocessing techniques (e.g., clip, dissolve, buffer).
Incorporate join, union, buffering, and other basic analytical functions in GIS application.
Ask a geographic question
Acquire geographic resources
Explore geographic data
Analyze geographic information
Act on geographic knowledge

**Student Learning Outcomes:**

- Students will define a Geographic Information System.
- Students will demonstrate basic proficiency in map creation and design principles, including thematic map display, employment of map projections and cartographic design, to solve a problem of geographic nature.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

72.0

**Computer Aided Drafting Fundamentals For Surveyors**

**SURV205:**

3.0 Units

A first course in computer drafting with applications in land surveying specifically intended for students with land surveying training or experience.

**Requisites**

**Requisites:**

**Advisory**

**SURV119 - Advanced Plane Surveying**

**Transferability & General Education Options**
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes

Course Objectives:
Navigate a basic Computer Aided Drafting (CAD) menu system
Use basic drawing commands to draw simple figures to scale.
Use CAD commands to draw dimensionally precise figures.
Manipulate existing figures using the edit commands.
Use layers, line types, and colors to organize the drawing.
Demonstrate an understanding of complex drawing commands.
Set up and use local and grid coordinate systems.
Use complex editing commands to finalize survey drawings.
Use symbols to improve drawing efficiencies.
Annotate lines and curves in mapping.
Incorporate title blocks into drawings and plot results.

Student Learning Outcomes:

- Execute basic line work in a Computer Aided Drafting (CAD) environment by following directions.
- Determine and select appropriate drawing tools in order to complete common simple mapping tasks.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Advanced Problems in Surveying I
SURV221:

3.0 Units

Measurement analysis, adjustments, geodesy, state plane coordinates, global position system.

Requisites

Requisites:

Advisory

MATH160 - Trigonometry

AND

Advisory
SURV119 - Advanced Plane Surveying

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes

Course Objectives:
Identify and apply basic measurement terminology and techniques.

Explain the basics of probability and statistics.

Explain and demonstrate the testing and adjusting of survey instruments.

Reduce survey data.

Determine various measures of probability.

Determine the propagation of errors.

Predict survey results using measurement analysis.

Determine error ellipses, positional tolerances and level of confidence.

Explain the basics of weighting of measurements.

Identify sources of error in adjustments.

Perform basic least squares adjustments of survey data.

Describe the history of geodesy.

Explain the basic survey datums.

Determine geodetic distances using the “long-line reduction” method.

Describe the history and general concepts of the state plane coordinate system.

Explain the Lambert triangle.

Convert between latitude/longitude and state plane coordinates.

Determine grid distances and directions from measured data.

Compute a traverse using state plane coordinates.

Describe the history and fundamental principles of the GPS.

Explain satellite ranging and the location of satellites.

Determine locations and error sources.

Explain differential GPS.

Distinguish between static, kinematic and real-time kinematic GPS.

Student Learning Outcomes:

Analyze repeated measurements and detect and manage errors.

Make geodetic calculations relating to State Plane Coordinates, latitude, and longitude.

Units & Hours

Minimum Units:
3.0
Maximum Units
3.0

Total Hours
54.0

Advanced Problems in Surveying II
SURV222:

3.0 Units
Introduction to photogrammetry emphasizing concepts and calculations. Route surveying includes horizontal and vertical curves, volume calculations and construction staking.

Requisites
Requisites:
Advisory
MATH160 - Trigonometry
AND
Advisory
SURV119 - Advanced Plane Surveying
AND
Advisory
SURV221 - Advanced Problems in Surveying I

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Demonstrate an understanding of the methodologies of photogrammetry.
Demonstrate the methodologies and applications of route surveying.
Use software applications to prepare comprehensive reports of survey calculations and data formatting.

Student Learning Outcomes:
- Explain and use photogrammetry and route surveys to produce technical reports.
- Perform complex calculations necessary for laying out transportation and utility routes.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
Legal Aspects of Land Surveying I
SURV229:

3.0 Units

Basic elements of the U.S. Public Land Survey System, including background, history, and subdivisions of sections and restoration of lost corners. Principles of preparing land descriptions for surveyors and title company personnel. Common pitfalls and how to avoid them.

Requisites
Requisites:
Advisory

SURV119 - Advanced Plane Surveying

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
3.0

General Education Plan:

Learning Outcomes
Course Objectives:
Demonstrate an understanding of Unites States (U.S.) Public Land Survey System (PLSS) History.
Demonstrate an understanding of layout of the public lands.
Demonstrate an understanding of subdivision of sections.
Determine the location of lost (destroyed) land corners.
Demonstrate an understanding of types of land descriptions.
Demonstrate an understanding of proper calls and control.
Demonstrate an understanding of clauses and exceptions.
Demonstrate an understanding of ambiguous descriptions.

Student Learning Outcomes:
Write a metes and bounds legal description of a land boundary.
Determine through analysis and critical evaluation which method appropriate methods to employ in re-tracing public lands surveys.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Legal Aspects of Land Surveying II
SURV230:

3.0 Units

Principles and techniques of boundary control. Interpretation of land descriptions, voluntary and involuntary transfer of property, senior rights, simultaneous conveyances, sequential conveyances, and case law pertaining to boundary disputes.

Requisites

Requisites:

Advisory

SURV229 - Legal Aspects of Land Surveying I

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

3.0

General Education Plan:

Learning Outcomes

Course Objectives:

Demonstrate an understanding of types of land descriptions.

Demonstrate an understanding of transfer of real property.

Demonstrate an understanding of sequential conveyances.

Demonstrate an understanding of simultaneous conveyance.

Demonstrate an understanding of sequential and simultaneous conveyance.

Demonstrate an understanding of water boundaries.

Demonstrate an understanding of easements and reversions.

Demonstrate an understanding of case law.

Student Learning Outcomes:

Evaluate and critically analyze survey boundary evidence.

Cite specific state laws that pertain to land surveying and their effect on professional practice.

Units & Hours

Minimum Units:

3.0

Maximum Units:

3.0

Total Hours:

54.0

Social and Behavioral Sciences - B1. American Institutions


Social and Behavioral Sciences - B2. Social Science Elective

ANTH100 - Introduction to Cultural Anthropology ANTH100H - Honors Introduction to Cultural Anthropology CDEV107 - Child Growth and Development (DS1) CDEV110 - Child, Family and Community (DS2) GEOG100 - World Regional Geography GEOG100H - Honors
World Regional Geography GEOG102 - Cultural Geography GEOG102H - Honors Cultural Geography HIST102 - World Civilizations Since the 16th Century HIST102H - Honors World Civilizations Since the 16th Century HIST240 - Introduction to Peace and Conflict Studies POLT101 - American Government and Politics POLT101H - Honors American Government and Politics POLT230 - Political Theory PSYC100 - Introduction to Psychology PSYC100H - Honors Introduction to Psychology PSYC160 - Introduction to Lifespan Psychology SOC100 - Introduction to Sociology SOC100H - Honors Introduction to Sociology SOC150 - Introduction to Race and Ethnicity

Student Leadership, COM

Certificate of Competency

Control Number:
33942

Curriculum Id:
OEC.LEAD.COM

The Certificate of Competency in Student Leadership introduces applied leadership and self-development skills. Information will be presented in academic format, and students will be required to demonstrate mastery through participation in student-centered, hands-on activities.

Program Courses

Available Program Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HSOTH050</td>
<td>Basics of Leadership Part 1</td>
<td>0.0</td>
</tr>
<tr>
<td>HSOTH202</td>
<td>Basics of Leadership Part 2</td>
<td>0.0</td>
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</table>

Program Requirements

Certificate of Competency

Certificate requirements: 72 hours (credits are in hours) 72.0 Units

<table>
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<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>HSOTH050</td>
<td>Basics of Leadership Part 1</td>
<td>36.0</td>
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AND

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSOTH202</td>
<td>Basics of Leadership Part 2</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Total Units 72.0

Learning Outcomes

- Develop and demonstrate leadership skills.
- Identify team building strategies and the effect that interpersonal awareness and communication have on group dynamics.

Introduction to Theatre

THEA100:

3.0 Units

An introduction to the art and concepts of theatre through a study of modern and historical theories of dramatic structure, playwriting, directing, design, and acting. Attendance at live theatre is required.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
Area C: Humanities

CSU GE - Plan B
Area C1: Arts (Art, Cinema, Dance, Music, Theatre)

IGETC - Plan C
Area 3A: Arts

Course Identifier (C-ID)
Theatre

Learning Outcomes
Course Objectives:
Define theatre

Compare and contrast other art forms

Identify current trends in theatrical production, acting, new plays, revivals, and experimentation

Describe the crisis of today's theatre

Compare and contrast Broadway and West End and explain why London is attracting more new plays

Define non-profit theatre, professional theatre, amateur theatre, summer stock, dinner theatre, community theatre, and academic theatre and how each shapes our theatrical world.

Classify plays by genre

Identify leading playwrights of the contemporary Western theatre literature

Explain the role of each play in today's theatre

Explain how a playwright creates his/her process and technique

Describe what a writer must consider when developing a character and dialogue: credibility, speakability, stage-ability, flow, pertinence, compression, intensity, conflict and richness

Explain the role of the scenic, lighting, costume, makeup, and sound designer

Describe the process and media each uses to create and complete the design

Identify the roles and functions of stage technicians and the technical demands of the production process

Define acting and explain the process of how one becomes an actor

Describe the training of an actor including the actor's routine (such as audition, rehearsals, performances)

Explain the historical evolution of the director in theatre

Describe the directorial functions such as development of concept, vision, collaboration, communication, organization, rehearsal process and mounting

Explain the process involved in the training of a director

Define and describe theatre movements which have evolved since Romanticism

Apply acquired information to create text, character, and design using a rehearsal process culminating in production

Student Learning Outcomes:
Comprehend Theatre as an art form with significance for themselves and society, in terms of: the Audience’s Role, Theme & Message, Theatrical Criticism.
Analyze playwriting as the creative process for theatrical storytelling, in terms of: Aristotle’s “Poetics” and the genres of Drama and Comedy.
Evaluate the production elements essential to a theatrical performance, in terms of: Directing, Acting, Design (Scenery, Costumes, Lighting, Sound).

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Acting Fundamentals
THEA110:

3.0 Units
A study of acting involving the development of acting techniques, styles and disciplines. Provides the student with theory and practical experience with varied characterizations. Emphasizes individual growth and acquired skills necessary to the acting craft.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:

UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre

Learning Outcomes
Course Objectives:
Describe the distinctions between presentational and representational acting styles
Identify the components of truthful characterization
Describe the importance of environment in honest and real characterizations.
Describe the relationship of environment to human action.
Describe how to imaginatively select and create an environment which propels the actor into dynamic character actions.
Describe how to build an awareness of the role of the senses in characterization.
Acquire the skills necessary to make a role personally meaningful.
Acquire the skills necessary to transfer personal experience to stage life.

Acquire the skills necessary to build a character with a history.

Describe how to analyze the script and organize the facts of the character’s life.

Describe how to imaginatively create circumstances that motivate the actor to the proper actions.

Student Learning Outcomes:
- Interpret characters and actions.
- Justify choices made while performing roles.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
72.0

Intermediate Acting
THEA111:

3.0 Units

Further study in the art of acting for the stage, investigating in-depth character study, role portrayal, special problems, and personal technique. Acting skills developed through use of exercises, monologues, and scenes from contemporary theatre.

Requisites
Requisites:
Advisory
THEA110 - Acting Fundamentals

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre

Learning Outcomes
Course Objectives:
- Use theatre games and freeform exercises to explore the boundaries imposed on the imagination and to break through barriers.
- Apply foundational skills in acting.
- Demonstrate the skill necessary to recall emotional moments from his/her past.
- Use emotional recall in order to truthfully depict moments of extreme emotion on stage.
Identify and apply the fundamental principles of playing objectives and overcoming obstacles.

Identify the character’s objectives: overall, for individual scenes, and moment-to-moment.

Find substitutions from his/her real life to give a psychological identification with the character’s objectives.

Apply the Stanislavsky system of breaking down a script, unit by unit, beat by beat, in order to develop a dramatic through-line of action.

Apply various methods of approaching extreme characterization.

Apply various methods of transformative acting while searching for a physical life of a character very different from his/her self.

**Student Learning Outcomes:**
- Interpret characters and actions.
- Justify choices made while performing roles.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
72.0

**Fundamentals of Scene Study**

**THEA118:**

2.0 Units

A continued study for the novice actor in the preparation and presentation of scenes from contemporary drama. Students prepare scenes with partners for performance and critique. Recommended for acting majors. Field trips may be required.

**Requisites**

**Requisites:**

Advisory

[THEA110 - Acting Fundamentals](https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32faa6eb18)

or Audition/Interview

**Transferability & General Education Options**

**Transferable:**

Transferable to both UC and CSU

**Weekly Lecture Hours:**

2.0

**General Education Plan:**

**Learning Outcomes**

**Course Objectives:**

Discover how to use personalization in identifying and using character circumstances.

Identify character objectives and to discover how to use immediate objectives in each acting beat.

Identify character obstacles in the written text, and to create additional objectives as needed to support immediate objectives within a character’s journey.

Discover how to select strong tactics to pursue objectives and overcome obstacles.
Experience the importance of submersion in one’s environment, by defining and outfitting a playing space in detail.

Explore all possibilities before making final choices when working with a scene partner.

Use active sense and emotional memory when creating substitutions in time, place, and conditions, as well as in the creation of relationships.

Work toward always staying in-the-moment in all aspects of a performance.

Explore endowment of all onstage and offstage people and objects.

Establish and utilize the fourth wall as both a primary and secondary wall in all scene work.

Use correct theatre terminology when creating and mounting all work.

Discover and evaluate one’s own range of strengths and weaknesses during planning, rehearsal, and performance of all scenes/characterizations.

Work to overcome fear, and develop personal confidence when performing.

Develop a personal goal for each aspect of the rehearsal process and for each individual rehearsal.

Use rehearsal time as effectively as humanly possible, by coming to class fully prepared.

Accept constructive criticism and make adjustments as requested by the instructor/director.

Use adjustments as a tool for personal growth as an artist.

Student Learning Outcomes:

- Analyze a scene’s structure and characterization using given circumstances, history, objectives, obstacles, and character tactics.
- Develop and showcase characterizations through a personal disciplined work process necessary for successful performance showings.

Units & Hours

Minimum Units:

2.0

Maximum Units:

2.0

Total Hours:

72.0

Beginning Performance Ensemble

THEA121:

2.5 Units

A study of the standards and expectations for an actor in auditions, casting, rehearsal and performance in a departmental production. All students will be cast in project plays for public presentation.

Requisites

Requisites:

Prerequisite

Audition

Transferability & General Education Options

Transferable:

Transferable to both UC and CSU

Weekly Lecture Hours:

2.5
General Education Plan:

Learning Outcomes

Course Objectives:
Properly prepare an audition scene and/or song.

Understand the play, directorial concept, director expectations, and production goals.

Understand rehearsal etiquette, and each performer’s role in the company environment.

Identify structure research, analysis, and initial character choices based on directorial concept.

Identify circumstances, actor beats, text scoring, character analyses, and back stories when creating characters.

Develop the use of blocking notation, directorial coaching, and taking adjustments.

Understand the performer’s “homework” between rehearsals.

Gain proficiency in vocal and movement techniques required for the production.

Understand the demands of final adjustment rehearsals, the rigors of performance and the immediate and long term value of criticism.

Learn proper audition technique.

Utilize all tools gained through lecture and workshop rehearsals leading to the final production.

Student Learning Outcomes:
Create believable characters based on their knowledge of concept, analysis, character choices, stage terminology, and dramatic structure.

Interpret scripts and/or songs by creating written analyses, back stories, and text scorings, with the use of objectives, obstacles, and tactics.

Units & Hours

Minimum Units:
2.5

Maximum Units:
2.5

Total Hours:
72.0

Beginning Production Showcase

THEA122:

3.0 Units

A study of the performer’s process in the development of a character in a live stage performance. Rehearsal and performance hours arranged. Additional hours are required for technical rehearsals, dress rehearsals and performances.

Requisites

Requisites:
Prerequisite:
Audition

Transferability & General Education Options

Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0
General Education Plan:

Learning Outcomes

Course Objectives:
Understand the project, directorial concept, director expectations, and production goals.
Understand the character concepts wanted by the director.
Understand rehearsal etiquette and each performer’s role in the company environment.
Structure research, analysis, and initial character choices based on the production concept.
Define objectives, obstacles, and tactics for each character in scenes, songs, or other text work.
Utilize text scoring and beats in all work.
Personalize performance choices.
Define character relationships.
Understand rehearsal obligations and expectations in ensemble performance.
Record blocking and stage business.
Find effective memorization techniques and the need for self-discipline when working away from the classroom environment.
Make use of directorial adjustments and notes between rehearsal.
Gain proficiency in vocal and movement techniques required for the production.
Understand the demands of final adjustment rehearsals, the rigors of performance, and the immediate and long-term value of criticism.
Work through technical rehearsals, dress rehearsals, and performances.
Integrate costumes and makeup to enhance character.
Use critique for personal growth.
Take and apply daily notes and adjustments.
Keep the role fresh.
Utilize all tools gained through lecture and workshop rehearsals leading to performance[s].

Student Learning Outcomes:
Demonstrate an understanding for creating believable characters based on their knowledge of concept, analysis, character choices, stage terminology, and dramatic structure.
Interpret scripts and/or songs by creating written analyses, back stories, and text scorings, with the use of creative imagination when defining objectives, obstacles, and tactics.
Participate in ensemble performance assignments to recognize the importance of both collaboration and diversity in seeking common solutions to performance tasks.
Display an understanding of the use of proper vocal and/or song techniques, while also demonstrating mastery of movement and/or choreography skills in production.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
90.0

Rehearsal and Performance: Drama - Minor/Supporting Role
THEA180A:

2.0 Units

This course provides experience in the preparation and public performance of a minor or supporting role in a dramatic theatrical production. Students will discover the complexities of working as an ensemble member, while learning to craft a role that is believable and dimensional.

Requisites

Requisites:

Advisory

THEA110 - Acting Fundamentals

AND

Prerequisite

Audition

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

2.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

Theatre

Learning Outcomes

Course Objectives:

Demonstrate an understanding of directorial expectations and production goals.

Identify the play's structure and purpose.

Recognize and follow proper rehearsal etiquette.

Identify each actor's role in the company environment.

Create the role through an understanding of given circumstances, character and relationship explication, objectives, obstacles, and tactics.

Create a written character analysis and back story using given circumstances and imagination.

Identify and record blocking and stage business in a script.

Memorize lines and blocking.

Identify and apply directorial adjustments during rehearsals.

Recognize the need for the performer's "homework" between rehearsals.

Identify and apply workable choices for character actions as directed.

Refine actor choices and interpretation for repeatability and consistency.

Identify and apply directorial adjustments and critique.

Adjust to addition of technical components to the production.
Demonstrate the ability to use costume and makeup to enhance characterization[s].

Identify lighting areas on stage.

Demonstrate the ability to efficiently use props to enhance characterization[s].

Distinguish the demands of final rehearsals, the rigors of performance, and the ongoing value of directorial notes.

Adjust to audience response while maintaining consistency and growth.

**Student Learning Outcomes:**

- Interpret characters based on given circumstances using written analyses, back story, character choice, objectives, obstacles, and tactics.
- Create believable characters based on acquired knowledge of concept, character choices, stage terminology, and dramatic structure.

**Units & Hours**

**Minimum Units:**
2.0

**Maximum Units**
2.0

**Total Hours**
72.0

**Rehearsal and Performance: Drama - Leading Role**

**THEA180B:**

2.0 Units

This course provides intensive experience in the preparation and public performance of a leading role in a dramatic theatrical production. Students will develop their acting techniques and personal process, while learning to negotiate the demanding responsibilities necessary to sustain them through rehearsal and production alike.

**Requisites**

**Requisites:**

*Advisory*

**THEA110 - Acting Fundamentals**

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

2.0

**General Education Plan:**

**UC Comparable Transfer Courses**

- UC Comparable Transfer Courses

**Course Identifier (C-ID)**

- Theatre

**Learning Outcomes**

**Course Objectives:**

Demonstrate an understanding of directorial expectations and production goals
Recognize and follow proper rehearsal etiquette

Identify the purpose of each leading character, and the role of each actor in the play

Demonstrate an understanding of a leading character’s responsibility to the play and to the other company members

Analyze the script through a breakdown into units of action

Research the time, place, and social significance of the play’s setting

Identify and employ the use of actor’s beats to explicate the text

Recognize and employ improvisations to understand each unit of action

Develop an in-depth written character analysis and back story

Maintain a written journal of the entire production journey

Demonstrate the ability to develop substantial character relationships

Create specific personal business as needed for each scene, using given and imagination

Identify and record blocking, business, beat breakdowns, objectives, and tactics into the rehearsal script

Identify and develop physical and vocal approaches to enhance characterization

Memorize lines and blocking

Identify and execute character choices to develop the dramatic arc of the character

Recognize and apply directorial critique when working to develop strong tactics pursuing objectives

Demonstrate the ability to refine scenes by playing in-the-moment at all times

Recognize and utilize an inner monologue to enhance characterization

Refine all acting choices using repetition for consistency in technical abilities and emotional character development alike

Demonstrate the ability to build and maintain performance and actor energy throughout rehearsals

Recognize and adjust to the rigors of final adjustments in both technical and dress rehearsals leading to performance

Demonstrate the ability to apply directorial adjustments in the intensive final rehearsals

Demonstrate the ability to use the addition of technical elements to energize the performance.

Demonstrate the ability to use technique and directorial adjustments to enhance each performance.

Recognize and work to maintain energy, health, and focus during performances

Adjust to audience response while maintaining consistency and growth

**Student Learning Outcomes:**

Demonstrate the ability to create and sustain a fully-developed and believable character, when performing a leading role in a dramatic play presented for a public audience.

Demonstrate the ability to interpret significant dramatic leading characters based on goals, obstacles, and diverse tactics, using observable emotional connections, clear use of varied tactics, and a strong pursuit of character objectives.

**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units:**

2.0

**Total Hours**

72.0

**Rehearsal and Performance: Comedy - Minor/Supporting Role**
THEA181A:

2.0 Units

This course provides experience in the preparation and public performance of a minor or supporting role in a comedic theatrical production. Students will learn the requisites of comedic performance and learn how to craft a role that is both dimensional and engaging.

Requisites

Requisites:

Advisory

THEA110 - Acting Fundamentals

Transferability & General Education Options

Transferable:

Transferable to CSU only

Weekly Lecture Hours:

2.0

General Education Plan:

UC Comparable Transfer Courses

UC Comparable Transfer Courses

Course Identifier (C-ID)

Theatre

Learning Outcomes

Course Objectives:

Demonstrate an understanding of directorial expectations, concept, and production goals

Identify the comedic style to be used for the play.

Recognize comedic timing, stock characters, freedom, and delivery

Identify each actor’s role in the company environment

Identify and follow proper rehearsal etiquette

Develop the role through an understanding of given circumstances, character and relationship explication, objectives, obstacles, and tactics

Identify the energy, physical life, vocal dexterity, and “ism’s” required for character creation.

Write a character analysis and back story using given circumstances and imagination

Identify and work to develop physical and relaxation techniques needed when developing the characters physical life.

Record blocking and stage business in the script

Memorize and apply lines and blocking in each scene

Demonstrate the ability to create needed lazzi

Demonstrate the ability to employ burla, when pacing requires.

Demonstrate the ability to take and apply directorial adjustments during rehearsals

Integrate comedic freedom and timing

Hone listening skills

Discover and develop character “ism’s”
Determine workable choices for character actions as directed
Identify and refine actor choices and interpretation for repeatability and consistency
Recognize how to use critique to build levels and dimension
Adjust to addition of all technical production components
Demonstrate the ability to use costume and makeup to enhance characterization[s]
Identify lighting areas on stage
Distinguish the demands of final rehearsals the rigors of performance, and the ongoing value of directorial notes and adjustments
Demonstrate the ability to adjust to the variables of audience response, while maintaining consistency and growth

Student Learning Outcomes:
Create characters based on acquired knowledge of the comedic genre, style, performance concept, role of the character[s] performed, and the role of audience feedback.
Develop characters internally; using written analyses, backstories, objectives, obstacles, tactics, and externally, using applicable physical and vocal character technique.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Rehearsal and Performance: Comedy - Leading Role
THEA181B :
2.0 Units

This course provides intensive experience in the preparation and public performance of a leading role in a comedic theatrical production. Students will learn the skills and timing needed to play in diverse comedic genres while developing personal process through acquired comedic techniques.

Requisites
Requisites:
Advisory
THEA110 - Acting Fundamentals

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:
UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre
Learning Outcomes

Course Objectives:
- Identify the purpose and function of each leading character, and their relationship to other characters in the play
- Determine directorial concept, expectations, and definition of boundaries
- Demonstrate an understanding of a leading actor's responsibility to the play and to the other company members
- Analyze the script through a breakdown into units of action, identifying all possible builds to potential laughter
- Demonstrate the ability to follow rehearsal etiquette
- Identify and employ the use of actor's beats to explicate the text for the character journey
- Identify and employ improvisation to understand each unit of action
- Demonstrate the ability to creatively discuss the role of straightman and comic
- Define the character based on situation as well as character foibles and excesses
- Write an in-depth and creative character analysis and back story
- Develop and maintain a written journal of the entire production journey
- Create specific physical business as needed for each scene, using givens and imagination
- Record blocking, business, beat breakdowns, objectives, and tactics into the rehearsal script, finding all "pay-off" lines/moments
- Creatively define the character's physical and vocal life, exploring varied voices, physicalities, and added "isms"
- Explore the use of the mask in order to make the most of takes, holds, and delivery without words
- Determine the set-up for all jokes and/or comedic arcs
- Demonstrate the ability to integrate comedic freedom and timing
- Identify and apply directorial critique when working to develop strong tactics pursuing objectives.
- Refine each scene to be playing in-the-moment at all times
- Utilize constant inner monologue to enhance the characterization
- Identify and refine all acting choices using repetition for consistency in physical and emotional character development alike
- Build and maintain performance and character energy throughout rehearsals
- Demonstrate the ability to meet the rigors of final adjustments in technical and dress rehearsals leading to performance
- Identify the use the addition of all technical elements to energize and fill-out the performance
- Identify and use costume and makeup as another tool to bring the character to life
- Identify and use acquired technique to sustain and elevate each performance through the use of director critique
- Maintain energy, health, and focus during performances
- Adjust to audience response, working with that response to adjust timing as needed
- Identify and eliminate predictability in the performance

Student Learning Outcomes:
- Demonstrate the ability to create, sustain, and perform a fully-developed, entertaining, and believable comedic character, when performing a leading role in a comedy presented for public performance.
- Demonstrate the ability to interpret the characters based on goals, obstacles, and diverse tactics, using observable emotional connections, clear use of varied tactics, and a strong pursuit of character objectives.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Rehearsal and Performance: One-Act Plays
THEA182A:

2.0 Units

This course provides experience in the preparation and public performance of one or more roles in a series of One-Act plays. Students will learn the techniques of creating and performing multiple characters and will further develop their personal performance techniques in plays of diverse styles.

Requisites

Requisites:
Advisory
THEA110 - Acting Fundamentals

AND

Prerequisite
Audition

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre

Learning Outcomes

Course Objectives:
Demonstrate an understanding of each play, and the directorial concepts for all plays in the series.

Identify the director’s expectations, and overall production goals.

Identify and follow proper rehearsal etiquette.

Identify their role as a performer in the company environment.

Analyze each individual character through the play’s unique structure, themes, given circumstance, and director’s vision.

Demonstrate the ability to use research, character analysis, back story, and relationship explication.

Determine given circumstances, and create objectives, needs, wants, emotions, actions, reactions, and individuality.

Demonstrate the effective use beats, analysis, and back stories to create viable characterizations.

Read a ground plan.
Record blocking and stage business in a script.

Demonstrate the ability to take and apply director adjustments.

Determine the stages of the rehearsal process.

Identify the use daily objectives and keep on schedule.

Determine the final character choices for each characterization portrayed.

Identify and incorporate the use repetition for consistency while still remaining in the moment.

Adjust to any addition of technical components to the play and the to production as a unified whole.

Demonstrate the ability to meet the demands of final adjustment rehearsals and the rigors of performance.

Demonstrate an appreciation of the on-going value of directorial notes.

Identify and adjust to audience response while maintaining consistency and growth.

**Student Learning Outcomes:**

Create multiple characters in a variety of short plays, based on a knowledge of each play's dramatic structure, concept, characters, style, and production goals.

Interpret characters based on given circumstances using written analyses, character choice, objectives, obstacles, tactics, and proper stage terminology.

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**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units**

2.0

**Total Hours**

72.0

**Rehearsal and Performance: Original One-Act Plays**

**THEA182B**

2.0 Units

This course provides experience in acting, writing and/or directing in one or more original One-Act plays. Students will learn the collaborative process of developing and executing scripts, characters, concepts, and production needs of the short play format, culminating in public performance.

**Requisites**

**Requisites:**

**Advisory**

THEA110 - Acting Fundamentals

**AND**

**Prerequisite**

Audition and Interview

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

2.0
General Education Plan:  
UC Comparable Transfer Courses  
UC Comparable Transfer Courses  

Course Identifier (C-ID)  
Theatre  

Learning Outcomes  

Course Objectives:  

Identify expectations, production goals, rehearsal etiquette, and each person’s role in the company.  
Identify and apply Aristotle’s elements and components of play structure when developing a script, from exposition to denouement.  
Demonstrate the use imagination and structure to create the story scenario, setting, plot, character, mood, and style.  
Determine the theme and dramatic question of the play.  
Demonstrate the use themes to influence conflict, emotion, and entertainment.  
Identify and develop the protagonist and antagonist  
Create leads, supporting, stock, and ensemble/chorus characterizations.  
Determine given circumstances.  
Create objectives, needs, wants, emotions, actions, reactions, and individuality.  
Identify and employ methods to effectively use beats, analysis, and back stories to create viable characterizations  
Write dialogue based on circumstance and objective for each character.  
Rewrite for compression and economy within the script.  
Define the concept for a play.  
Effective communication of concept to actors and designers.  
Determine and develop directorial beats.  
Recognize the need for simplicity in the multi-short play format from all perspectives.  
Identify and determine production budget restrictions.  
Collaborate with designers and technicians.  
Construct and read ground plans and models.  
Identify and execute directorial stage pictures and focus.  
Record blocking and stage business in a script.  
Demonstrate the use effective interpersonal communication with actors and technicians.  
Create a rehearsal schedule while demonstrating the stages of the rehearsal process, and daily objectives,  
Organize rehearsal schedule.  
Demonstrate the ability to take and apply adjustments and critique.  
Recognize the need for the performer’s “homework” between rehearsals.  
Demonstrate confidence and proficiency in vocal and movement techniques required for each play.  
Identify how to accommodate and elevate the final rehearsals with the addition of sets, lights, props, costumes, and makeup.  
Identify the demands of final rehearsals, the rigors of performance, and the on-going value of directorial notes.  
Demonstrate the ability to adjust to audience response while maintaining consistency and growth.  

Student Learning Outcomes:  

Demonstrate an understanding of play structure though the creation of original short plays.
Demonstrate an understanding of the use of concept, analysis, stage terminology, character choice, staging, and critique as applied to one-act plays developed for public performance.

Units & Hours
Minimum Units: 2.0
Maximum Units 2.0
Total Hours 72.0

Rehearsal and Performance: Musical - Minor/Supporting Role THEA183A :

2.0 Units
This course provides experience in the preparation and public performance of a minor or supporting role in a Musical Theatre production. Students will learn to develop the basic acting, dance, and vocal performance skills required for Musical Theatre, while crafting a believable character when working as an ensemble member.

Requisites
Requisites:
Advisory
THEA110 - Acting Fundamentals
AND
Prerequisite
Audition

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:
UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre

Learning Outcomes
Course Objectives:
Demonstrate and understanding of the libretto and music for the production.
Identify expectations, production goals, rehearsal etiquette, and each person's role in the company.
Effectively work with multiple directors: The Director, the Musical Director, and the Choreographer.
Analyze and interpret lyrics as dialogue.
Identify individual vocal technique based on the song styles in the production.
Demonstrate the effective use of choral singing, using note specifics, diction, and mask work.

Demonstrate proper breath control at all times when singing and dancing, using acquired techniques to assist in developing that control.

Analyze and explicate all song lyrics, choreography, and dialogue through character objectives, obstacles, and each character's individual and group emotional journey.

Demonstrate the ability to meet the demands of maintaining individuality in character when forced into rhythmic patterns dictated by the music.

Demonstrate the ability to use research, character analysis, back story, and relationship explication in character development.

Recognize how to record choreography, blocking and stage business in a script.

Demonstrate the ability to utilize director adjustments.

Recognize the stages of the rehearsal process, using daily objectives, and keeping on schedule.

Recognize and apply the use of repetition for consistency in the acquisition of choreography.

Identify the demands of performance by building physical stamina and maintain character energy throughout rehearsals.

Identify the rigors of incorporating final adjustments in the last rehearsals leading to performance.

Demonstrate the ability to use critique to elevate the performance.

Utilize technical and dress rehearsals to enhance the overall work of the company.

Demonstrate the ability to adjust to the addition of the orchestration to elevate performance.

Demonstrate confidence and proficiency in Musical Theatre.

Demonstrate the ability to adjust to audience response while maintaining consistency and growth.

Student Learning Outcomes:
- Demonstrate an understanding of the roles of a chorus member, ensemble member, and supporting player in a Musical Theatre production, and to create the multiple singing, dancing, and acting characterizations often required when working in musicals.
- Create believable singing, dancing, characters based on their knowledge of character development, technical skills, and performance needs.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Rehearsal and Performance: Musical - Leading Role
THEA183B:

2.0 Units

This course provides intensive experience in the preparation and public performance of a leading role in a musical theatre production. Students will continue to develop their vocal, dance, and acting skills, techniques, and personal process, while learning to negotiate the demanding responsibilities of musical theatre performance.

Requisites
Advisory
THEA110 - Acting Fundamentals

AND

Prerequisite

Audition

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

UC Comparable Transfer Courses

Course Identifier (C-ID)

Theatre

Learning Outcomes

Course Objectives:

Demonstrate knowledge of the play's libretto and score.
Identify expectations, production goals, rehearsal etiquette, and each person's role in the company.
Analyze the needs of the libretto and score.
Analyze and interpret lyrics as dialogue, while using the music to assist in developing emotional connections.
Identify how to approach the solo, duet, and group/chorus number, while accommodating varying actor's skill.
Interpret the solo as a monologue.
Demonstrate correct use of breath control techniques when working vocal and choreographic passages.
Demonstrate growth in personal vocal technique during musical rehearsals.
Identify in-depth aspects of the character's personality, needs, wants, and drives with advanced analyses techniques.
Employ research, written analyses, back story, actor beats, and relationship explication.
Prepare and maintain a rehearsal journal and performance journal.
Build and maintain performance and character energy throughout rehearsals.
Meet the rigors of final adjustments in technical and dress rehearsals leading to performance.
Use repetition for consistency in technical abilities and emotional character development alike.
Keep on schedule.
Take and apply director, musical director, and choreographic adjustments in the intensive final rehearsals.
Use the addition of the orchestration to elevate the performance.
Use acquired technique to sustain and elevate each performance through the use of director critique.
Adjust to audience response while maintaining consistency and growth.
Maintain energy, health, and focus during performances.

Student Learning Outcomes:

Demonstrate the ability to create and sustain a believable, engaging, and entertaining characterizations while performing a leading role in a Musical Theatre production for public performance.
Show a consistent through-line in the presentation of lyrics, lines, and choreography, based on their knowledge of character development, vocal and movement technical skills, and performance needs.

Units & Hours
Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Beginning Technical Theatre Production
THEA186A:

2.0 Units

This course is intended for students interested in hands-on training and experience in the various backstage areas of technical support for a major Theatre Arts production. Students will be part of the technical team, working with the director, stage manager, designers, and crew heads, while serving as a production crew member.

Requisites

Advisory
THEA110 - Acting Fundamentals

AND

Prerequisite
Interview

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:
2.0

General Education Plan:

UC Comparable Transfer Courses
UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre

Learning Outcomes
Course Objectives:
Demonstrate an understanding of directorial expectations, concept, layproduction goals, and technical assignment responsibilities.

Read-thru play.

Identify each person's role in the company environment.

Identify the particular stylistic requirements for production.

Preparation for production, including necessary theatrical techniques.
Identify and safely utilize appropriate tools to fulfill production requirements for the production.

Demonstrate an understanding of technical theatre terminology.

Work cooperatively and collaboratively with the director, designers, and crew heads.

Display and understanding of the designs and their function.

Research period as appropriate to crew assignment.

Assist to develop designs according to specific crew assignments.

Demonstrate basic skills necessary to efficiently work in design area.

Organize time for maximum productivity.

Assist designers and crew heads to install and or integrate technical elements into the theatre space.

Apply acquired skills and techniques to mount the production technical elements.

Demonstrate the ability to work cooperatively with cast and other crew members during work-thrus and run-thrus.

Recognize and follow proper workshop and rehearsal etiquette.

Operate all stage equipment safely and with precision.

Display the ability to adapt to and manage the stressful final rehearsal period.

Apply directorial and/or designer adjustments as needed.

Work collaboratively with the cast to present a quality performance for the audience.

Maintain a clean work space.

Prepare for each performance, and strike completely after each showing.

Adhere to call times.

Follow and complete all assignments.

**Student Learning Outcomes:**

- Demonstrate proficiency in the skills required for an assigned technical theatre crew.
- Execute assignment responsibilities in work sessions, technical rehearsals, during production run, and strike.

**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units:**

2.0

**Total Hours**

72.0

**Intermediate Technical Theatre Production**

THEA186B :

2.0 Units

Students will gain technical theatre experience working as a crew head in one of the following production areas: Stage management, directorial associate, scenery, properties, costuming, makeup, lighting, and/or sound.

**Requisites**

**Requisites:**

Advisory
THEA110 - Acting Fundamentals

AND

Prerequisite

Interview

Transferability & General Education Options

Transferable:
Transferable to CSU only

Weekly Lecture Hours:

2.0

General Education Plan:

UC Comparable Transfer Courses

Course Identifier (C-ID)

Theatre

Learning Outcomes

Course Objectives:

Demonstrate an understanding of directorial expectations, concept, play production goals, and technical assignment responsibilities.

Identify the particular stylistic requirements for production.

Read-thru play.

Identify each person's role in the company environment.

Follow workshop and rehearsal etiquette.

Identify specific design or production elements needed to fulfill the assignment.

Utilize research as needed to assist the director, designer, production managers, and/or crew members to complete the production goals.

Employ organizational skills to assist in the preparation of necessary script notes, call times, schedules, etc., to be used in the production work sessions and run.

Identify and apply safety rules to all members of the company when working on the production in any capacity.

Maintain an open dialogue with the director, designer, production managers, and crew members at all times.

Construct scenery, props, costumes, and makeup items as assigned.

Prepare lighting or sound components for production as assigned.

Record blocking, business, and all cues into the script as assigned.

Demonstrate leadership skills necessary to effectively lead the crew members or cast members within the assigned discipline.

Organize time for maximum productivity.

Take and apply directorial, designer, and stage manager adjustments as necessary.

Solve problems when encountered to assure a safe and efficient transition into the space.

Demonstrate and apply the usage of proper theatrical technical techniques in creating the technical elements for production.

Install and/or integrate technical elements into the theatre space.

Clearly communicate technical assignments to the running crew.

Demonstrate an understanding of the role of the stage manager during tech, dress, and runs.
Demonstrate the ability to work cooperatively with cast and crew members as they integrate the technical components into the production.

Demonstrate the ability to use constant adjustments during the stressful final rehearsals leading to opening night.

Work collaboratively with the cast to present a quality performance for the audience.

Maintain a clean work space.

Manage the assigned running crew.

Maintain effective relationships and communications with the stage manager.

Prepare for each performance and strike completely after each showing.

Adhere to call times.

Follow directions and complete all assignments.

Strike the production after the final performance.

**Student Learning Outcomes:**

- Demonstrate proficiency in technical skills and management required for participating as a crew leader or production assistant for a Theatre Arts production.

- Execute assignment responsibilities in work sessions, technical rehearsals, during production run, and strike.

**Units & Hours**

**Minimum Units:**

2.0

**Maximum Units**

2.0

**Total Hours**

72.0

**Advanced Technical Theatre Production**

**THEA186C:**

2.0 Units

This course explores the artistic and organizational techniques and practices required of a stage manager, assistant director, production manager, and designer/coordinators. Students will be involved as members of a Santiago Canyon College Theatre Arts artistic production team working on a major production.

**Requisites**

**Requisites:**

**Advisory**

THEA110 - Acting Fundamentals

**AND**

**Prerequisite**

Interview

**Transferability & General Education Options**

**Transferable:**

Transferable to CSU only

**Weekly Lecture Hours:**

2.0
General Education Plan:
UC Comparable Transfer Courses

Course Identifier (C-ID)
Theatre

Learning Outcomes

Course Objectives:
Demonstrate an understanding of directorial expectations, concept, play production goals, and technical assignment responsibilities.

Read through play.

Identify each participant’s role in the company.

Identify the specific stylistic requirements for the production.

Establish timelines and budget.

Research the play and time period in detail.

Analyze the play and characters in detail.

Explicate all technical requirements from the text.

Create and/or plan all design elements for the play as required for specific assignment.

Prepare initial rehearsal production documents for recording.

Collaborate with crew heads.

Maintain open communication with the director.

Designers/Design coordinators:

Complete design preparations and communicate specific responsibilities to assigned crew heads.

Organize and oversee the construction of scenery, props, costumes, and makeup items as assigned.

Organize and oversee the preparation of lighting or sound components as assigned.

Demonstrate leadership skills necessary to effectively lead the technical crew heads and crew members through the creative process.

Organize time for maximum productivity.

Prioritize duties.

Take and apply directorial and stage manager adjustments as necessary. Stage Manager:

Create the master prompt book recording all blocking, business, and cues during blocking sessions with the director and cast.

Communicate all director initiated rehearsal notes to designers/coordinators, crew heads, and crew members.

Prepare the rehearsal space prior to each rehearsal session.

Create, distribute, and maintain any written documents assigned by the director.

Collaborate with ASMs, and assist with the development of their books.

Collaborate with ASMs to determine duties.

Call the show as required by the director. Assistant Director/Production Manager:

Create a prompt book recording all blocking, business, and cues during blocking sessions with the director and cast.

Communicate all director initiated rehearsal notes to cast members, designers/coordinators, and crew heads.

Run lines with cast members as required by the director.

Record all notes given during rehearsals.
Maintain a collaborative relationship with all company members.

Demonstrate an understanding the role of an assistant director.

Install and/or integrate technical elements into the theatre space.

Solve problems when encountered to assure a safe and efficient transition into the space.

Demonstrate an understanding of the changing role of the stage manager during tech, dress, and runs.

Demonstrate the ability to work cooperatively with cast and crew members as they integrate the technical components into the production.

Clearly communicate all adjustments to cast and/or crew.

Demonstrate the ability to use constant adjustments during the stressful final rehearsal leading to opening night.

Use directorial adjustments for determining the pace and arc of the final rehearsals.

Work collaboratively with cast and crew to present a quality performance for the audience.

Maintain open communications with the stage manager.

Follow all directions and complete all assignments. Stage Manager/Designer/Coordinators

Record notes during the performance, and give adjustments to the crew and stage manager in order to tighten cues in the play.

Assistant Director:

Record notes during the performance and give adjustments to the cast in order to clean problems with any given scene or acting choice.

Listen to audience response, and note actors accordingly.

Student Learning Outcomes:

Effectively execute assignment responsibilities in work sessions, technical rehearsals, dress rehearsals, the production run, and strike.

Demonstrate the ability to work cooperatively with the other members of the artistic team, crew members, and cast, using positive communication and management skills.

Units & Hours

Minimum Units:
2.0

Maximum Units
2.0

Total Hours
72.0

Introduction to Web Design using Adobe Dreamweaver
VBUS010:

60.0 Hours

Provides introductory instruction on Adobe Dreamweaver, one of the industry's leading web authoring tools. Students will learn how to create, publish, manage, and maintain a website. Open Entry/Open Exit.

Requisites

None

Learning Outcomes

Course Objectives:

Discuss Process for Creating/Maintaining Web Pages with Adobe Dreamweaver
Use Dreamweaver Panels, Tools, and Menus

Customize the Work Area

Set Preferences

Locate Adobe's Stock Photos

Use Adobe's Stock Photos

Create a Website

Understand How to Import/Export Sites from/to other drives

Set Up Pages and Add Files

Add Elements and Scripts

Create, Specify, and Edit Hyperlinks

Create Image Links

Manage and View Websites

Edit URLs and Links Site Wide

Correct Site Errors and the Code View

Create Quality Page Layouts

Understand the difference between id/class divs

Develop Tables

Create and analyze tables

Identify rows, columns, and cells

Format tables with CSS

Add/Enhance Text within Web Page Layouts

Format paragraphs with CSS

Format text with CSS

Use HTML special characters

Search text and HTML source code

Work with Cascade Style Sheets (CSS)

Develop, create, and view style sheets

Use external style sheets

Create CSS styles in style sheets

Define style properties

Apply styles

Recall HTML Source Code

Use source code editors and preferences

Use source code view management tools

Use code navigator

Add new elements to source code

Work with source code

Insert or rewrite source code
Work with Smart Objects
Develop, add, and copy smart objects
Update, edit, resize, and crop smart objects
Work with Slices during Optimization
Work with Output Settings for Web Graphics
Add Adobe Photoshop Images to Web Pages
Add Adobe Illustrator Artwork to Web Pages
Recall the PDF/Dreamweaver Connection
Display and navigate PDF documents
Edit PDF link regions
Create Forms with Dreamweaver
Create forms
Add form elements
Add form navigation
Work with Forms using Dreamweaver
Utilize HTML form elements
Utilize properties
Explore Use of Site Assets
Work with Images and Multimedia
Use optimized images
Create rollovers
Use of actions with rollovers
Create image maps
Use background images
Publish Websites
Upload Sites
Set Up Distributed Websites

**Student Learning Outcomes:**

- Design a fully functional website on the Internet.
- Objectively evaluate the needs of a website for a client's company and the types of elements that should be included in their website.
- Analyze a website for search engine optimization and apply basic search engine marketing techniques.
- Recognize the difference between print and web graphics and be able to communicate to clients the type of graphic files needed for their project.

**Hours**

**Total Hours**

60.0

**Workforce Readiness**

**VBUS012:**
60.0 Hours

Provides instruction in office skills for employment preparation. Students will learn communication, decision-making, interpersonal, leadership, lifelong learning, and job seeking skills. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Listen Actively as Demonstrated through Appropriate Verbal and Non-Verbal Responses
Guide Others
Reflect and Evaluate: Personality Profiles
Prepare a Job Application, Resume, and Cover Letter
Effectively Communicate and Network as Demonstrated by Increased Interaction and Expression of Opinion in Class Discussion
Identify Course Overview Orientation Objectives
Attend Sessions Equipped with Required Materials
Read with Comprehension and Utilize Basic Information Necessary to Function in the Workplace
Business-based Grammar (Gregg Reference Manual Style Guide)
Research: Occupational Interests
Outlook calendaring
Identify Appropriate Work Characteristics
Resolve Conflict and Negotiate
Practice Personal Responsibilities
Discuss Effective Leadership Skills
Learn Interview Techniques
MS Word, Outlook Notes and other smart devices for digital note taking
Observe Critically
Prompt follow-up
Advocate and Influence
Plan
Learn to Serve Customers Well Through:
Research employers
Recognize Employee Responsibilities
Business writing best practices
Use Social Media
Active Voice
Needs analysis
Cooperate with Others
Effective email writing
Prepare questions for hiring manager
Use Information and Communications Technology
Develop Networking Correspondence
Solve Problems and Make Decisions
Apply Note Taking and Time Management Tools Using:
Effectively Convey Ideas in Writing using:
Demonstrate Types of Interviews
Empathy
Build Skills in Telephone Techniques, Filing, and Keyboarding in Employment Situations
Use Basic Math to Solve Problems and Communicate

**Student Learning Outcomes:**
- Consider and use effective communication, decision-making, interpersonal, leadership, job seeking, and lifelong learning skills as tools to draw on selectively to more effectively achieve their purpose.
- Successfully carry out their roles as community members, workers, and citizens.

**Hours**
**Total Hours**
60.0

**Introduction to Personal Management using Microsoft Outlook VBUS013:**

60.0 Hours

Provides introductory instruction on Microsoft Outlook, one of the industry's leading personal data management applications. Students will learn how to better manage their electronic communications, schedules, tasks, and contact information using Outlook's E-mail, Calendar, Task, and Contact components. Open Entry/Open Exit.

**Requisites**
**Requisites:**
None

**Learning Outcomes**
**Course Objectives:**
- Attend Sessions Equipped with Required Materials
- Discuss Process for Managing Personal Data with Microsoft Outlook
- Use Outlook's Navigation Pane, Ribbon, Tools, and Menus
- Customize the Work Area
- Set Preferences
- Use Microsoft Outlook to Compose New Messages
- Create new messages
- Specify recipients
- Select and send attachments
- Utilize "cc" and "bcc" effectively
- Use Microsoft Outlook to Receive Messages
- Open received messages
- Utilize preview pane
Save attachments
Open attachments
Use Microsoft Outlook to Organize Messages
Create new folders
Move messages to specific folders
Use flags to mark messages for follow-up
Use Microsoft Outlook to Manage Multiple Email Accounts
Add new accounts to Outlook
Specify account settings
Modify Email Settings
Adjust junk email settings
Adjust email options
Schedule Meetings, Appointments, and Events
Set recurrence for individual meetings
Set reminders for meetings and events
Utilize labels to classify appointments
Designate calendar work week
Customize the Appearance of the Calendar
Change the calendar view
Set calendar options
Use Calendar Options
Create a new calendar
Distinguish calendar views
Create calendar groups
Manage Contacts
Create new contacts
Edit contact information
Search for contacts
Delete a contact
Manage Distribution Lists
Create new distribution lists
Add a contact or a sender to a distribution list
Delete distribution lists
Send email to a distribution list
Manage Tasks
Create new tasks
Prioritize tasks
Set Task recurrence
Assign tasks
Update task details
Delete tasks
Modify the Task Window
Adjust the task view
Customize the task view

**Student Learning Outcomes:**
- Utilize Microsoft Outlook's Mail feature to effectively manage an email account.
- Create, manage, and utilize a distribution list.
- Demonstrate how to utilize Microsoft Outlook's Calendar and Contacts to effectively manage personal data.

**Hours**

**Total Hours**

60.0

**Introduction to Mobile and Social Media Tools**

**VBUS014:**

60.0 Hours

Provides introductory instruction on how to incorporate social networks and mobile technology in a business environment utilizing applications and tools such as Instagram, LinkedIn, Facebook, Twitter, wikis, blogs, Pinterest, Snapchat, and YouTube. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Use Mobile and Social Media Terminology both in Oral and Written Communications

Identify the algorithm of social media platforms

Set Up and Use Social Media Accounts

Compare and Contrast each of the Social Media Sites in terms of:

- Functionality
- Bookmarking each site
- Utilization [application to business]
- Marketing and promoting products and services

Explore Centralized Access to Social Media Sites, involving:

- Setting up accounts
- Saving links
- Explore the Facebook, Instagram, LinkedIn, Twitter, Snapchat, and Pinterest Social Media Sites and Apply Learning to:
- Create an account/linked to Gmail
- Recall the user interface
- Navigate the applications
- Post information (company events/news)
Explore the Twitter Social Media Site and Apply Learning to:

Account setup
Navigation
Posting Tweets
Creating Hashtags
Develop a Follow(ing)

Construct a LinkedIn Social Media Site and Apply Learning to:

Account setup
Navigation
Create Profiles/Resumes
Connections
Assess Various Smart and Mobile Devices to Determine Applicability to Business

Explore the Use of Zoom for Business Communications:

User interface
Navigation
Participate in Video calls

Evaluate the Design of Blogs to Collaborate with Staff/Customers in a Business Setting; including:

Creating functionality
Creating blogs from scratch
Posting messages
Sharing (email/public/friends)

Student Learning Outcomes:

Create accounts on a wide array of social media web sites.
Utilize mobile technology social media tools.

Hours
Total Hours
60.0

How to Build a Home-Based Business

VBUS030:

60.0 Hours

This course provides an overview of the process of planning, launching, and operating a home-based business. Students will learn to distinguish between the various forms of home-based businesses and explain how they can be supported by business models. Open Entry/Open Exit.

Requisites

Requisites:

None

Learning Outcomes

Course Objectives:

Identify the benefits, risks, and challenges of building a home-based business
Distinguish between home-based business ownership and working at home

Generate at least one home-based business idea

Recognize the forms of home-based businesses

Analyze a retail store business model and three online business models: e-commerce, lead generation, and publishing

Assess the legal and financial considerations of the different forms of business ownership

Employ a business model to a business idea and propose a monetization strategy

Identify sources of revenue, calculate fixed and variable costs

Perform market research to determine the price to charge for goods or services

Perform basic financial calculations to determine revenue, expenses, and profit margins

Create a marketing plan

Calculate the break-even point for a business

Prepare an application for startup funding

Create a do-it-yourself website for a business

Create social media accounts for a business

Create a display or search engine advertisement

Evaluate how e-commerce capabilities can be incorporated into a website

Identify a strategic partner for affiliate marketing of a business product or service

Assess how a home-based business can manage inventory and personnel

Analyze business proposals in a specific industry and prepare a proposal for a prospective customer

**Student Learning Outcomes:**

- Distinguish between the forms of home-based businesses.
- Describe how a home-based business could be formed and supported by a business model.
- Generate a business proposal for a prospective customer.

**Hours**

**Total Hours**

60.0

**Accounting for Non-Accountants**

**VBUS040:**

60.0 Hours

Designed for those who may be interested in building a home-based business, this course introduces general accounting principles, including basic terminology, processes, and an overview of financial statements. An emphasis is placed on utilizing accounting methods to generate and interpret financial information in real-life situations to make managerial and financial decisions. Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

Discuss the accounting needs of small businesses

Review definitions of commonly used terms in accounting

Create organizational goals and prepare a budget; create a procedure to assess the extent to which goals are accomplished
Explain the difference between revenues and expenses

Calculate initial costs and recurring costs that an organization may incur while doing business

Identify the types of financial statements and interpret the significance of the financial information they contain

Create an income statement, balance sheet, and statement of cash flows

Determine financial information that needs to be reported for taxation purposes

Explain the financial considerations to be made when determining whether to hire employees or use independent contractors

Calculate the cost of hiring personnel, including salary and benefits

Explain how an organization can access banking services such as checking, savings, loans, and lines of credit

Identify sources of funding, such as venture capital and crowdfunding

Calculate the costs of inventory

Prepare invoices for goods and services

Create a record of accounts payable

Create a record of accounts receivable

Explain methods of recording bad debt

Calculate the cost of acquiring a customer

Create a sales forecast

Use accounting data to justify business decisions such as outsourcing, developing a new product, and acquiring equipment or other assets

Explain how internal controls can be used to mitigate risk

Demonstrate how accounting data can be used to inform external stakeholders

**Student Learning Outcomes:**

- Interpret financial statements.
- Justify business decisions based on financial data.

**Hours**

**Total Hours**

60.0

**Introduction to Use of Digital Cameras**

**VBUS096:**

60.0 Hours

Provides introductory instruction on using digital still and digital video cameras. Introduces students to camera selection, basic features, compositional guidelines, how to transfer files from the camera to the computer, basic image editing, use of photos/videos in common applications, and output options. This course is designed to be taken independently or concurrently with courses, such as Adobe Photoshop or Premiere. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

- Identify Different Types of Digital Still Cameras and the Consumer/Prosumer Application
- Define Common Terms Related to Digital Photography
Describe Proper Handling of Memory Cards

Describe the Benefits and Limitations of the Various Image File Formats

Describe Key Features of Digital Still Cameras as Related to the Intended Application and the Relationship between Features and Cost

Identify Common Digital Still Camera Accessories

Describe the Features of the Digital Camera

Demonstrate Several Basic Compositional Guidelines

Describe Depth of Field and its Application

Demonstrate Techniques for Working with Difficult Lighting Situations

Crop/Resize Photo in Basic Image Editing Application for Intended use: Email, Web, Print

Describe File Formats and Use of Digital Photos in Common Business Applications (e.g., MS Office Applications)

Describe Ways to Present Images for Personal or Business use

Describe the Benefits and Limitations of Different Output Devices: Inkjet vs. Laser Printer, Color vs. Grayscale

Describe the Importance of Using the Correct Media for Output (e.g., Photo Paper vs. Copier/Laser Paper) Based on Desired Application

Utilize Printer Driver Options to Achieve Optimum Quality Output from Device

Identify Different Types of Camcorder Formats and Their Application

Define Common Terms Related to Digital Camcorders/Videography

Describe Key Features of Digital Video Cameras as Related to the Intended Application and the Relationship between Features and Cost

Identify Digital Camera Accessories

Describe the Features of the Digital Video Camera

Demonstrate Several Basic Compositional Guidelines

Describe Depth of Field and its Application

Demonstrate Techniques for Working with Difficult Lighting Situations

Describe the Basic Process of Transferring Video to a Computer for Editing

Describe the Benefits and Limitations of Different Output Options

**Student Learning Outcomes:**

- Make better informed decisions regarding purchase of digital cameras and/or accessories for business or personal use.
- Use their existing digital camera gear more efficiently/effectively to produce images for business or personal use.
- Perform basic image editing (e.g., cropping, resizing, etc.).
- Use digital camera images in several popular computer applications.

**Hours**

**Total Hours**

60.0

**Introduction to Personal Commerce on the Internet**

**VBUS097:**

60.0 Hours

Provides introductory instruction to E-commerce on the Internet. Platforms include eBay, Amazon, Etsy, and Shopify. Topics include privacy and security issues, searching techniques, auction bidding, secure payment methods, selling techniques, and protecting consumer rights. Open Entry/Open Exit.

**Requisites**
Requisites:
None

Learning Outcomes

Course Objectives:
Brief Introduction to Personal Commerce on the Internet
Recognize Course Objectives
Attend Sessions Equipped with Required Materials
Explain How to Protect Personal Privacy and Maintain Security
Identify Fraud detection and prevention
Select a strong password
Choose an effective secret question
Utilize Searching Techniques on the Internet: Google, Yahoo, Bing
Efficiently Search to Find Best Deals and Price Comparisons
Use Auction Bidding to Win Techniques
Finding deals with eBay search
Checking credibility of seller
Comparing price history to know your buying limit
Avoiding paying too much for shipping costs
Tracking your auction (my eBay, etc.)
Identify Secure Paying Methods
Describe how to Sell online: Store vs. Auction
Set Profitable Price Points
Set Shipping Costs
Explain how to Collect Payment
Pick an appropriate Shipper: FedEx, UPS, USPS, DHL,
Discuss how to Market Your Items
Track Orders or Auction Actions
Notify Buyers/Winners
Report Failed Transactions
Recognize Spam
Report Fraud
Correct transaction errors
Avoid Phishing Schemes

Student Learning Outcomes:
Identify several secure online vendors.
Search for and locate items of interest for purchase.
Describe methods to improve security in online transactions (i.e., sensitive information, payment options, etc.).

Hours
Total Hours
Introduction to 3D Modeling using Blender
VBUS101:

60.0 Hours

Provides introductory instruction on 3D modeling and basic animation using Blender software. Introduces students to Blender's interface, 3D space, animation and modeling features, surfaces, and textures, and uses. Open Entry/Open Exit.

Requisites

Requisites:
Advisory

VBUS119 - Introduction to Keyboarding and Basic Windows

or equivalent

Learning Outcomes

Course Objectives:
Demonstrate Modeling Basics
Apply Creative Ideas for 3D Modeling Project Planning and Design
Identify the features of Blender and Open-Source Software
Demonstrate how to navigate the Blender Interface and 3D Space
Recall Important Functions of Files and File Management

Load files
Save Blender files
Use preferences and themes
Set the default scene
Use coordinates
Use lights
Select objects
Move (translate) objects
Rotate objects
Scale/mirror objects
Duplicate objects
Rendering
Discuss Computer Animation in Film and Television
Preparing 3D models for printing
Import HDRI files
Pack External Data into Blend File
Perform UV Editing
Identify Nodes Trees
Identify Normal Mapping
Create Texture Mapping
Apply Materials
Use Camera Control

**Student Learning Outcomes:**
- Demonstrate an understanding of the principles and techniques used for creation of three-dimensional content through the planning, creation and design of models and environments using 3D principles.
- Identify and effectively apply conceptual thinking skills that are important in animation for the utilization of model creation, texture manipulation, scene rendering and the production of meaningful and artistic visualizations.
- Demonstrate successful problem solving that results from experimentation, exploration, and the taking of risks during the creative problem-solving process.
- Apply their skills in technical manuals, games, architectural presentations, and other media to create exciting 3D visual expression.

**Hours**

**Total Hours**
60.0

**Introduction to Desktop Publishing using Adobe InDesign**

**VBUS102:**

60.0 Hours

Provides introductory instruction on desktop publishing using Adobe InDesign. Introduces students to navigation of InDesign's work area, document setup, placement of text and graphics within frames, styles, color and transparency features, and how to export and print professional-quality InDesign files. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

**VBUS119 - Introduction to Keyboarding and Basic Windows**

or equivalent

**Learning Outcomes**

**Course Objectives:**
Summarize elements of Desktop Publishing
Recall course objectives
Demonstrate how to correctly use required materials
Navigate InDesign's Work Space
Explore InDesign
Select objects
Distinguish between the features of InDesign's work space
Set Up New Document
Place frames and content
Create Text
Apply Color
Create Styles
Apply styles to: paragraphs, characters, objects
Embed or Link Graphics from other Programs
Modify Graphics
Remove backgrounds
Clip paths
Draw lines, boxes, etc.
Demonstrate correct use of the Transparency Panel
Use various blend modes
Colorize black and white images
Change opacity
Feather margins of images
Apply drop shadows
Produce Quality Output For:
Print
The Web
Export:
Flash Player (SWF) files
Adobe PDF (Print)
Adobe PDF (Interactive)
Navigate with Bridge
Save files with Bridge

**Student Learning Outcomes:**
- Identify and apply the four basic rules of good design (contrast, repetition, alignment, and proximity) in a publication.
- Design and implement a print publication (newsletter, brochure, poster) using graphics and text.
- Export a publication as an Adobe PDF or SWF file, optimized for web, desktop publishing, or offset (professional) printing.

**Hours**

**Total Hours**
60.0

**Introduction to MS Project**

**VBUS103:**

60.0 Hours

Provides introductory instruction on the use of Microsoft Office Project software. Students will learn how to set up a project, manage project files, create a task list, schedule tasks, view a schedule, define and assign resources and costs, track a project, analyze progress, and revise a schedule. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Describe elements of project management
- Recall Course Objectives
- Learn Microsoft Project Basics
- Start and exit MS Project
Use menus and toolbars
Use learning aids
Change views
Navigate in MS Project
Set up project
Set up calendar
Use wizards
Manage Project Files
Save project files
Copy and rename objects
Delete objects
Create and use templates
Create and Edit a Task List
Enter task names
Edit a task list
Define milestones
Attach notes and hyperlinks
Explain How to Schedule Tasks, Create Links and Work with Task Constraints and Deadlines.
Create lines
Create tasks
Work with calendars
Demonstrate how to work with different views in Project
Use different views
Change the date format
Locate and insert tasks
Explore Different Resources and Costs and How to Enter and Work with Them in MS Project
Explain resources and costs
Use resource fields
Set automatic options
Sort, group, and filter resources
Assign Resources and Costs
Graph resource availability
Assign resource units
Schedule resources
Add delays
Assign overtime work
Demonstrate How to Track Projects
Track projects
Work with project baselines
Track performance and costs
Explain calculation options
Create Reports
Identify the reports
Select a report
Generate reports
Print reports
Analyze Performance
Revise and Review Schedules

Student Learning Outcomes:
Create, edit, format and organize a basic project using MS Project’s task scheduler, project views, print views, calendars, and reports.
Use MS Project’s planning tools to link tasks effectively and work with time constraints, assign resources and their work schedules to tasks, manage and view cost information.
Demonstrate the ability to shorten the critical path of a project and manage a project’s resources, track tasks, evaluate data with reports, work with a resource pool and subprojects and collaborate with other team members.

Hours
Total Hours
60.0

Introduction to 3D Animation using Blender
VBUS105:

60.0 Hours
Provides introductory instruction for creating short 3D animations using Blender software for viewing on the Internet or in other multimedia formats. Students learn to create animations using Blender’s tools and timeline, e.g., trajectory, lighting, bones, and movements. Students will gain an understanding of the basics needed to succeed as an animator. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Recall course objectives
Demonstrate effective use of course materials required
Create Object Animations
Work with Blender’s Workspace Panel
Create a New Project using Scenes, Views, Frames & Keyframes, and Tweening
Save Blender Project Including Assets
Render and Preview Animation
Blender render
Cycle render
Publish Settings to QuickTime or Other Movie Codec
Export Rendered Animation

Import Animation to other Multi-Media Applications (e.g., Flash, Premiere, etc.)

Apply Various Material(s) to Animated Objects

Explore Animation Objects with Various Material(s)

Use video and audio codecs

Mesh reactive to audio

**Student Learning Outcomes:**
- Demonstrate an understanding of the principles and techniques used for creation of three-dimensional content using Blender.
- Apply conceptual thinking skills that are important in 3D animation.
- Demonstrate successful problem-solving skills that result from creative thinking process.
- Apply their skills in technical manuals, games, architectural presentations, Web content, television, and other media to create exciting 3D visual expression.

**Hours**

**Total Hours**
60.0

**Seminar in Adobe Tools**

**VBUS107:**

60.0 Hours

Explores and provides instruction in evolving Creative Cloud applications for the personal computer such as design, web, and video/audio tools. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
Design layouts for print and publishing
Create and edit images and graphics
Arrange, organize and search for files/images
Create, edit, and share documents
Define paths
Create and optimize web graphics
Create rich, interactive object animations
Demonstrate an understanding of panels
Preview and test movies
Create, edit and enhance motion graphics & audio
Describe the basic process of capturing raw video to a computer for editing
Describe the benefits and limitations of different output options

**Student Learning Outcomes:**
- Implement the basic design tools through editing, creating, designing and manipulation of files, images, videos/audio and websites.
- Apply the tools and creative techniques from the creative cloud collection to produce files for unique business applications.
Introduction to Desktop Video Editing using Adobe Premiere

VBUS109:

60.0 Hours

Provides introductory instruction on desktop digital video production and editing using industry-standard software. Includes capturing, importing, assembling, and editing video, audio, and still images. Open Entry/Open Exit.

Requisites

None

Learning Outcomes

Course Objectives:

- Describe Desktop Digital Filmmaking and its uses Today
- Identify the required materials for the course
- Explain the Pre-production Process
- Write scripts/outline
- Sketch scenes/storyboarding
- Create production schedules
- Shoot Scenes – Production
- Collect/organize assets
- Capture video
- View video and transfer clips
- Demonstrate Key Video Editing and Post-production Concepts
- Project organization
- Story-telling
- Pacing
- Transitions and their effective use
- Mixing
- Export

Arrange Windows, Features and Panels

Check Project Settings

Import, Organize assets via Project Window

Work with bins

Save and autosave projects

Assemble and Work with Video in a Time-based Display

Open clip window

Work with tracks
Work with keyframes
Monitor Window Views for Playback, Setting Editing Marks and/or Performing Edits
Navigate within Timeline Window
Work with the current time indicator/playhead
Work with timecode display
Use Panels, Contextual Menus and Keyboard Shortcuts
Use effects controls, info, navigator, commands and history palettes for easy access to common commands
Right-click to access contextual menus
Use keyboard shortcuts to maximize efficiency
Import Assets to Project Window
Add Clips to Timeline using Various Methods
Preview Rough Cuts by using Play Button or by Scrubbing
Trim Clips in Timeline Window, in Source View or Trim View of the Monitor Window
Add, Change or Preview Transitions
Work with Audio Clips
Create L-cuts
Link/unlink video and audio clips
Synchronize clips
Add audio clips
Create Titles
Create rolling and crawling text
Create title graphics
Layer Clips and Adjust Opacity to Fade One Image over Another
Work with track hierarchy
Work with fading and keying
Create Animation via Keyframing
Work with Optional Features
Create video and audio effects
Create virtual clips
Export File Types
Export Media
Export Presets

**Student Learning Outcomes:**
Ingest assets for video production (e.g., video, stills, audio clips, etc.) into a Premiere project file.
Assemble assets into a finished video production.
Save and export the finished video.

**Hours**

**Total Hours**
60.0
Introduction to Document Processing using Adobe Acrobat
VBUS117:

30.0 Hours

Introduces students to portable document formats created with Adobe Acrobat. Students learn how to convert simple and complex documents to PDF files; navigate, edit, and annotate PDF files; and distribute PDF files via the Internet. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Summarize a brief History of PDF files

Recite Course Objectives

Identify Required Course Materials

Use Basic PDF Terminology

Identify Basic PDF Concepts

Convert a Document to PDF using: PDF Writer (simple documents), Acrobat Distiller (complex documents), Open as PDF command (image files), Import Scan command (paper documents), other, e.g., from World Wide Web, Microsoft Programs (optional)

Navigate a PDF Document using: bookmarks, Zoom tool, Actual Size button, Hand tool, Thumbnails tab

Edit/Work with a PDF Document

Correct type

Insert pages from other PDF documents

Reorder pages

Renumber pages

Customize PDF Navigation

Add bookmarks to PDF documents

Add links to PDF documents

Annotate a PDF Document

Review comments

Add a note

Apply stamps

Summarize comments

Create PDF Portfolio

Design portfolio style

Publish and Share Portfolio

Create a PDF Form

Use the Form tool

Fill in the Field Properties dialog box

Distribute PDF Files
Optimize PDF files for distribution
Send PDF files via Internet
Other
Add interactivity
Sign PDF files digitally
Protect and encrypt

**Student Learning Outcomes:**
- Create an Adobe Acrobat (PDF) from any printable file.
- Create an interactive PDF form with form fields to be filled in by the user of form.
- Create an interactive PDF file with multimedia components and hyperlinks.
- Properly prepare a PDF file for various target outputs (e.g., web/email, desktop printing, press-ready printing).

**Hours**

**Total Hours**
30.0

**Microsoft Windows Overview**

**VBUS118:**

60.0 Hours

Provides introductory instruction for learning MS Windows. Introduces students to Windows: navigation, views, commands, file management, desktop customization, Help, and other Windows programs; for example, address book and electronic communications.

Open Entry/Open Exit. Former Title: Introduction to Windows (2021)

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
Provide a Brief Introduction to Windows
Attend Sessions Equipped with Required Materials
Define terminology
Work with Desktop Screen Components
Use the Mouse
Use Shortcuts, Menus and Keyboard Commands
Navigate within and among Windows
Launch programs
Size, move, arrange, close, switch windows, etc
Minimize/Maximize/Close windows
Manage multiple applications
Log off computer
Shut down Windows
View Computer Contents
View Files
Sort Files

Arrange Windows on Desktop

Manage Files in the Windows Environment

Create, Select, Open and Rename Folders

Create, Select, Open and Rename Files

Move/Copy Folders/Files

Delete/Restore Folders/Files

Empty Recycle Bin

Save

Print

Perform Searches

Create File/Folder and Application Shortcuts on Desktop

Create & Edit Simple Document Files (e.g., with Word Pad)

Create Graphic, Video and Sound Files

Sketch in paint programs

Explore touch-up or image programs

Use video and sound play back

Apply the Snipping Tool

Perform Basic Mathematics

Modify the Program Menu, Top of Start Menu and Favorite Menus

Discuss Procedures for Setting Date and Time

Personalize

Explore Themes

Set Colors

Change Overall Appearance of Start Menu

Set Mouse Options (pointers, motion, visibility)

Rearrange Taskbar and Toolbars

Use Pinning

Create Shortcuts on Desktop

Explore Accessibility Features

Use Clipboard vs. Drag and Drop

Check hard drive capacity (used/free space)

Detect Disk Errors with Windows

Identify Hard Drive Tools

Discuss Installation/Removal of Hardware and Software

Browse Help Contents by Subject

Browse Help Topics via Alphabetical Index

Search Help Topics by Keyword
Discuss Windows Firewall; Windows Defender, Windows Updates
Explain Personal Privacy/Security, Authentication, Malware, Social Engineering
Demonstrate Web Filtering, Parent Control
Protect Files and Folders, Removable Drives
Recognize Unauthorized Computer Changes
Create Contacts
Connect to World Wide Web
Practice Outlook Express Features
Create Digital Reminders
Explore Online Tools

Student Learning Outcomes:
- Demonstrate basic MS Windows OS navigation and organizational skills.
- Create, save, open, and print program files and documents.
- Demonstrate proficiency in Windows accessory applications.

Hours
Total Hours
60.0

Introduction to Keyboarding and Basic Windows
VBUS119:

60.0 Hours

Provides introductory instruction for keyboarding by touch and learning MS Windows. Introduces students to Windows: navigation, views, commands, file management, desktop customization, and simple Accessory programs, such as WordPad, Character Map, Calculator, and Paint. Scanning and working with simple graphics is also explored. This course or Introduction to Windows is highly recommended prior to taking other courses taught within the Windows environment. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Identify required course materials
Work with Desktop Screen Components
Use the Mouse
Demonstrate Shortcuts, Menus and Keyboard Commands
Navigate within and among Windows
Launch Windows
Launch a program
Size, move, arrange, close, switch windows
Manage multiple applications
Log Off computer
Shut down Windows
Identify Computer Contents

View Files

Sort Files

Arrange Windows in Desktop

Demonstrate how to use Windows Explorer

Create, Select, Open and Rename Folders

Create, Select, Open and Rename Files

Move/Copy Folders/Files

Delete/Restore Folders/Files

Empty Recycle Bin

Save Files

Print Files

Search Files

Create Shortcut to Desktop

Learn to Review Keyboard by Touch

Develop Keyboard Speed and Accuracy

Create & Edit Simple Document Files (e.g., with WordPad)

Create Graphic, Video and Sound Files

Sketch in paint programs

Recognize touch-up or image programs

Explore photograph programs

Demonstrate use of video players

Use sound players

Sort Files

Arrange Windows on Desktop

Explore Accessibility Features

Use Clipboard

Discuss Procedures for Setting Date and Time

Set Screen Savers

Add Wallpaper

Set Colors

**Student Learning Outcomes:**

Demonstrate basic touch-typing proficiency.

Demonstrate basic MS Windows OS navigation and organizational skills.

Create, save, open, and print program files and documents.

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**Hours**

**Total Hours**

60.0
Introduction to Animations using Adobe Animate
VBUS120:

60.0 Hours

Provides introductory instruction for creating short Adobe Animate movies for viewing on the Internet or for viewing in other multimedia formats. Students learn to create animations using Animate’s drawing tools, layers, and timeline. Students also are given an opportunity to explore Animate’s libraries, preview movies, save, and publish Animate’s documents. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Identify Course Objectives

Attend Sessions Equipped with Materials Required
Create Vector and Bitmap Graphics
Work with the toolbox to draw, paint, etc.
Work with objects
Work with type
Create Object Animations
Explore the workspace and stage
Create a new document
Set preferences
Use property inspector
Practice scenes and the scene panel
Operate the timeline
Apply frames and keyframes
Demonstrate Tweening (motion and shape)
Use layers
Explain Panels
Practice the Motion Preset panel
Apply the Code Snippets panel
Preview and Test Animation
Work with Libraries
Save Animate Documents
Publish Settings
Implement Codecs
Save .swf and .fla files
Practice Animate’s Components
Discuss ActionScripts
Student Learning Outcomes:
- Draw or create computer graphic illustrations with multiple layers.
- Incorporate multi-media files (i.e., music, sound effects and video) into web movies.
- Publish Animate documents.

Hours
Total Hours
60.0

Introduction to Computer Software Applications
VBUS121:

60.0 Hours
Provides individual skill-building assistance on industry-standard computer applications, e.g. Web, MS Office, Adobe Creative Suite/Cloud, and Multi-Media applications. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Use skills in educational pursuits or the workforce in the operation of computer applications software, e.g. Web, MS Office, Adobe Creative Suite/Cloud, and Multi-Media applications.

Student Learning Outcomes:
- Launch a variety of applications from the start menu or desktop shortcuts.
- Create or edit files in a variety of applications.
- Save and output documents in a variety of applications.

Hours
Total Hours
60.0

Introduction to 3D Printing
VBUS130:

60.0 Hours
This course is designed to teach students how to use a 3D printer and the technology behind 3D printing. Students will learn about the different plastic filaments that are used, and they will learn techniques for feeding the plastic filament into the 3D printer for optimal performance. Students will also learn about components of the printer, such as the extruder nozzle, contact sensor, calibration techniques, software, design methods, and reducing defects. An emphasis is placed on familiarizing students with the use of 3D printing in the areas of personal applications, engineering, design, and manufacturing. It will also be of interest to all students who would like to learn more about 3D printing and the future applications of this exciting technology. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
- Demonstrate an understanding of what can be made using 3D printing technology
- Demonstrate the features and uses of a 3D printer to make an object, emphasizing 3D printing technologies
3D printing history

3D printing applications

Explain rapid prototyping machines and 3D printers, using

Modeling materials

Tools

Software requirements

Hardware requirements

Explain the career opportunities available within the variety of model making and design industries

Transportation design

Product design

Architecture

Packaging

Entertainment

Medical

Aerospace

Related careers and their unique characteristics

Analyze interests and aptitudes and match them to selected career areas of model making and design that will increase ability for success

Changing the filament from an extruder

Reducing "Warpage"

Slicing Software

Photogrammetry and 3D Scanning

**Student Learning Outcomes:**

- Describe the correct setup and operation of a 3D printer
- Describe the features of 3D printing software, how it is used for printing, and the types of objects that can be printed
- Demonstrate how to make 3D models and designs

**Hours**

**Total Hours**

60.0

**Introduction to Google Applications for Work**

**VBUS140:**

60.0 Hours

This course provides an overview of Google Apps for Work, a collection of cloud computing, productivity, and collaboration tools, with an emphasis on their use of effective workplace communication. Applications covered include Google Documents, Sheets, Slides, Drive, and Forms. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**
Introduce Google Applications for Work and provide an overview of Google Drive, Documents, Sheets, Slides, and Forms

Review the syllabus and student learning outcomes for the course

Create a Google Drive account

Identify the functions of Google Drive

Explain how to create a Google Form

Use Google Forms to create and administer a survey; record and analyze the data

Read, interpret, and create graphs; use and apply the basic terms of statistical analysis; make decisions based on data displays

Explain how to create a Google Document

Use Google Documents to create a composition or a blog entry that is appropriate for a business audience

Compose effective sentences, using the standard conventions of English including mechanics, sentence structure, spelling, and usage

Explain how to create a Google Sheet

Use Google Sheets to organize information and perform mathematical operations using whole numbers and decimals

Add, subtract, multiply and divide whole numbers and decimal; perform order of operations

Explain how to create Google Slides

Use Google Slides to create a presentation that is appropriate for a business audience

Identify audience and purpose; summarize and organize ideas and thoughts, and write concise phrases

Additional Google Applications (Google Drawing, Google My Maps, Google Sites, and Waze)

Navigate user interfaces of novel Google applications and their role in the work environment.

**Student Learning Outcomes:**

- Identify the most appropriate Google Application for a specific form of workplace communication.
- Use Google Applications to create each of the following: document, slide, form, sheet.

**Hours**

**Total Hours**

60.0

**Introduction to Digital Marketing**

**VBUS150:**

60.0 Hours

This course is an introduction to the use of digital marketing methods to research market conditions in local, regional, or national areas, and to gather information to determine potential sales of a product or service. Students will learn how to use marketing tools to gather and analyze information on competitors, prices, and sales. Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Explain the similarities and differences of digital marketing in relation to other forms of marketing
- Define the goals of a digital marketing campaign
- Identify the drivers of the Internet economy
- Define the web-based-business models
Articulate the value proposition; specifically, the value created for users by a product or service offered

Conduct research on consumer opinions and marketing strategies

Define a product or service that satisfies consumer desires

Demonstrate the correct use of digital tools to collect and analyze data on customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting product demand

Explain how customer service can be used as a content generating resource

Calculate the customer lifetime value (LTV)

Describe the elements of website design

Demonstrate the effective use of digital marketing technology

Identify best case, worst case, and risk scenarios

Differentiate between measurable and non-measurable marketing programs

Demonstrate how to use digital marketing tools to collect data

Demonstrate how to use data to inform marketing decisions

Explain how to effectively transition a lead from marketing to sales

**Student Learning Outcomes:**

- Analyze market conditions in local, regional, and national areas to determine potential sales of a product or service.
- Create a marketing campaign using digital marketing tools.

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**Hours**

**Total Hours**

60.0

**Introduction to Digital Marketing Analytics**

**VBUS152:**

60.0 Hours

This course is an introduction to the theory and practice of digital marketing analytics. Students will explore the theory of web analytics and how they are used in real-world business situations. An emphasis is placed on identifying the appropriate analytics tools to collect, analyze, and visualize data from the web, using that data to make decisions that impact an organization, its stakeholders, and its customers. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

**VBUS150 - Introduction to Digital Marketing**

**Learning Outcomes**

**Course Objectives:**

- Identify the tenets of marketing analytics theory
- Summarize the characteristics of digital analytics
- Identify digital analytics techniques
- Distinguish between the forms of data and determine if they contain biases
- Outline the marketing analytics processes
- Locate an appropriate form of data to satisfy a business objective
- Create a visual presentation of data
Student Learning Outcomes:

- Identify digital marketing tools used to collect, analyze, and visualize data.
- Compile and analyze marketing data.

Hours

Total Hours
60.0

Introduction to Financial Services and Investments

VBUS160:

60.0 Hours

Provides an introduction to financial services with an emphasis on the Securities Industry Essentials (SIE) exam. Topics include: 401(k), IRA, Stocks, Mutual Funds, Bonds, Precious Metals, Bank Accounts, and Cryptocurrencies (such as Bitcoin). The roles of financial advisors, bankers, and other financial services personnel will be explained.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:

- Define the various market participants and the role they play in the market structure of the securities industry
- Recognize how financial services firms are subject to a multilayered regulation structure
- Recall federal, state, and industry regulations
- Recall equity-related concepts including ownership, voting rights, convertibility, control, and restrictions
- Recognize the different types of debt instruments
- Analyze common features of bonds that are issued by corporations, the U.S. Government, municipalities, and others attempting to raise capital
- Measure the performance of a stock, bond, or other investment
- Explain how investment benchmarks are used to gauge relative investments
- Identify the forms of packaged investment products
- Describe the mechanics of buying and selling investment products using the appropriate client disclosures
- Analyze option related concepts such as hedging, expiration date, strike price, premium, and underlying security or case settlement
- Recall the basics of tax implication and suitability regarding variable annuities and municipal fund securities
- Identify restricted uses of plan assets
- Recognize alternative investments such as exchange-traded funds (ETFs), hedge funds, real estate investment trusts (REITs), and direct participation plans (DPPs)
- Recognize the unique tax benefits of alternative investments
- Recall the language associated with the function of assisting issuers in raising capital
- Identify the federal regulations and SRO rules related to new issues
- Recognize how the economy affects the decision making process of issuers and investors
- Analyze how economic factors influence market participants through the level of interest rates, the outlook for inflation, relative currency valuation, and perceived trajectory of the economy
- Distinguish between the different types of risks, and how investors mitigate potential investment losses
Explain different types of orders, including market orders, limit orders, and stop orders

Explain how broker-dealers can execute securities trades as an agent versus a principal

Describe the actions that occur after a trade is executed and which transactions are cleared and settled

Define the various adjustments made to a client’s position after settlement

Recall the different account registrations (individual, joint, corporate, custodial, and retirement)

Explain the rules and regulations surrounding AML, AML compliance programs, monetary reports, and U.S. Treasury’s Office of Foreign Asset Control (OFAC)

Recall securities-related prohibited and illegal activities

Explain the different SRO registration categories, fingerprinting, statutory disqualification, and continuing education (CE) requirements

Recall how to register with FINRA and the requirements for updating FINRA of any relevant changes in an individual’s application

Student Learning Outcomes:

Recall features of the capital markets.
Analyze financial products and their risks.
Recall principles of securities trading, customer accounts, and prohibited activities.
Define the regulatory framework of the securities industry.

Hours
Total Hours
60.0

Introduction to Bitcoin and Digital Assets

VBUS161:

60.0 Hours

Provides an introduction to Bitcoin and other digital assets. An emphasis is placed on how they work, how they are obtained, and how to incorporate them into an investment plan.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Explain basic principles of the economy
Define money
Define debt
Define inflation
Explain the time value of money
Define an investment
Explain investment terminology
Recall the history and philosophy of the cypherpunks
Explain cryptography
Describe the work of Satoshi Nakamoto and the origin of Bitcoin
Define blockchain
Define Bitcoin
Define cryptocurrency
Describe Bitcoin mining
Explain proof of work
Describe how capital flows from fiat currency into Bitcoin
Identify the features of a cryptocurrency exchange
Explain the methods of storage for cryptocurrency
Recall the work of Vitalik Buterin and the creation of Ethereum
Define a smart contract
Compare and contrast proof of stake with proof of work
Explain how cryptocurrencies can be used to accomplish investment goals
Define an oracle
Recognize Decentralized Finance (DeFi) Protocols
Identify Tether and other stablecoins
Define risk and risk-adjusted return
Recognize nonfungible tokens (NFTs)

**Student Learning Outcomes:**

- Recall the features of Bitcoin
- Analyze a digital asset and explain how it functions.

**Hours**

**Total Hours**

60.0

**Introduction to Vector Graphics using Adobe Illustrator**

**VBUS242:**

60.0 Hours

Provides introductory instruction in computer graphics and design. Includes basic design concepts, use of illustration tools, and modification of art work and text layout. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

*VBUS119 - Introduction to Keyboarding and Basic Windows*

or equivalent

**Learning Outcomes**

**Course Objectives:**

Discuss Brief History of Illustrator

Explain Course Objectives

Attend Sessions Equipped With Required Materials

Manage Documents

Correct Mistakes

Save Documents
Customize Files
Practice the Toolbox
Arrange Documents
Magnify and Reduce with the Zoom Tools
Demonstrate effective use of artboards
Place Files
Practice Copy & Paste Between Documents
Create Paths
Practice Draw Tools
Demonstrate the Selection Tools
Utilize Edit Options
Create and modify shapes
Preview Work
Use Outline View
Explain Tools, Panels, Attributes, Overprint
Work with Object Layout
Demonstrate and Use Layers
Create Masks
Work with Appearance Panel
Work with Type & Submenus
Edit Type and Objects
Practice Transformation Tools
Choose the Blend Tool
Apply Filters
Create and modify Graphs
View Documents output appearance
Set Print Options
Convert Illustrator file to PDF and for the web

**Student Learning Outcomes:**
- Describe the difference between vector graphics and bitmap images, and the benefits and limitations of each type.
- Create and edit text, outline text, and perform simple vector graphics.
- Save, print, and output Illustrator files.

**Hours**

**Total Hours**

60.0

**Seminar in Business Applications**

**VBUS257:**

60.0 Hours
Explores and provides instruction in evolving standard software applications commonly used in business. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Provide a brief history of the pre-software technology, e.g., typewriters, fax machines, carbon paper, green bar paper, and general ledgers
Discuss different platforms, e.g., MS Windows/Mac OS
Operate word processors, spreadsheets and presentation applications
Summarize the differences between Windows vs. Mac operating systems
Identify the bundling of popular business applications, e.g., word processors, spreadsheets, email and/or desktop publishers, photo editing, web authoring, video editing
Create files using the operating systems file manager
Operate the two window structures of the manager, e.g. folder pane vs. file/content pane
Create folders and sub-folders (directories)
Expand/collapse folders to search for specific files
Organize files
Send/receive electronic mail and attach files to messages
Research and extract content from multiple online resources for the development of specific documents
Apply formatting and styles to text to improve appearance and readability for print
Generate reports integrating bar graphs and/or pie charts
Apply basic image editing, such as cropping and resizing of photos
Manipulate image for importing into other documents

Student Learning Outcomes:
Demonstrate proficiency navigating within a Windows environment.
Create basic documents.
Demonstrate essential file management skills to organize files.

Hours
Total Hours
60.0

Navigating the Internet
VBUS258:

36.0 Hours
Introduces students to the Internet. Topics include types of Internet connections, e-mail, research, and data retrieval techniques. Open Entry/Open Exit.

Requisites
Requisites:
None
Explain Brief History of the Internet and How it Works
Attend Sessions equipped with required materials
Recall Basic Internet/WWW Terminology
Apply Basic Internet/WWW Concepts
Demonstrate Knowledge of Internet Connections
Recognize the Purpose of WWW Browsers
Practice Browser’s Drop-Down Menus
Demonstrate Browser’s Main Features
Apply Browser’s Hypermedia Helper Applications
Execute an Electronic File Retrieval
Practice Online Research
Identify Search Utilities and Portals
Communicate with Web-Mail
Discuss Social Media
Explain Best Practices to Protect Personal Privacy and Maintain Security
Show where to change web browser security
Create Strong, Secure Passwords
Recognize Computer Infections
Recall How to Protect Computers
Explain Psychological Methods

**Student Learning Outcomes:**
- Perform simple to moderately complex web-based searches.
- Send and receive email including email with attachments.
- Describe the various types of Internet connections.
- Describe basic rules for safe Internet practices.

**Hours**

**Total Hours**
36.0

**Introduction to Word Processing using MS Word**

**VBUS260:**

60.0 Hours

This course provides instruction in concepts and techniques of Microsoft Word. Students will learn procedures of creating, editing, and formatting office/business documents of varying complexities. They will create business letters and tables, use mail merge, illustrate documents with graphics, and more. A passing grade may be awarded if a student completes and passes all the required assignments and final exam. Open Entry/Open Exit.

**Requisites**

**Advisory**

**VBUS119 - Introduction to Keyboarding and Basic Windows** or equivalent
Learning Outcomes
Course Objectives:
Identify Course Objectives
Recall the Difference Between Typing and Word Processing
Apply No “white-out”
Practice Window Commands, Tools, and Features to Create a Variety of Word Documents
Recall Purpose of the Status Bar
Operate Shortcuts
Select Printer, Choose Options, and Print
Apply Spanish accents
Module 1 Creating Documents with Word
Module 2 Editing Documents
Module 3 Formatting Text and Paragraphs
Module 4 Formatting Documents
Module 5 Creating and Formatting Tables
Module 6 Illustrating Documents with Graphics
Module 7 Working with Themes and Building Blocks
Module 8 Merging Word Documents

Student Learning Outcomes:
Create and edit simple to moderately complex text documents.
Save and print text documents.
Perform basic formatting of tables and insert graphics into text documents.

Hours
Total Hours
60.0

Introduction to Databases using MS Access
VBUS261:

60.0 Hours
Provides instruction in basic concepts addressing typical database problems with MS Access software. Open Entry/Open Exit.

Requisites
Advisory

VBUS119 - Introduction to Keyboarding and Basic Windows

or equivalent

Learning Outcomes
Course Objectives:
Enter and Revise Data
Demonstrate Microsoft Access Menus
Practice Functions and Algebraic Concepts in Field Definitions
Format Text
Set Up Calculation and Summary Fields
Use Options for Field Categories
View and Print Records
Practice the Sort Command
Create a Find Request
Develop Sort Criteria
Apply Database Concepts to Solve Typical Database Design Problems
Create and Format Layouts
Create and Format Reports
Use Sort Order for Summary Fields
Organize Information into Fields, Records, and Files
Incorporate Graphics into Layout
Use Multiple Requests
Use Following Modes of Operation; Browse, Find, Layout, Preview
Create and Save Files
Choose Find Symbols to Make Requests More Specific

**Student Learning Outcomes:**

- Create and edit a basic database and perform basic database searches and filters.
- Describe the difference between a database and spreadsheet application, such as MS Excel, and the benefits and limitations of each.
- Create and format layouts and reports from a database.

**Hours**

**Total Hours**

60.0

**Introduction to Spreadsheets using MS Excel**

**VBUS262:**

60.0 Hours

Provides students with instruction to spreadsheet concepts and software using Microsoft Office Excel. Students will learn how to create a worksheet, use formulas and functions, insert charts and tables, and more. A passing grade may be awarded if a student completes all the required assignments and passes the final exam. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

**VBUS119 - Introduction to Keyboarding and Basic Windows**

or equivalent

**Learning Outcomes**

**Course Objectives:**

Learn Spreadsheet Terminology

Apply Algebra Concepts
Apply Spreadsheet Menu Commands
Understand/Use Spreadsheet Interface
Recognize Formula bar
View Status bar
Enter numbers and text
Enter formulas
Use Predefined Functions: SUM, AVERAGE, MIN, MAX, PMT
Practice cut, copy, paste, paste special
Format Cells
Generate and format Reports
Prepare for printing single or multiple pages and maintain headings
Create Data Tables
Apply Absolute and Relative Notations
Practice data sort
Apply data filter
Module 1 Getting Started with Excel
Module 2 Working with Formulas and Functions
Module 3 Formatting a Worksheet
Module 4 Working with Charts
Module 5 Analyzing Data Using Formulas
Module 6 Managing Workbook Data
Module 7 Managing Data Using Tables
Module 8 Analyzing Table Data
Organize Information into Fields, Records, and Files
Use Options for Field Categories
Set Up Calculation and Summary Fields
Practice Functions and Algebraic Concepts in Field Definitions
Create and Save Files
Demonstrate Microsoft Access Menus
Use Following Modes of Operation; Browse, Find, Layout, Preview
Enter and Revise Data
View and Print Records
Create and Format Layouts
Create and Format Reports
Format Text
Incorporate Graphics into Layout
Practice and Sort Command
Develop Sort Criteria
Use Sort Order for Summary Fields
Create a Find Request
Use Multiple Request
Choose Find Symbols to Make Requests More Specific
Apply Database Concepts to Solve Typical Database Design Problems

Student Learning Outcomes:
- Create, edit, save, and print simple spreadsheets.
- Organize, format, and sort data in an Excel spreadsheet.
- Prepare spreadsheets for printing using the “Page Setup” options.

Hours
Total Hours
60.0

Introduction to Web Page Development using HTML
VBUS302:

60.0 Hours
Provides introductory instruction to web page development. Topics include web page design elements: HTML; graphic images, movie and sound formats; and testing pages on cross platforms.Open Entry/Open Exit.

Requisites
Requisites:
Advisory
VBUS119 - Introduction to Keyboarding and Basic Windows
or equivalent

Learning Outcomes
Course Objectives:
Explain Brief Introduction to Web Page Development
Identify Course Objectives
Attend Sessions Equipped with Required Materials
Recite Basic Web Page Development Terminology
Recall Basic Web Page Development Concepts
Use Web Page Design Elements
Develop HTML
Create Cascading Style Sheets
Utilize Graphic Image Formats & Sizes Related to Styles & Image Content
Work with Movie Formats
Practice with Sound Formats
Create Forms
Discuss Shopping Cart Systems
Examine Online purchasing
Secure servers

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6eb18
View samples using PayPal

**Student Learning Outcomes:**
- Hard code simple HTML pages including ordered and unordered lists, basic character formatting, etc.
- Insert graphics and other non-text elements in an HTML page.
- Test web page designs on multiple browsers.
- Describe how to build and upload a simple website with multiple linked pages.

**Hours**

**Total Hours**

60.0

**Introduction to Electronic Imaging using Adobe Photoshop**

**VBUS303:**

60.0 Hours

Provides introductory instruction to electronic imaging using Adobe Photoshop software. Topics include beginning Photoshop features, scanner basics, image and file formats, color, importing/exporting of files, and printing. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

**VBUS119 - Introduction to Keyboarding and Basic Windows**

or equivalent

**Learning Outcomes**

**Course Objectives:**
- Explain Brief History of Image Editing
- Recall Course Objectives
- Attend Sessions Equipped with Required Materials
- Recite Basic Image Editing Terminology
- Apply Basic Image Editing Concepts
- Identify Bridge Basics
- View Drop-Down Menus
- Utilize Photoshop's Basic Features
- Scan Photographs from within Photoshop
- Crop
- Adjust image sizes
- Adjust resolution
- Work with black and white photos
- Work with color photos
- Work with Adobe Camera RAW
- Utilize Photoshop's Selection Tools
- Modify Selections
- Utilize scaling/sizing
- Utilize filter
Student Learning Outcomes:

- Implement the basic image editing workflow from image acquisition to output.
- Properly prepare any source image file for different output media (e.g., print, web, email, etc.).
- Produce images for their unique business application by using the tools and creative techniques available through Photoshop's toolbar and menu options.

Hours

Total Hours

60.0

Introduction to Electronic Presentations using MS PowerPoint

VBUS304:

60.0 Hours

Provides introductory instruction for development of professional quality, computer-generated presentations using presentation software used in industry. Includes concepts of combining text, graphics, animations and/or sound to create slides for electronic output. Open Entry/Open Exit.

Requisites

Requisites:

Advisory

VBUS119 - Introduction to Keyboarding and Basic Windows

or equivalent

Learning Outcomes

Course Objectives:
Add/edit (revise, cut, paste, etc.)
Work with Views
Insert Graphics
Print as outline or presenter notes
Attend Sessions Equipped with Required Materials
Enter & Format Text
Format text (font, style, etc.)
Explain Presentation Software and its Use Today
Display and/or Print Presentations
Display slide shows
Apply Basic Presentation Software Concepts
Enhance Slide Shows
Explain Basic Presentation Software Design
Identify Course Objectives
Insert Bullets
Become Familiar with the Contents of the Window
Apply Color

**Student Learning Outcomes:**
- Create and edit a PowerPoint presentation utilizing text and images.
- Format slide backgrounds or apply template designs to existing slides.
- Save, package, and output finished presentations for delivery.
- Print slides, handouts, and notes.

**Hours**

**Total Hours**
60.0

**Fundamentals of Commercial Sewing**

**VCLTH477:**

180.0 Hours

Provides instruction in commercial sewing including the selection of textiles, thread, and needle size appropriate to each item to be sewn or manufactured. Provides in-depth study of design, pattern making, construction, and quality control aspects of manufacturing. Open Entry/Open Exit.

**Requisites**

**Requisites:**

*Advisory*

[VCLTH483 - Introduction to Commercial Sewing](#)

or instructor's approval by assessment

**Learning Outcomes**

**Course Objectives:**

- Apply sleeve techniques
- Identify course objectives
Illustrate seam repairs
Create covered picture frames
Demonstrate sewing techniques
Practice patching techniques
Demonstrate the different techniques and construction of darts, pleats, and gathers
Assemble doll clothes
Apply collar techniques
Identify the different qualities and requirements for a wide variety of textiles including knits, flannel, vinyl, canvas, denim, and synthetics.
Practice turned pointed corners
Apply zipper techniques
Describe the principles of fabric selection
Practice mending techniques
Assemble facings and interfaces for elastic, and draw-string waistline treatments
Apply measuring techniques
Demonstrate the different techniques and construction of plain, French, and flat-felled seams
Practice neckline finishes, including facings and bias binding
Construction techniques for stuffed toys
Construct dressmaker set-in sleeves including preparation of the sleeve and easing to fit armhole
Apply embroidery techniques
Practice cutting techniques

Student Learning Outcomes:
- Complete a sewing project using skills and techniques learned in class.
- Evaluate and identify the work needed to repair a garment.

Hours
Total Hours
180.0

Introduction to Commercial Sewing
VCLTH483:

160.0 Hours
Introduces basic commercial sewing skills, including safe operation of equipment, sewing terminology, use of patterns, fabric cutting, garment construction, and repair. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
- Demonstrate cutting machine safety
- Identify sewing machine parts and their functions
- Apply single unit layout
Demonstrate construction techniques
Apply facings and interfaces
Apply threading techniques
Identify basic sewing techniques and terms
Apply patching
Design doll clothes
Demonstrate garment repairs
Apply buttonholes
Create table coverings
Apply adjustments
Apply collar and interfacing
Practice measuring
Apply upholstery techniques
Employ machine operation
Apply embroidery
Create stuffed toy project
Assess garment for needed repairs
Apply sleeves
Apply zippers
Assemble pillows
Discuss and identify various types of employment available in the textile and fashion industries
Practice fabric measuring and pattern layout
Select appropriate fabrics
Demonstrate care and use of equipment
Apply proper pressing techniques
Apply seam repairs
Apply mending
Practice cutting
Employ waistline treatment
Employ neckline finishes
Set up repair materials
Demonstrate shop safety procedures
Apply seam and seam finishes
Apply sleeves
Apply fastenings
Practice sewing
Apply step by step instruction
Demonstrate Alterations
Identify sewing methods for specific fabrics such as knits, flannel, vinyl and canvas, denim, and synthetics

Apply buttons – replacing

Apply collars

Identify course objectives

Create darts, pleats and gathers

Discuss and define the important developments in the history of fashion

Construct drapes

Identify pattern marking

Employ patch pocket construction

**Student Learning Outcomes:**
- Identify the vocabulary and terminology of a sewing machine and types of seams used in the construction of a garment.
- Select proper materials and seam finishes to construct and complete a garment.

**Hours**

**Total Hours**

160.0

**Introduction to Welding, Pre-Apprentice**

**VCNST608:**

180.0 Hours

Introduces welding safety, proper use of hand and power tools, and the basics of arc welding. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**
- Identify the course objectives
- Apply flat fillet welding techniques
- Describe and demonstrate basic shop safety techniques
- Apply basic arc welding techniques
- Discuss and demonstrate Arc welding safety

**Student Learning Outcomes:**
- Demonstrate safe use of tools and equipment for welding
- Select the correct tool or equipment to use for the welding project

**Hours**

**Total Hours**

180.0

**Fundamentals of Welding, Pre-Apprentice**

**VCNST611:**

180.0 Hours
Provides basic instruction and training in Arc welding, Tungsten Inert Gas welding (TIG), and Metal Inert Gas welding (MIG). Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

VCNST608 - Introduction to Welding, Pre-Apprentice

or instructor's approval by assessment

**Learning Outcomes**

**Course Objectives:**

Demonstrate and apply basic overhead fillet weld

Recognize and follow TIG welding machinery safety practices

Recognize, identify, and follow required Arc welding safety practices

Identify course objectives

Recognize and follow industry safety practices with MIG welding equipment

Demonstrate and apply basic vertical fillet weld

Recognize the cause of MIG weld defects and how to correct them

Identify the parts of the MIG welding machinery

Execute a basic TIG flat butt weld

Identify the parts of the TIG welding machinery

Know the difference between the three distinctive process techniques in MIG welding and be able to demonstrate each technique

**Student Learning Outcomes:**

- Demonstrate satisfactory Arc, TIG, and MIG welds.
- Select the correct and proper technique needed for Arc, TIG, or MIG welds.

**Hours**

**Total Hours**

180.0

**Introduction to Cabinetry/Furniture Refinishing Pre-Apprentice**

VCNST859:

180.0 Hours

Provides introductory instruction in workshop safety and basic use of tools and power equipment, cabinet design, construction principles, and the use of finishes on common types of woods and cabinets. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Identify the various properties of different woods

Identify course objectives

Demonstrate and apply finishes with brushes and sprays

 Demonstrate appropriate selection and use of patching materials and wood fillers
Identify basic principles used in the preparation of wood surfaces for finishing
Describe and apply adhesives and clamping techniques
Describe the finishing processes
Discuss, design, and construct table and cabinet top
Discuss and apply molding, detail, and cabinet preparation
Discuss and identify basic principles of selection and the use of stains, bleaches, and oil finishes
Select the appropriate wood for a project
Describe and apply squaring
Discuss and demonstrate general safety techniques around equipment
Discuss, identify, and practice industrial safety standards for power and hand tools used in carpentry

**Student Learning Outcomes:**
- Demonstrate proper, safe, and effective use of tools and power equipment.
- Design and construct a project using a choice of woods and finishes.

**Hours**

**Total Hours**

180.0

**Fundamentals of Cabinetry/Furniture Refinishing, Pre-Apprentice**

**VCNST953:**

180.0 Hours

Provides instruction in basic cabinetry/furniture construction, refinishing and repair with an emphasis on the use of hand and power tools. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

VCNST859 - Introduction to Cabinetry/Furniture Refinishing Pre-Apprentice

or instructor's approval by assessment

**Learning Outcomes**

**Course Objectives:**
Practice and apply using applications that involve clamps and adhesives on woodwork and cabinet work
Develop and practice safe and proper operation of machines and tools
Practice and apply squaring woodwork and cabinet work
Prepare molding and apply cabinet work detailing
Design layout and construct cabinet tabletop

Identify course objectives

Master and demonstrate proper and safe use of basic finish applications

**Student Learning Outcomes:**
- Demonstrate the proper operation of basic equipment and machines used in cabinet construction.
- Demonstrate knowledge of the proper and safe use of refinishing materials.

**Hours**
Total Hours
180.0

Custodial Technician
VCST101:

60.0 Hours

Prepares students for employment in custodial services. This course provides essential training for custodial work in a private and public facility. Students will learn safety standards set by California’s Occupational Safety and Health Administration (Cal-OSHA), proper usage and maintenance of tools, and general maintenance procedures. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Create a maintenance schedule

Inspection of equipment

Identify bloodborne pathogens

Review and discuss prevention of slips, trips, and falls

Discuss carelessness and repetition

Distinguish between efficiency and productivity

Review Cal-OSHA history and mission statement

Review cleaning tile wall procedures

Review of student learning outcomes

Explain proper techniques in making beds

Identify proper footwear

Employ ladder and lifting safety

Application of proper training

Distinguish between safety and illness

Review of course objectives

Identify alternating scrubbing patterns

Practice mopping and wringing of mops

Locate the right equipment

Identify problems and risks at the workplace

Recognize body linguistics

Review high dusting/wiping

Review and apply emergency procedures

Recognize health hazards of chemicals

Describe citations and penalties

Employ lifting and emptying garbage from a receptacle
Summarize rights and responsibilities of employer and employee under Cal-OSHA

Recognize a safe and healthful workplace

Recognize proper usage of hand tools

Describe sweeping techniques

Review of student syllabus

Explain proper moving of furniture, barrels, and carts

Recognize the need of Cal-OSHA assistance

Explain and practice lifting and maneuvering soiled linen

Report hazardous conditions

Discuss and employ carrying and emptying mop buckets

Describe the use of Personal Protective Equipment (PPE)

Identify proper housekeeping standards

Recognize and employ filing of complaints

Maintain mops, buckets, buffers and polishers

Review the importance of California's Occupational Safety and Health Administration (Cal-OSHA) standards at the workplace.

Demonstrate effective communication

**Student Learning Outcomes:**

- Describe the safe use of tools and equipment for custodial procedures.
- Identify the correct tool or equipment to be used in a specified area.

**Hours**

**Total Hours**

60.0

**Basic Hazmat Safety Standards**

**VCST102:**

36.0 Hours

Prepares students for basic training of hazardous materials. Topics include labeling, packaging, identifying and handling of hazardous materials. Students will learn basic Department Of Transportation (DOT) HAZMAT safety standards set by California’s Occupational Safety and Health Administration (Cal-OSHA). Open Entry/Open Exit.

**Requisites**

**Requisites:**

*Advisory*

VCST101 - Custodial Technician

or equivalent

**Learning Outcomes**

**Course Objectives:**

- Identify health hazards of chemicals
- Recognize the standards of a safe and healthful workplace
- Recognize authorized packaging groups
- Employ segregation of stored products
Define corrosive, flammable, and combustible types of chemicals

Review effective communication of hazardous conditions

Recognize security awareness and risks

Distinguish package contents

Translate the hazard class placards or division numbers

Practice specific function trainings

Apply general awareness requirements

Identify DOT regulations and compliance

Recognize hazardous materials

Recognize civil penalties

Identify the proper shipping papers

Recognize the identification numbers and markings

Identify the safe operation of a motor vehicle

Identify rights and responsibilities of employer and employee under DOT HAZMAT/Cal-OSHA

Summarize special provisions

Recognize symbols for transporting

Review student learning outcomes

Recall the 6 hazardous materials table symbols

Seek Cal-OSHA assistance when applicable

Record an emergency phone number plan

Recognize assigned International (UN), Domestic (NA) and Identification (ID) identifiers

Maintain emergency incident information

Identify general hazardous classifications

Select the measured quantity of chemical

Identify the mildest degree of the hazard (Group 3 - Mild Danger)

Define the medium degree of the hazard (Group 2 - Medium Danger)

Identify safety and health risks

Identify shipping material for transportation

Assess the methods of security training

Review course objectives

Recall package testing types

Classify categories of chemicals

Identify citations and penalties derived from inspections

Discuss cleaning and maintenance training methods

Review safe handling use of chemicals

Review the importance of Department of Transportation (DOT) HAZMAT/California's Occupational Safety and Health Administration (Cal-OSHA) standards in the workplace

Create a comprehensive emergency response plan

https://sccollege.elumenapp.com/catalog/all-pages/4a0df669-0f6e-1-4cb-b0e7-d321afa6eb18
Identify loading restrictions
Employ safe emergency procedures
Select the proper shipping labels
Inspect maintenance equipment
Select and classify performance oriented hazards
Recognize and employ filing of complaints
Identify packing groups
Summarize safe methods of travel
Review DOT HAZMAT/Cal-OSHA history and mission statement
Recognize the greatest severity of the hazard (Group 1 - Great Danger)
Review student syllabus
Review combination packaging

**Student Learning Outcomes:**
- Identify the basic hazmat hazard classifications.
- Demonstrate proficiency in the use of markings, labels, and placards.
- Recognize proper sequencing in completing shipping paperwork for hazardous materials.

**Hours**

**Total Hours**
36.0

**Concepts in Dog Training**

**VDOG020:**

12.0 Hours

Provides an introduction to basic concepts of dog training, including proper techniques to socialize shelter dogs for placement in private homes. Emphasizes techniques for training animals to perform specific tasks or improve obedience. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Describe the dog's basic needs, love, structure, guidance, food, water, and shelter
- Describe both canine and human personality traits and explain the importance of matching them in the training experience
- Identify course objectives
- List and demonstrate the levels of distraction and techniques to resolve them
- Demonstrate an understanding of the difference between positive reinforcement and aversion techniques
- Demonstrate the elements of basic grooming for dogs
- Identify canine critical fear periods
- Recognize both canine and human body language and communication
- Explain the importance of play and the relationship with the dog being trained
- Apply specific methods to alleviate stress in the dog
Identify the resistance in training and demonstrate techniques to resolve them

Explain the importance of exercise for dogs

Identify and be able to explain the various training techniques of luring, catching, prompting, and chaining

Describe and demonstrate the three basic canine motivators and their use

Recognize undesirable behaviors and identify how to deal with them

Demonstrate correct use of “tools” such as leash, collar, treats, and voice

Demonstrate an understanding of classical and operant conditioning

Demonstrate an understanding of canine stages of development

Identify the elements of veterinary wellness

Student Learning Outcomes:

- Demonstrate basic knowledge of canine stages of development and basic animal care.
- Demonstrate understanding of the core concepts and strategies of dog training.

Hours

Total Hours

12.0

Practical Dog Training

VDOG030:

36.0 Hours

Applies the concepts of dog training to the actual training of a shelter dog preparing it for adoption in a family home. Open Entry/Open Exit.

Requisites

Requisites:

None

Learning Outcomes

Course Objectives:

- Identify course objectives
- Discuss and demonstrate dog grooming and feeding skills
- Practice and demonstrate with dog to recognize and respond to its name
- Demonstrate the basic dog commands in progression; Sit, Down, Stay, Wait, Stand, Place, Come, Recall, Leave it, Take it, and Off
- Identify and demonstrate handling skills for good behavior, wellness and discuss veterinary exams
- Practice and demonstrate with dog to walk on a loose leash or harness
- Discuss and demonstrate crate training of dogs
- Practice and demonstrate with dog to walk calm and relaxed with no pulling
- Practice and demonstrate in training groups - exercises and tricks with the dogs

Student Learning Outcomes:

- Demonstrate mastery of canine handling and training skills.
- Work on a team to care for and train a shelter dog.

Hours

Total Hours
Food Handler Test Preparation
VFOOD005:

36.0 Hours

This course prepares students for employment in commercial and institutional food kitchens. Includes employee terminology, responsibilities, and training when preparing, handling, and serving food to the public. The course covers six key areas; basic food safety, good personal hygiene, controlling time and temperature, preventing cross-contamination, cleaning and sanitizing, and detailed food industry safety guidelines. Prepares the students for ServSafe Food Handler Certification. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Recognize how to keep food safe through dishwashing.

Practice use and storage of cleaning tools and supplies, and how to ensure sanitizers are effective.

Distinguish how to set up and use a three compartment sink.

Illustrate handling garbage, and how to spot pests like rodents and cockroaches.

What to do if cross-contact happens

Setting up and using a three-compartment sinks

Recognize food most likely to become unsafe.

Demonstrate how to measure the temperature, holding, and, storing of TCS food.

Cooking and holding TCS food

Demonstrate how and when to clean and sanitize surfaces.

Identify what to do if cross-contamination happens.

Describe how to clean, maintain, and wash items in the dishwasher.

How to keep customers with food allergies and safe from reactions.

Recognize your role in keeping food safe: biological, chemical, physical

Evaluate hands and nails and what to wear: hair covering, clothing, aprons, jewelry.

Identify where to wash your hands, use of the hand washing sink and stocked items.

Recognize what to do for people who have food allergies and reactions.

Storing, thawing, and prepping TCS food

Illustrate how to be sure the food you receive is safe, and the safe way to thaw, prep, cook, cool, and reheat TCS food.

Cleaning and maintaining dishwasher

The most common food allergens.

Demonstrate keeping food safe through the; practice good personal hygiene, control the time and temperature of food, prevent cross-contamination, cleaning and sanitizing correctly, approved reputable suppliers

Examine cross contamination when storing, serving, in self service areas, and when storing utensils and equipment.

Practice other hand care guidelines, by applying the use of gloves the right way.

How to be sure the food you receive is safe
Explain other important practices of where to: eat, drink, smoke, chew gum, tobacco

Demonstrate the right way to calibrate a thermometer.

Apply how to prep food safely.

Distinguish how and when to wash your hands illustrate: how to wash your hands, after washing your hands, using hand antiseptics

Washing items in the dishwasher

How to keep food safe through dishwashing

Identify how people make food become unsafe, and describe contamination hazards from the environment.

Describe what to do if you are sick.

**Student Learning Outcomes:**

- Identify and interpret Time Temperature Control when cooking, holding, cooling, and reheating.
- Demonstrate knowledge to successfully pass Servsafe Food Handler Exam.
- Demonstrate Personal Hygiene to Eliminate Contamination, Cross-Contamination and Distinguish Cleaning and Sanitizing.
- Identify Food Safety and Prevent Foodborne Illness.

**Hours**

**Total Hours**

36.0

**Food Service Manager Test Preparation**

**VFOOD010:**

0.0 Units

Prepares students for employment in commercial and institutional food kitchens. Topics include an introduction to basic food service administration, personal hygiene and food safety/sanitation, storage, terminology, equipment, food service math and science, nutrition, procedures, and employment preparation. Prepares students for the ServSafe® Food Protection Manager Certification. Open Entry/Open Exit.

**Requisites**

None

**Transferability & General Education Options**

Transferable:

Not transferable

**Learning Outcomes**

**Course Objectives:**

- Discuss storage guidelines
- Apply dishwashing methods
- Discuss hazards in the flow of food
- Describe safe cleaners and factors that affect the type and condition of the dirt
- Locate and operate utilities
- Explain off-site service
- Review and identify government agencies who prevent foodborne illnesses
- Recognize and respond to foodborne-illness outbreak
- Recognize foodborne illnesses and challenges to food safety
Identify pathogens and how contamination occurs

Recognize and respond to foodborne-illness outbreak implementing a Hazard Analysis Critical Control Point (HACCP)

Discuss and apply food preparation general practices

Develop a cleaning program

Evaluate general inspection guidelines

Create and employ food safety management systems

Design an integrated pest management (IPM) program

Review Food Drug Administration (FDA) recommendations for controlling common risk factors for foodborne illness

Identify and organize self service area

Identify how food becomes unsafe and how TCS foods become unsafe

Design and employ a safe operation

Discuss biological toxins

Report health issues, watch and report staff illness and restrict or exclude staff for medical conditions

Explain specific food storage requirements and guidelines

Discuss and apply sanitizing, heat, chemical, and sanitizer effectiveness

Review and apply serving food safely and service staff guidelines

Describe how foodborne illnesses occur and contaminate

Explain the food safety responsibility of a manager

Identify fungi, mold, and yeast

Define general cooking guidelines

Identify evidence of pests and work with a pest control operator (PCO)

Discuss and demonstrate holding food for service and review general rules for holding food

Apply key practices to ensure food safety

Recognize major foodborne bacteria

Explain cooling and reheating processes

Describe chemical, physical, and deliberate contamination of food

Identify minimum internal cooking temperatures

Explain cleaning the premises

Categorize parasite characteristics and major foodborne illnesses caused by parasites

Identify and monitor time and temperature

Examine other areas of the facility

Practice inspecting different types of food

Analyze and assess purchasing and receiving guidelines

Classify viruses and general information about viruses

Review and discuss active managerial control

Apply a good personal hygiene program, corrective action, and hand antiseptics

Distinguish bacteria and general information about bacteria

**Student Learning Outcomes:**
Describe principles of safe-food handling.
Prepare for the ServSafe® Food Protection Manager Certification.

Units & Hours

Total Hours
72.0

Overview of the Nursing Assistant Training Program
VMED010:

10.0 Hours

This course is designed to provide an introduction to the clinical and theoretical requirements for the Certified Nursing Assistant (CNA) Training Program. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Explain the certification requirements, including the minimum number of hours of instruction needed
Create a portfolio that includes all preparatory work for the CNA program
Demonstrate how to complete forms required by the California Department of Health

Student Learning Outcomes:
Identify the clinical and theoretical requirements for the Certified Nursing Assistant (CNA) designation
Create a portfolio of all completed assignments related to the Nursing Assistant Training Program

Hours

Total Hours
10.0

Certified Nursing Assistant (CNA) Training
VMED011:

160.0 Hours

Designed for students who want to become Certified Nursing Assistants (CNA), this course includes theory and clinical segments designed to prepare them to complete the CNA certification and potentially seek employment as entry-level healthcare assistants. Upon completion, the student will be prepared to take the California certification exam. Students must complete all lecture hours and clinical training hours to be eligible to take the certification exam. Open Entry/Open Exit.

Requisites

Requisites:
Advisory
VMED010 - Overview of the Nursing Assistant Training Program

Learning Outcomes

Course Objectives:
Demonstrate skills involved in providing care for patients
Identify the procedures for rehabilitative nursing, including range of motion exercises, assisting the resident to ambulate with gait belt, walker, cane and other rehabilitative devices
Demonstrate methods of observation and charting

Explain syllabus, SLOs, lecture and clinical requirements, California certification requirements for the Certified Nursing Assistant (CNA) designation

Demonstrate the correct procedures for maintaining residents' rights

Explain the process of death and dying

Demonstrate emergency procedures including the Heimlich maneuver in conscious and unconscious resident

List the procedures for prevention and management of a catastrophic occurrence

Explain the mechanics of the human body

Perform correct procedures for obtaining measures and weights

Explain communication strategies in the context of a healthcare setting

Define patients' rights

Demonstrate patient care procedures

List the principles of nutrition

Explain methods of care for long-term patients

Demonstrate how to practice medical and surgical asepsis

Measure and record the vital signs

**Student Learning Outcomes:**

- Demonstrate the skills involved in providing appropriate care for patients.
- Explain the procedures involved in providing patient care under the direction of a nurse.

**Hours**

**Total Hours**

160.0

**Overview of the Medical Assistant Training Program**

**VMED020:**

10.0 Hours

Designed for students interested in becoming medical assistants, this course provides an overview of the areas of study in the medical assistant training program, including medical terminology, body systems, human diseases, clinical procedures, microbiology and surgical assisting. An emphasis is placed on the required coursework to take the exam to become a Registered Medical Assistant (RMA). Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Describe the certification requirements and the sequence of courses
- Describe pathology and oncology
- List common clinical procedures
- Identify the procedures involved in surgical assisting and microbiology
- Explain the role of the medical assistant in regard to various business procedures
- Identify the various body systems
Apply basic techniques of medical word building

Recognize the requirements for a medical assistant externship and the application process for employment

**Student Learning Outcomes:**

- Identify the clinical and theoretical requirements for the Registered Medical Assistant (RMA) designation.
- Create a portfolio of all completed assignments related to preparation for the Registered Medical Assistant (RMA) designation.

**Hours**

**Total Hours**

10.0

**Medical Terminology for Medical Assistants**

**VMED021:**

60.0 Hours

Designed for students interested in becoming medical assistants, this course is an introduction to medical terminology, including the techniques of medical word building using basic word elements. Topics include: major suffixes in the surgical, diagnostic, symptomatic groups and related suffixes; suffixes denoting adjective, noun, singular and plural forms of medical words; major prefixes denoting position, number and measurement, negation, direction and anatomical, physiological and pathological terms. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

**VMED020 - Overview of the Medical Assistant Training Program**

**Learning Outcomes**

**Course Objectives:**

- Identify the structures and functions of the eyes and ears
- Identify and interpret the elements of the muscular system
- List the major organs of the urinary system and their functions
- Identify the major components of the cardiovascular system and the medical terms associated with their functions
- List and define the components of the integumentary system
- Distinguish between the four elements of medical terms (roots, suffixes, prefixes, and combining forms)
- Recognize the major organs of the male and female reproductive systems and describe their functions
- Define the terms associated with the structures and functions of the lymphatic system
- Define dermatology
- Explain syllabus and SLOs
- Identify the levels of body organization
- Explain the major structures and functions of the skeletal system and associated terminology
- Recall the functions of the digestive system and its accessory organs
- Identify and define commonly used prefixes and suffixes; accurately pronounce and spell them
- Name the major parts of the respiratory system and describe the functions of each part
- Name the major parts of the nervous system and describe their functions
- Identify and describe elements of the endocrine system

**Student Learning Outcomes:**
Describe how medical words are formed.
Define the levels of organization in the human body.

Hours

Total Hours

60.0

Business Procedures for Medical Assistants

VMED022:

180.0 Hours

Designed for students interested in becoming medical assistants, this course covers the role of communications, ethics, health insurance, pharmacology, bookkeeping/records, office management, personal organization (supplies, equipment use and maintenance, mail/postage), ergonomics, and safety factors. Open Entry/Open Exit.

Requisites

Requisites:

Advisory

VMED020 - Overview of the Medical Assistant Training Program

Learning Outcomes

Course Objectives:

Explain the syllabus and SLOs

Explain how to demonstrate professionalism

List the educational pathways for becoming a health care worker

Outline the patient education process

Outline the Healthcare Common Procedural Coding System

Recall various types of medications and their uses

Demonstrate the use of appointment scheduling systems

Explain the principles of effective medical office management

Summarize government and legislative regulation

Identify members of the health care team

Analyze the basic flow of communication

Demonstrate how to create and maintain a professional presence

Describe the relationship between coding and reimbursement

Explain the health benefits plans

Evaluate methods of collecting medical fees

Demonstrate correct use of computer and electronic applications

Demonstrate methods for the accounting of receivables and daily bookkeeping

Summarize the Health Insurance Portability and Accountability Act of 1996

Explain the guidelines for producing professional and medical documents

Summarize the history of medicine and medical assisting

Student Learning Outcomes:

Demonstrate proper techniques for communicating with new and established patients
Explain the principles of health insurance, including how it works, eligibility factors, and billing procedures
Demonstrate effective bookkeeping procedures and organization of a medical office

Hours
Total Hours
180.0

Body Systems for Medical Assistants
VMED023:

60.0 Hours

Designed for students interested in becoming medical assistants, this course covers the systems of the human body. Students will learn about cell structure and special senses, the endocrine system, the skeletal system, the muscular system, the integumentary system, the circulatory system, the respiratory system, the nervous system, the digestive system, the urinary and the reproductive systems. Open Entry/Open Exit.

Requisites
Requisites:
Advisory

VMED020 - Overview of the Medical Assistant Training Program

Learning Outcomes
Course Objectives:
Describe fertilization and the early development of the fertilized egg
Describe the structure and function of the brain and cranial nerves
Explain the structure and function of the male and female reproductive systems
Differentiate between catabolism and anabolism
Outline the organization of the nervous system according to structure and function
Describe the organs of the urinary system and name the functions of each
Describe the structure and function of the sensory system
Explain the functions of the lymphatic system
Compare the effects of the nervous system and the endocrine system in controlling the body
Describe the structure and function of blood
Describe the tissue layers of the heart wall
Name the main functions of the digestive system
Explain the syllabus and SLOs
Analyze the structure and function of bones and joints
Analyze the structure and function of muscles
Define respiration and describe the phases of respiration
Analyze the organization of the human body
Differentiate among the five types of blood vessels with regard to structure and function
Name the main groups of tissues and give the location and general characteristics of each

Student Learning Outcomes:
Identify and describe the structure and function of the organ systems of the human body
Identify and describe the characteristics of human cells and tissues
Hours

Total Hours
60.0

Human Diseases and Disorders for Medical Assistants
VMED024:

6.0 Hours

Designed for students interested in becoming medical assistants, this course is an overview of human diseases. It covers pathology and oncology, diseases of the eyes/ears, skeletal system diseases and disorders, muscular system diseases and disorders, endocrine diseases and disorders, skin diseases, diseases of the blood and immune systems, respiratory diseases and disorders, neurological disorders, gastrointestinal disorders, diseases of the urinary system and disorders of the reproductive systems. Open Entry/Open Exit.

Requisites

Requisites:
Advisory

VMED020 - Overview of the Medical Assistant Training Program

Learning Outcomes

Course Objectives:

Identify common nervous system disorders
List and define common disorders associated with the endocrine system

List and describe common respiratory disorders

Outline the principles of medical compliance and mental health in the older adult

List and describe common urinary disorders

Provide an overview of the syllabus and SLOs

List and describe disorders of the musculoskeletal system

List and describe common gastrointestinal disorders

List and define disorders associated with the eye, ear, nose and throat

Student Learning Outcomes:
Name and describe various types of diseases and disorders related to cell growth.
Name and identify diseases and disorders of the human body.

**Hours**

**Total Hours**

60.0

**Clinical Procedures for Medical Assistants VMED025:**

120.0 Hours

Designed for students interested in becoming medical assistants, this course provides an introduction to clinical procedures. Students will learn how to perform the following procedures: complete physical examinations (CPX), eye and ear lavages, bandaging and wound care, handling emergencies using mobility assisting devices, electrocardiography and mounting the results record, cardiopulmonary resuscitation (CPR), pulmonary function tests, hemoglobin and glucose testing, and taking throat cultures. Students will also learn how to use clinical charting abbreviations, universal precautions and sterile techniques, assist with pap and pelvic examinations, perform pregnancy tests, set up rectal trays, assist with pediatrics, and prepare special diets. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

VMED020 - Overview of the Medical Assistant Training Program

**Learning Outcomes**

**Course Objectives:**

Demonstrate practices of wound care, bandaging and dressing

Demonstrate correct urinalysis laboratory practices and patient communication

Demonstrate how to perform an eye lavage

Demonstrate how to operate an EKG

Demonstrate how to mount an EKG

Explain syllabus and SLOs

Demonstrate correct documentation of a patient chart, charting and documentation/evaluation of a medical record, and evaluation of universal precautions

Demonstrate the correct methods of venipuncture and universal precautions

Demonstrate how to perform an ear lavage

Demonstrate how to perform a hearing acuity test

Demonstrate how to measure vital signs

Summarize the hematocrit and correct documentation/laboratory techniques

Demonstrate correct patient positioning, draping, and documentation

Demonstrate appropriate patient communication skills and evaluate privileged communication

Outline the study of hematology

Demonstrate the correct use of syringes and needles, and perform drug dosage calculations

Demonstrate how to perform correct drug dosage calculations

Demonstrate how to use a Snellen chart and how to perform an Ishihara Test

Provide an overview of the UA laboratory, documentation of medical records, and urinalysis documentation
Demonstrate correct injection techniques

**Student Learning Outcomes:**

- Demonstrate how to provide wound care, using bandages and dressings.
- Perform correct calculations for drug dosages.
- Perform correct patient charting and documentation/evaluation of a medical record.

**Hours**

**Total Hours**

120.0

**Surgical Assisting for Medical Assistants**

**VMED026:**

90.0 Hours

Designed for students interested in becoming medical assistants, this course is a hands-on experience covering the following topics: using various methods to achieve asepsis to control growth of microbes, performing strep tests and throat cultures including instructions for culture and sensitivity, obtaining specimens, using a microscope and other medical office instruments, identifying surgical instruments and their uses, sanitizing and disinfecting surgical instruments with special emphasis on autoclaving, setting up sterile trays for minor office surgeries, surgical assisting, scrubbing and gloving, preparing the skin, preparing the patient. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

[VMED020 - Overview of the Medical Assistant Training Program](#)

**Learning Outcomes**

**Course Objectives:**

- List and describe the medical assistant’s responsibilities in the hematology laboratory
- Identify applications of clinical chemistry
- Explain how to perform and interpret hematologic tests
- Explain the principles and practices of surgical asepsis
- Summarize the use of the blood drawing station
- List and describe the laboratory personnel and the medical assistant’s responsibility in the clinical laboratory
- Demonstrate how to prepare and maintain a sterile field
- Explain the methods of medication administration
- Explain the responsibilities of the medical assistant in the chemistry laboratory
- Explain the structure and function of blood
- Demonstrate the use of laboratory test panels and equipment
- Explain the properties of urine and the urinalysis procedure
- Explain syllabus and SLOs
- Summarize standard precautions and safety in the laboratory
- List and describe the laboratory departments
- List and describe the Clinical Laboratory Improvement Amendments and laws governing the clinical laboratory
- List and describe the types of laboratories
Student Learning Outcomes:
Demonstrate correct methods to achieve asepsis.
Demonstrate correct use of a microscope and other medical office instruments.
Explain how to assist with minor office surgeries.

Hours
Total Hours
90.0

Externship for Medical Assistants
VMED027:

150.0 Hours

Designed for students interested in becoming medical assistants, this course provides experience in a selected physician's office or health care facility. The medical assisting student is supervised and evaluated by qualified medical personnel. The student will have an opportunity for equal exposure to administrative and clinical experience and is required to meet and discuss learning with the instructor on a regular basis. Open Entry/Open Exit.

Requisites
Requisites:
Advisory
VMED020 - Overview of the Medical Assistant Training Program
AND
Advisory
VMED021 - Medical Terminology for Medical Assistants
AND
Advisory
VMED022 - Business Procedures for Medical Assistants
AND
Advisory
VMED023 - Body Systems for Medical Assistants
AND
Advisory
VMED024 - Human Diseases and Disorders for Medical Assistants
AND
Advisory
VMED025 - Clinical Procedures for Medical Assistants
AND
Advisory
VMED026 - Surgical Assisting for Medical Assistants

Learning Outcomes
Course Objectives:
Perform duties of a medical assistant according to established principles and industry standards
Conduct a job search using appropriate methods
Explain syllabus, SLOs
Prepare a job-specific application
List and explain the requirements of the externship

**Student Learning Outcomes:**
- Demonstrate how to prepare for a medical assistant externship.
- Prepare a complete job-specific application.

**Hours**

**Total Hours**
150.0

**Introduction to Caregiving**

**VMED030:**

20.0 Hours

This course is designed to prepare students to assist the elderly, convalescents, or persons with disabilities with daily living activities at the person’s home or in a care facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals. Topics covered include methods of advising families, the elderly, convalescents, and persons with disabilities regarding such things as nutrition, cleanliness, and household activities. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Recognize the principles of caregiving culture and companion care
- Recognize the duties of a companion caregiver and how they differ from the duties of a certified nursing assistant (CNA)
- Recall key definitions of culture, care, prevention and management
- Identify the components of proper nutrition
- Prepare a client menu based upon a chronic illness and/or with several comorbidities
- Identify the mechanics of the human body
- Demonstrate emergency procedures including the Heimlich maneuver in conscious and unconscious client
- Summarize the procedures for prevention and management of a catastrophic occurrence
- Distinguish between the skills involved in providing care for clients
- Demonstrate how to practice universal precautions

**Student Learning Outcomes:**
- Distinguish between the types of healthcare-related tasks a caregiver may perform.
- Evaluate a client’s needs and create a plan for caregiving services.

**Hours**

**Total Hours**
20.0

**Caregiver Training**

**VMED031:**
40.0 Hours

This course is designed to provide students with hands-on experience as caregivers. Students will apply caregiver skills in a simulated caregiving environment. Open Entry/Open Exit.

**Requisites**

**Requisites:**

**Advisory**

**VMED030 - Introduction to Caregiving**

**Learning Outcomes**

**Course Objectives:**

Demonstrate how to assist the client with personal hygiene

Explain the types of dementia and how to correctly redirect behavior when appropriate

Perform a client needs assessment, and perform the appropriate type of personal assistance or emotional support based on a client's needs

Identify the appropriate types of meals for clients with chronic illnesses

Given a specific disease, or multiple chronic illnesses, identify the appropriate caregiver protocol

Develop a schedule for a client

Demonstrate how to correctly assist the transfer of a patient from one location to another

Organize and record client information

Show correct methods of light housekeeping activities

**Student Learning Outcomes:**

- Demonstrate how to correctly perform the duties of a caregiver.
- Determine an appropriate caregiving strategy based on a client's needs.

**Hours**

**Total Hours**

40.0

**Introduction to Healthcare Occupations**

**VMED050:**

60.0 Hours

This course is designed for students interested in pursuing a career in healthcare. An overview will be provided of various healthcare occupations including: audiologist, cardiovascular technologist, dental assistant, dental hygienist, diagnostic medical sonographer, electrocardiograph technician, emergency medical technician, health information technician, medical records technician, medical assistant, nurse, nurse assistant, mental health technician, occupational therapist, pharmacy technician, phlebotomist, physical therapist, radiographer, and respiratory care therapist. Students will learn the duties and benefits of these careers as well as the academic and clinical requirements necessary to work in each position. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Recognize the academic and clinical requirements to become an EMT

Explain the duties of a mental health technician

Explain the duties of a pharmacy technician
Explain the duties of a dental assistant

Explain the duties of a dental hygienist

Recognize the academic and clinical requirements to become a respiratory therapist

Recognize the academic and clinical requirements to become a phlebotomist

Recognize the academic and clinical requirements to become an audiologist

Explain the duties of a radiologic technologist

Explain the duties of a nurse

Explain the duties of a health information / medical records technician

Explain the duties of an EMT

Explain the duties of a nurse assistant

Recognize the academic and clinical requirements to become a medical assistant

Recognize the academic and clinical requirements to become an occupational therapist

Explain the duties of a medical assistant

Recognize several types of healthcare programs

Recognize the academic and clinical requirements to become a dental hygienist

Recognize the academic and clinical requirements to become a dental assistant

Explain the duties of a cardiovascular technologist

Recognize the academic and clinical requirements to become a cardiovascular technologist

Recognize the academic and clinical requirements to become a radiologic technologist

Recognize the academic and clinical requirements to become a nurse

Explain the duties of a phlebotomist

Recognize the academic and clinical requirements to become a mental health technician

Explain the duties of an occupational therapist

Recognize the academic and clinical requirements to become a health information / medical records technician

Recognize the academic and clinical requirements to become a pharmacy technician

Explain the duties of an audiologist

Explain the duties of a respiratory therapist

Recognize the academic and clinical requirements to become a nurse assistant

**Student Learning Outcomes:**

- Identify various types of healthcare occupations.
- Recall the academic and clinical requirements necessary to successfully enter at least one healthcare occupation.

**Hours**

**Total Hours**

60.0

**Healthcare Support Worker Pathways**

**VMED051:**

20.0 Hours
Designed for students who are preparing to enter a healthcare occupation, this class provides instruction on how to identify and follow a pathway to a career in healthcare. Topics include noncredit to credit academic pathways, noncredit to workforce pathways, and applying for employment as a healthcare support worker. Students will prepare a job-specific application for a healthcare career of their choice. Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**
Complete an application for a healthcare support worker program or job

Describe the healthcare support worker pathways

Recognize the differences between noncredit and credit academic pathways to the healthcare professions

**Student Learning Outcomes:**
- Identify a healthcare support worker pathway.
- Complete an application for a healthcare support worker position.

**Hours**

**Total Hours**

20.0

**Overview of the Home Health Aide Training Program**

**VMED060:**

10.0 Hours

The home health aide (HHA) program prepares individuals who already hold their Certified Nurse Assistant (CNA) to become Certified Home Health Aides. This course provides an overview of the requirements to transition from CNA to HHA. Instruction builds and expands on the CNA training with increased focus and experience in the areas of patient needs, personal care services, nutrition, cleaning and care in the home. Open Entry/Open Exit.

**Requisites**

**Requisites:**

Advisory

**VMED011 - Certified Nursing Assistant (CNA) Training**

**Learning Outcomes**

**Course Objectives:**
Create a portfolio that includes all preparatory work for the HHA program

Demonstrate how to complete forms required by the California Department of Health

Identify the certification requirements, including the minimum number of hours of instruction needed

**Student Learning Outcomes:**
- Recognize the licensing requirements to become a home health aide (HHA).
- Create a portfolio of all completed assignments related to the home health aide program.

**Hours**

**Total Hours**

10.0

**Home Health Aide (HHA) Training**

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd321b6eb18
VMED061:

52.0 Hours

The home health aide program prepares individuals who already hold their Certified Nurse Assistant (CNA) to become certified Home Health Aides. The program is designed to meet both State and Federal regulations and consists of both theory and clinical experience in assisted living facilities and/or homes. Instruction builds and expands on the CNA training with increased focus and experience in the areas of patient needs, personal care services, nutrition, cleaning and care in the home. Successful students will be eligible to complete their California Home Health Aide (HHA) Certification. Open Entry/Open Exit.

Requisites

Requisites:
Advisory
VMED011 - Certified Nursing Assistant (CNA) Training
or Certified Nurse Assistant (CNA) Certification
AND
Advisory
VMED060 - Overview of the Home Health Aide Training Program

Learning Outcomes

Course Objectives:
Recall critical steps to follow during emergencies in the home
Identify the role and responsibilities of the Home Health Aide
Explain the housekeeping responsibilities of the HHA
Describe and demonstrate the professional behaviors expected of a CNA / HHA
Identify common diseases and disorders of the home care client, including their signs and symptoms
Recall the role of the HHA in the patient's nutrition
Demonstrate how to correctly perform personal care services
Recall the class requirements and policies
Apply principles of rehabilitation to patient care at home
Demonstrate the appropriate methods for Home Health Aides to help meet the medical and social needs of clients

Student Learning Outcomes:
Describe the purpose and goals of home health care.
Demonstrate how to correctly perform the duties of a home health aide.

Hours
Total Hours
52.0

Acute Care Theory for Nurse Assistants
VMED070:

90.0 Hours

With an emphasis on acute care theory, this course prepares the student to provide basic personal care to patients in the acute care hospital setting. Students will learn to effectively communicate with peers, instructors, patients, families, and employees of the facility. This is the first course in a sequence of classes designed to encourage the mastery of tasks consistent with entry-level employment in the acute care setting. Open Entry/Open Exit.
Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
List and describe the elements of unit specific care

Describe the nursing assistant role in the nursing process/care plan

Identify the certification requirements to become an acute care technician

Explain pre-operative care and special procedures for the post-operative patient

Recognize how to prepare a person for admission, transfer, and discharge

Describe routine pediatric care

List and describe the rules of maintaining normal elimination

Create a personal career plan that includes a resume, portfolio, and job-specific application

Identify the signs and symptoms of illness

Recall the patient care skills performed by CNAs / HHAs

Identify and explain hospital code systems pertaining to safety issues

List and describe the nursing assistant responsibilities in the acute care setting

Recall class requirements and student expectations

Summarize the history of healthcare and career pathways

Student Learning Outcomes:

Identify the roles and responsibilities of the acute care technician in the acute care facility

Demonstrate effective communication and documentation skills in the acute care setting

Hours

Total Hours

90.0

Acute Care Practice for Nurse Assistants

VMED071:

90.0 Hours

With an emphasis on the clinical practice of acute care skills, this course is designed to train students for employment as nursing assistants in the acute care facility. Integrated throughout the course are essential employability skills for the healthcare industry. Content area skills focus on direct patient care of the acute and chronically ill patient. Safety practices in the acute care setting will be emphasized. Students will work with neonatal and postpartum care, elimination, surgery, and admissions, transfers, and discharges.

Open Entry/Open Exit.

Requisites

Requisites:

Advisory

VMED011 - Certified Nursing Assistant (CNA) Training

or Certified Nurse Assistant (CNA) License

AND

Advisory
Learning Outcomes

Course Objectives:

- Identify the certification requirements to become an acute care technician
- Discuss workplace violence and protection procedures
- Identify the signs and symptoms of illness
- List observations to be reported about urine and bowel elimination problems
- Demonstrate procedures for answering the phone
- Identify the different kinds of catheters and their care
- List and describe the nursing assistant responsibilities in the acute care setting
- Demonstrate common pediatric procedures
- Describe ethical behavior
- Recall class requirements and student expectations
- Graph vital signs on flow sheets
- Describe and assist in special procedures for the post-operative patient
- Explain pre-operative care and special procedures for the post-operative patient
- Develop perspective of all aspects of the industry
- Describe routine pediatric care appropriate for each age group
- Explain the principles of growth and development
- Explain hospital code systems
- Describe the nursing assistant role in the nursing process/care plan
- Explain the purpose, complications and safety guidelines for restraints
- Orally report procedures and observations
- Recall state and federal laws pertaining to the acute care setting
- Describe safety measures to be taken in a disaster and in a fire
- Perform patient care skills
- Demonstrate ID band procedures
- Identify and explain hospital code systems pertaining to safety issues
- Demonstrate routine pre-operative care
- Explain Health Insurance Portability and Accountability Act (HIPAA) regulations
- Create a personal career plan that includes a resume, portfolio, and job-specific application
- Recall the patient care skills performed by CNAs / HHAs
- Complete hospital orientation materials
- List and describe the rules of maintaining normal elimination
- Define appropriate scope of practice
- Describe death and dying
- Demonstrate how to correctly complete patient charts
- Demonstrate how to prepare a person for admission, transfer, and discharge
Identify and explain handling environmental hazards
Describe the impact of environmentally sound business practices
Demonstrate correct procedures for unit specific care
Describe methods of bladder and bowel training
Summarize the history of healthcare and career pathways

Student Learning Outcomes:
- Demonstrate safe and effective care of the surgical patient
- Create an appropriate plan of care for the patient with disorders in the major body systems

Hours
Total Hours
90.0

Introduction to the Behavior Technician Program
VMED080:

24.0 Hours

The behavior technician program prepares individuals for a certification exam and frontline work in the field of applied behavior analysis. This is an entry-level program designed to meet training national requirements for certification as a behavior technician. Courses will cover Autism Spectrum Disorder, basic principles of Applied Behavior Analysis (ABA), teaching methodologies based on ABA, prompting, generalization and maintenance, and data collection for skill acquisition. This is the first course in a two-course series. Students who successfully complete both courses in this series will learn the skills required to sit for any of the three nationally accredited behavior technician exams, such as Applied Behavior Analysis Technician (ABAT), Board Certified Autism Technician (BCAT), and Registered Behavior Technician (RBT).

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Recall the roles and responsibilities of a behavior technician
Demonstrate the steps of Natural Environment Teaching (NET)
Recall basic principles of Individuals with Disabilities Education Act (IDEA), Least Restrictive Environments (LRE), and Individualized Education Plans (IEPs)
Recall important facts related to Autism Spectrum Disorder
Recall important facts related to the treatment of Autism Spectrum Disorder (ASD)
Identify the parts of a 3-Term Contingency
Give examples and non-examples of Antecedents and Consequences
Give examples and non-examples of Behaviors
Identify positive and negative reinforcement when given scenarios
Demonstrate four types of preference assessments
Identify four schedules of reinforcement when given scenarios
Demonstrate prompting and stimulus control transfer procedures
Demonstrate the steps of Discrete Trial Teaching (DTT)
Demonstrate a probe
Demonstrate the steps of Natural Environment Teaching (NET)
Identify types of generalization and maintenance when given scenarios
Demonstrate the steps of shaping and chaining
Name and define four verbal operants
Recall the steps of Picture Exchange Communication System (PECS)
Recall basic principles of Pivotal Response Training (PRT) and Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH)
Name common visual supports and their uses
Recall basic principles of Token Economies
Demonstrate different data collection and graphing techniques for skill acquisition programs
Recall common skill deficit domains
Classify skills deficits by domain

**Student Learning Outcomes:**
- Describe basic interventions used in Applied Behavior Analysis.
- Demonstrate how to correctly perform the duties of a behavior technician.

**Hours**

**Total Hours**

24.0

**Behavior Technician Certification Training**

**VMED081:**

24.0 Hours

The behavior technician program prepares individuals for a certification exam and frontline work in the field of applied behavior analysis. This is an entry-level program designed to meet training national requirements for certification as a behavior technician. Classes in this course will cover defining behavior, Functional Behavior Assessment, Antecedent and Consequence Interventions, Measurement, Community and Social Skills, and Ethics and Professionalism. This is the second course in a two-course series. Students who successfully complete both courses in this series will learn the skills required to take any of the three nationally accredited behavior technician exams, such as Applied Behavior Analysis Technician (ABAT), Board Certified Autism Technician (BCAT), and Registered Behavior Technician (RBT).

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**
- Define a Functional Behavior Assessment (FBA)
- Describe how a behavior technician assists with an FBA
- Demonstrate event recording
- Name the main functions of behavior
- Name the main components of a Behavior Intervention Plans (BIP)
- Describe the Behavior Cycle
- Demonstrate how to respond to each phase of the Behavior Cycle
- Define Antecedent Interventions
Describe Visual Supports and how to use them
Describe supports for transitions and how to use them
Describe reinforcement systems
Describe other antecedent interventions
Define Positive Behavior Supports (PBS)
Name the components of Positive Behavior Supports (PBS)
Define consequence interventions
Describe extinction procedures
Describe punishment procedures
Describe reinforcement procedures
Demonstrate Continuous Measurement Procedures
Demonstrate Discontinuous Measurement Procedures
Develop a session structure plan
Describe how person-centered planning is different from traditional systems
Define an Essential Lifestyle Plan
Describe the behavior technician role in stakeholder training
Describe each ethical guideline
Define the Health Insurance Portability and Accountability Act (HIPAA) and its key rules

Student Learning Outcomes:
- Describe basic interventions used in Applied Behavior Analysis
- Demonstrate how to correctly perform the duties of a behavior technician

Hours
Total Hours
24.0

Introduction to Medical Coding
VMED090:

48.0 Hours
Introduces the student to concepts of medical coding that can be combined with medical billing by using coding knowledge and skills that align with the medical billing workflow. Topics covered are: Learning medical coding fundamentals using ICD-10-CM, CPT and HCPCS level II coding sets. Reporting diagnoses, provider services and procedures by abstracting coding information from medical records and learn legal, ethical and reimbursement issues as it relates to medical coding.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
- Recall the purposes of medical coding
- Distinguish between the various medical records
- Demonstrate the six coding steps
- Explain the Process of abstracting medical information
Demonstrate how to code services, procedures, and use of modifiers
Distinguish between inpatient and outpatient coding
Define regulatory rules and guidelines
Explain how coding differs in each specialty
Define the coding requirements for immunizations, injections, and infusions
Recall the different types of preventative screenings and exams
Demonstrate how to code a diagnosis
Define how to code services and procedures
Identify E&M coding for outpatient and inpatient settings
Differentiate between inpatient coding and outpatient coding
Perform coding procedures for hospitals
Differentiate between HCPCS coding and CPT level I coding
Recall legal guidelines for coding
Recall regulatory rules and guidelines
Identify how coding differs in each specialty
Identify codes needed for accidents and injuries
Identify common diagnostics and treatments
Define the different coding requirements for immunizations, injections, infusions
Recall codes needed when different types of accidents or injuries occur
Identify the different types of preventative screenings and exams

Student Learning Outcomes:
  Identify various medical coding structures.
  Differentiate between the types of services, procedures, diagnoses and supplies.
  Apply industry standard guidelines for accurate and compliant coding.

Hours
Total Hours
48.0

Introduction to Medical Billing
VMED091:

60.0 Hours
Introduces students to concepts and skills needed for a successful career in medical office billing. Students will learn current procedural terminology, the general flow of information in a medical office, and the role of computers. Open Entry/Open Exit. Former Title: VBUS 080, Introduction to Medical Billing

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
  Edit and delete charge transactions
  Identify the Basics of TotalMD Software
Explain the Medical Billing Process
Preview and print a variety of reports
Learn about Scheduling in the Medical Office
Preview/print schedules
Demonstrate how to Work with Claims
Create breaks
Input Insurance, Account, and Condition Information
Use patient aging report to identify past due patient accounts
Create collections reports, letters and collection tracer reports
Create claims
Edit patient information
Describe the role of a collection agency in obtaining payment on overdue accounts
Enter charges for procedures
Work with cases
Recognize the forms of Information Technology
Enter appointments
Apply TotalMD Software Skills to Medical Billing Scenarios
Record/apply payments received from insurance carriers
Search/find specific data
Reflect on Medical Billing Tasks Learned
Work with office hours
Use TotalMD Help
Change/delete appointments
Enter new patient information
Discuss what happens to uncollectible accounts in the medical practice
Discuss Collections in the Medical Office
Create a new case for a new patient
Select options available for different reports
Add attachments to electronic claims
Enter capitation payments
Explain the importance of a financial policy in a medical practice
Explain How Patient Information is Organized in TotalMD
Print walkout receipts
Record insurance adjustments
Record and apply payments received from patients
Post Insurance Payments and Create Patient Statements
Edit claims
Enter Charge Transactions and Patient Payments
Identify the laws that regulate collections from patients
Create, edit, and print statements
Identify how TotalMD data is organized and stored
Recall the importance of HIPAA in the Medical Office
Review claims for errors/omissions
Print Reports
Use the Menu bar and Toolbar to enter, edit, save, and delete data
Search for patient information

**Student Learning Outcomes:**

- Be familiar with the rules and guidelines of healthcare plans in order to submit proper documentation for appropriate reimbursement of services rendered.
- Use a variety of medical software with a minimum of training.

**Hours**

**Total Hours**

60.0

**Warehouse Worker**

**VWHS010:**

40.0 Hours

Provides instruction, demonstration and discussion of topics that are critical for the entry level warehouse worker. Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Describe warehouse functions and modern trends.
- Obtain specific information from graphs, charts, and spreadsheets.
- Demonstrate knowledge of basic MS computer skills.
- Practice basic communication skills utilizing computers and telephones.
- Explore different employment positions in a warehouse.
- Read and understand basic documents and forms.
- Explain flow of materials in the chain of supply.
- Explain Occupational Safety and Health Administration’s (OSHA) requirements for operating mobile power equipment.
- Review a brief history of warehousing.
- Identify fire regulations and fire safety as well as regulations for storage and shipping of dangerous materials.
- Demonstrate proper site maintenance.
- Identify tools and equipment used in a warehouse.
- Keep accurate inventory records.
- Explain power and manual lifting equipment.
- Describe proper lifting procedures and back care.
Identify methods of storing, loading, bracing, padding and strapping materials.
Demonstrate knowledge of receiving, storing, order picking, packing and shipping of materials.
Control and track materials and information.
Demonstrate proper use and maintenance of equipment.

**Student Learning Outcomes:**
- Demonstrate understanding of warehouse operations.
- Demonstrate good workplace skills by following directions and performing work that meets quality control standards.

**Hours**

**Total Hours**
40.0

**Introduction to Water Science**

**WATR020:**

3.0 Units

An overview of Water Science topics including water sources and supply, water quality and regulations, water transmission and distribution, and treatment of water and wastewater. Discussions will include applicable science and math principles, current events, and Water careers. Optional field trips may be offered.

**Requisites**
**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
3.0

**Learning Outcomes**

**Course Objectives:**
- Identify the major climate zones of California
- Explain the various steps and processes of the Hydrologic Cycle
- Compare and contrast the general water quality of surface water and ground water
- Perform mathematical conversions among various water units of measurement
- Identify the federal and state agencies responsible for establishing and enforcing water quality standards.
- Distinguish between primary and secondary standards
- Interpret a Consumer Confidence Report
- Calculate volumes of various water system components
- Identify the main components of a drinking water distribution system
- Describe the changes in water quality that may occur within a water distribution system
- Calculate flow rate
- Identify the processes that combine to accomplish Conventional Treatment
- Discuss the advantages and disadvantages of chemical disinfection of drinking water
Calculate velocity of water in pipelines and sedimentation and filtration processes
Discuss the characteristics commonly used to define wastewater quality
Identify the processes used in a conventional wastewater treatment plant
Contrast physical, chemical, and biological treatment processes.
Calculate detention times in waste treatment processes
Identify the major users of water in California
Discuss the impact of flood control and recreation on water supply
Calculate volumes of water in reservoirs and canals
Identify the water quality requirements of various water uses
Evaluate various post-secondary treatment methods as to their capabilities of achieving water quality objectives
Calculate density and specific gravity
Identify the largest users of water in a household
Describe how household water use is measured and billed
Calculate a residential water bill
Explain the process for obtaining relevant, water career-related certification from the State of California
Identify possible careers in the water industry

**Student Learning Outcomes:**

- Describe the water supply infrastructure of the State of California including major water sources, regional water and wastewater treatment facilities, and local drinking water distribution systems.
- Analyze a drinking water Consumer Confidence Report to determine if a water supply meets applicable health and safety standards.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Wastewater Operator Exam Review**

**WATR048:**

0.5 Units

This course provides a comprehensive review of topics from multiple courses in the Water Utility Science program in order to prepare students for the California State Water Resources Control Board, Wastewater Treatment Operator examinations.

**Requisites**

**Requisites:**

*Advisory*

**WATR081 - Wastewater Treatment**

**Transferability & General Education Options**

**Transferable:**
Weekly Lecture Hours:
0.5

Learning Outcomes

Course Objectives:
Describe the procedures for application and execution of the California State Water Resources Control Board examination for certification as a Wastewater Treatment Operator.

Calculate conversions among common water measurement units

Explain the main wastewater quality characteristics of Suspended Solids and Biochemical Oxygen Demand

Calculate areas

Calculate volumes

Describe the processes in a conventional wastewater treatment plant

Identify common preliminary treatment processes and purposes

Discuss the role of primary treatment in the removal of BOD and SS

Calculate flow rates, volumes, and times

Calculate flow rates, velocities, and areas

Describe the various methods employed to perform secondary treatment

Discuss the role of secondary treatment in the removal of BOD and SS

Calculate hydraulic loading rates

Calculate organic loading rates

Describe the construction and components of a centrifugal pump

Contrast the hydraulic performance characteristics of positive displacement and velocity pumps

Describe the components of a drinking water chlorination system

Discuss the safety challenges associated with chlorination chemicals

Calculate dosages of chlorination chemicals

Describe the anaerobic digestion process

Discuss the purpose of the anaerobic digestion process

Calculate residence time

Calculate percent solids

Describe key regulations applicable to wastewater treatment plant operation

Describe common wastewater quality laboratory analyses

Interpret common wastewater quality laboratory analysis results

Discuss safe working practices and common hazards in a wastewater treatment plant setting

Calculate other water math problems including density, specific gravity, and removal efficiency

Student Learning Outcomes:
Evaluate common wastewater treatment processes with respect to their effectiveness in complying with public health and safety regulations.
Calculate areas, volumes, flow rates, velocities, activated sludge process variables, and chemical feed rates for a public wastewater system.

Units & Hours
Minimum Units:
0.5

Maximum Units
0.5

Total Hours
9.0

Water Mathematics and Hydraulics
WATR050:

3.0 Units

Practical application of mathematics to perform unit conversions and to calculate areas, volumes, flow rates, pressures, velocities, chemical dosages and related hydraulic calculations used in water system operations.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Describe the relevance of mathematics to the Water Industry

Determine existing math-skill level

Solve addition and subtraction problems with fractions

Solve multiplication and division problems with fractions

Solve addition and subtraction problems with decimals

Solve multiplication and division problems with decimals

Convert between decimals and fractions

Calculate percentages

Convert between percent and decimal forms

Calculate arithmetic means

Solve linear equations

Solve problems requiring rounding to proper number of digits

Convert between simple units such as length, area, volume, and time

Convert between complex units such as flow rate, velocity, and chemical feed rate

Calculate radius, diameter, and circumference

Calculate areas of circles, rectangles, triangles, and trapezoids

Calculate volumes of rectangular prisms, cylinders, cones, and spheres
Calculate flow rate, volume, and time
Calculate weight, density, and volume
Calculate density and specific gravity
Calculate force
Calculate pressure and head
Calculate velocity, flow rate, and area
Describe friction and its effect on water pressure
Define hydraulic grade lines
Calculate chemical feed rates required for proper treatment of drinking water and wastewater
Calculate sedimentation process velocities
Calculate weir overflow rate
Calculate filtration and backwash rates
Calculate percent removal

Student Learning Outcomes:
Solve basic mathematical problems including the calculations of areas, volumes, and flow rates.
Calculate chemical dosages required to provide drinking water that meets public health standards established by the State of California.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Water Conservation Practitioner
WATR052:

3.0 Units

Theoretical and practical training in applied water use efficiency. Includes residential, commercial, and landscape customers, water uses, budgets, demand management, water audits, best management practices, rate structures, program design and management. Preparation for American Water Works Association (AWWA) Grade 1 and 2 Water Conservation Practitioner certification. Optional field trips may be offered.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:

- Identify general sources of water supply
- Identify general uses of water
- Calculate conversions among units of water measurement
- Describe the hydrologic cycle
- Define terms associated with the hydrologic cycle
- Identify the two main water sources for Human uses
- Calculate water pressures
- Identify the major regional surface water projects in the State
- Identify the main local surface water projects
- Identify the relative contributions of local and regional projects to the overall water supply
- Describe the role of conservation in the overall water supply
- Calculate areas of squares, circles, and triangles
- Identify the main components of demand for water in California
- Discuss the significance of water to various segments of the California economy
- Describe the relative quantities of water demand in California
- Calculate volumes of cylinders and rectangular prisms
- Recognize the common types of residential water meters
- Interpret residential water meter readings
- Calculate residential water consumption and costs
- Identify the main uses of water in indoor residential settings
- Calculate flow rates in various units, including gallons per minute, cubic feet per second, million gallons per day, and acre-feet per year
- Describe hydrozones in a typical outdoor residential setting
- Differentiate between cool season and warm season turf
- Analyze water consumption of various plants
- Define CIMIS
- Identify information available from CIMIS
- Calculate water demands for various outdoor residential uses
- Analyze past consumption of water in a typical residential setting
- Identify potential water savings actions
- Calculate customer cost savings potential if recommended actions are implemented
- Discuss various methods of crop irrigation
- Recognize water demands of various crops
- Calculate irrigation efficiency
- Distinguish among commercial, industrial, and institutional customers
- Identify common water uses of CII customers
- Calculate water consumption of CII customers
- Analyze water consumption and potential water savings of various CII customers
Calculate return on investment associated with implementation of water demand reduction measures

Identify resources for water conservation information

Describe the requirements and the application process for certification as a water conservation practitioner

Design a water conservation program for a small municipality

**Student Learning Outcomes:**

- Analyze a variety of residential, commercial, industrial, and landscaping scenarios for water consumption and potential water savings.
- Calculate water consumption and water savings in a variety of residential, commercial, industrial, and landscaping applications.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Advanced Treatment Exam Preparation**

**WATR054:**

0.5 Units

This course provides a comprehensive review of topics from multiple courses in the Water Utility Science program in order to prepare students for the California State Water Resources Control Board, Water Treatment Operator T3 and T4 examinations.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Weekly Lecture Hours:**
0.5

**Learning Outcomes**

**Course Objectives:**

- Describe the Hydrologic Cycle
- Contrast general groundwater and surface water quality characteristics
- Calculate conversions among common water measurement units
- Calculate areas in complex problems
- Calculate volumes in complex problems
- Describe the processes in a conventional surface water treatment plant
- Explain the purposes and operating theories of each conventional treatment process
- Calculate flow rates, volumes, and times
- Calculate flow rates, velocities, and areas
Describe the components of a drinking water chlorination system
Discuss the safety challenges associated with chlorination chemicals
Calculate dosages of chlorination chemicals in complex problems
Compare and contrast disinfection with chlorine and chloramines
Discuss nitrification and other distribution system issues associated with chloramination
Compare the treatment objectives of conventional treatment with those of advanced treatment processes
Describe the process theories of various advanced treatment processes
Interpret the various requirements of the Total Coliform Rule
Interpret the various requirements of the Surface Water Treatment Rule
Describe general sampling procedures and protocols
Explain the additional responsibilities of supervisors and managers of drinking water systems
Describe key regulations applicable to water treatment plant operation
Explain operator certification regulation requirements
Calculate other water math problems including density, specific gravity, and pressure

Student Learning Outcomes:
- Evaluate conventional and advanced water treatment processes with respect to their effectiveness in complying with public health and safety regulations.
- Calculate areas, volumes, flow rates, velocities, pressures, and chemical feed rates in complex problems for a public drinking water system.

Units & Hours
Minimum Units:
0.5

Maximum Units
0.5

Total Hours
9.0

Treatment Exam Preparation
WATR056:

0.5 Units

This course provides a comprehensive review of topics from multiple courses in the Water Utility Science program in order to prepare students for the California State Water Resources Control Board, Water Treatment Operator T1 and T2 examinations.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
0.5
Learning Outcomes

Course Objectives:
- Describe the procedures for application and execution of the California State Water Resources Control Board examination for certification as a Water Treatment Operator.
- Describe the Hydrologic Cycle
- Contrast general groundwater and surface water quality characteristics
- Calculate conversions among common water measurement units
- Calculate areas
- Calculate volumes
- Describe the processes in a conventional surface water treatment plant
- Calculate flow rates, volumes, and times
- Calculate flow rates, velocities, and areas
- Describe the construction and components of a centrifugal pump
- Contrast the hydraulic performance characteristics of positive displacement and velocity pumps
- Discuss safe working practices and common hazards in a water treatment plant setting
- Describe the components of a drinking water chlorination system
- Discuss the safety challenges associated with chlorination chemicals
- Calculate dosages of chlorination chemicals
- Interpret the various requirements of the Total Coliform Rule
- Interpret the various requirements of the Surface Water Treatment Rule
- Describe general sampling procedures and protocols
- Describe key regulations applicable to water treatment plant operation
- Explain operator certification regulation requirements
- Calculate other water math problems including density, specific gravity, and pressure

Student Learning Outcomes:
- Evaluate common water treatment processes with respect to their effectiveness in complying with public health and safety regulations.
- Calculate areas, volumes, flow rates, velocities, pressures, and chemical feed rates for a public drinking water system.

Units & Hours

Minimum Units:
0.5

Maximum Units
0.5

Total Hours
9.0

Water Distribution Test Preparation

WATR057:
0.5 Units
This course provides a comprehensive review of topics from multiple courses in the Water Utility Science program in order to prepare students for the California State Water Resources Control Board, Water Distribution Operator D1 and D2 examinations.

Requisites

Requisites:

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

0.5

Learning Outcomes

Course Objectives:

Describe the procedures for application and execution of the California State Water Resources Control Board examination for certification as a Water Distribution Operator

Describe the Hydrologic Cycle

Contrast general groundwater and surface water quality characteristics

Calculate conversions among common water measurement units

Calculate areas

Calculate volumes

Describe the components of a drinking water chlorination system

Contrast the disinfecting characteristics of chlorine and chloramines

Discuss the safety challenges associated with chlorination chemicals

Calculate dosages of chlorination chemicals

Describe the components of a typical drinking water distribution system

Discuss the purposes of the various components of a typical drinking water distribution system

Describe the construction and components of a centrifugal pump

Contrast the hydraulic performance characteristics of positive displacement and velocity pumps

Calculate velocity and flow rate

Calculate total static head and total dynamic head

Describe general operating principles of the main components of a drinking water distribution system

Describe general maintenance procedures of the main components of a drinking water distribution system

Discuss the safety challenges associated with water distribution systems

Interpret the various requirements of the Total Coliform Rule

Describe general sampling procedures and protocols

Describe key regulations applicable to water distribution system operation

Explain operator certification regulation requirements

Student Learning Outcomes:

Evaluate common water distribution system components and practices with respect to their effectiveness in complying with public health and safety regulations.

Calculate areas, volumes, flow rates, velocities, pressures, and chemical feed rates for a public drinking water system.
Units & Hours

Minimum Units:
0.5

Maximum Units
0.5

Total Hours
9.0

Advanced Distribution Exam Preparation
WATR059:

0.5 Units

This course provides a comprehensive review of topics from multiple courses in the Water Utility Science program in order to prepare students for the California State Water Resources Control Board, Water Distribution Operator D3, D4, and D5 examinations.

Requisites

Requisites:
None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:
0.5

Learning Outcomes

Course Objectives:
Describe the Hydrologic Cycle
Contrast general groundwater and surface water quality characteristics
Calculate conversions among common water measurement units
Calculate areas in complex problems
Calculate volumes in complex problems
Describe the components of a drinking water chlorination system
Contrast the disinfecting characteristics of chlorine and chloramines
Discuss nitrification and other distribution issues associated with chloramination
Discuss the safety challenges associated with chlorination chemicals
Calculate dosages of chlorination chemicals in complex problems
Describe the components of a typical drinking water distribution system
Discuss the purposes of the various components of a typical drinking water distribution system
Describe the construction and components of a centrifugal pump
Contrast the hydraulic performance characteristics of positive displacement and velocity pumps
Calculate velocity and flow rate
Calculate total static head and total dynamic head
Describe general operating principles of the main components of a drinking water distribution system

Describe general maintenance procedures of the main components of a drinking water distribution system

Discuss the safety challenges associated with water distribution systems

Contrast the role of the supervisor with that of the employee in workplace safety

Interpret the various requirements of the Total Coliform Rule

Describe general sampling procedures and protocols

Describe key regulations applicable to water distribution system operation

Explain operator certification regulation requirements

Compare the roles of the supervisor and the employee with respect to complying with water quality regulations

**Student Learning Outcomes:**

- Evaluate complex water distribution system components and practices with respect to their effectiveness in complying with public health and safety regulations.
- Calculate areas, volumes, flow rates, velocities, pressures, chemical feed rates, blending rates, hydraulic grade lines, and pump hydraulic measurements for a public drinking water system.

**Units & Hours**

**Minimum Units:**

0.5

**Maximum Units**

0.5

**Total Hours**

9.0

**Water Utility Maintenance and Construction**

**WATR060:**

3.0 Units

Overview of procedures, equipment, tools, and terminology used in water utility maintenance and construction. Topics include related math calculations and atlas map reading. This course is intended for individuals with minimal field experience who are seeking a career in the Water Industry. Field trips may be required.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

- Identify sources of drinking water for Orange County
- Describe the Hydrologic Cycle
- Identify USA color markings with Water and other utilities
Identify notification time requirements

Identify the components of a drinking water distribution system

Describe the functions of the various components of a drinking water distribution system

Identify common workplace hazards in the Water Industry

Distinguish among various categories of confined spaces

Interpret regulations found in the WATCH book

Describe industry standard procedures for pipe installation

Describe industry standard practice for pipe disinfection

Identify various valve types

Discuss valve selection considerations for various purposes

Identify various types of pipe fittings

Explain installation procedures for pipe fittings

Identify various types of fire hydrants

Explain preventive maintenance procedures for hydrants

Explain installation procedures for hydrants

Identify various types of air and vacuum relief valves

Explain preventive maintenance procedures for air and vacuum relief valves

Explain installation procedures for air and vacuum relief valves

Explain the function of Blow Off and Drain valves

Describe the operational procedure for dewatering a pipeline

Calculate pipeline volumes, flow rates, and drainage times for dewatering operations

Identity common tools used in the Water Industry

Explain the purposes of common tools used in the Water Industry

Identify different soil types

Discuss the impact of varying soil types on excavation operations

Calculate soil volumes for excavation and backfill operations

Discuss the purposes of various forms of documentation and record keeping for Water Industry maintenance and construction operations

**Student Learning Outcomes:**

- Identify and describe common equipment and tools used in the Water Industry, including various types of pipes, fittings, valves, meters, and fire hydrants.
- Calculate areas, volumes, and flow rates associated with excavations, pipe installations, and other related maintenance and construction operations.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0
Water Distribution
WATR061:

3.0 Units

Presents basic concepts of drinking water distribution, including water sources, water quality, and distribution system components. Water mathematics topics addressed include volume, flow rate, velocity, and chemical feeding calculations. Assists in the preparation for the California State Water Resources Control Board level D1 and D2 Water Distribution Operator certification exams. Optional field trips may be offered.

Requisites

Requisites:

Prerequisite

WATR050 - Water Mathematics and Hydraulics

or current certification by the California State Water Resources Control Board as a Water Treatment, Water Distribution, or Wastewater Operator

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Describe how water is transported from natural sources to human uses

Calculate conversions among common units of measurement in water systems

Identify elements of the hydrological cycle

Discuss differences in general water quality characteristics between groundwater and surface water

Calculate areas of rectangles, circles, triangles, and trapezoids

Describe the geology associated with an aquifer

Define terms associated with groundwater and hydrology

Describe a drinking water well and its components

Calculate volumes of rectangular prisms and cylinders

Interpret water quality regulations applicable to drinking water distribution

Contrast primary and secondary drinking water standards

Calculate water flow rate and detention times

Identify the two main purposes of reservoirs

Describe the typical diurnal pattern of customer water demand

Calculate pressure, density, and specific gravity

Identify common pipe materials used in drinking water distribution systems

Contrast the advantages and disadvantages of common pipe materials

Compare the water quality and system reliabilities of common piping system configurations

Calculate velocity, flow rate, and cross sectional area using the velocity equation
Contrast the hydraulic characteristics of isolation versus pressure reduction valves
Calculate head loss/pressure drop using hydraulic grade lines
Differentiate between meters used for customers and for applications within a distribution system
Compare the construction of wet barrel and dry barrel hydrants
Calculate customer consumption using water meter information
Contrast the hydraulic performance characteristics of positive displacement versus velocity pumps
Contrast the hydraulic performance characteristics of axial flow versus radial flow pumps
Calculate total static head
Calculate total dynamic head
Interpret the Total Coliform Rule to protect public health and safety
Identify the four chemicals approved for drinking water disinfection
Explain the origin and public health significance of disinfection by-products
Calculate chemical dosage rates
Describe the equipment used to feed chlorine to drinking water
Identify appropriate safety precautions for handling chlorination chemicals
Calculate chlorine dosage rates
Identify minimum distances for activities involving trenches
Identify the three conditions that together constitute a confined space
Identify the hazards associated with hydrogen sulfide and methane gases
Explain the importance of preventing backflow
Describe an air gap system
Compare backspiphonage and back pressure
Identify common devices use for backflow prevention
Explain the sampling procedure for common water quality analyses
Describe the field procedure for the measurement of chlorine residual

Student Learning Outcomes:
Describe the components of a public drinking water distribution system, as required to meet public health and safety standards. Calculate volumes, flow rates, velocities, pressures, and chemical feed rates for a public drinking water distribution system.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Advanced Water Distribution
WATR062:
3.0 Units
Presents advanced concepts of drinking water distribution, including water quality regulations, distribution system components, maps and records, and supervisory and management topics. Advanced water mathematics topics addressed include applied system and pump hydraulics. Assists in the preparation for the California State Water Resources Control Board level D2, D3, and D4 Water Distribution Operator certification exams. Optional field trips may be offered.

**Requisites**

**Prerequisite**

WATR061 - Water Distribution

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

Describe regulations concerning State of California certification as a Water Distribution Operator

Calculate areas and volumes and common unit conversions in water mathematics

Describe the roles of the various water agencies that supply drinking water to local communities

Discuss the impacts of disinfection by chloramination on distribution system operations

Discuss drinking water quality regulations

Describe common practices for maintaining water quality in a distribution system

Identify the sources of water for Orange County

Discuss the water quality characteristics of the sources of water for Orange County

Describe various hydraulic characteristics including pressure, head, force, flow rate, velocity, friction, and hydraulic grade lines

Calculate various hydraulic characteristics including pressure, head, force, flow rate, velocity, friction, and hydraulic grade lines

Describe procedures for disinfection of pipelines and reservoirs

Calculate dosages of chemicals required for satisfactory disinfection operations

Describe the role of pumps in maintaining pressure within a water distribution system

Calculate various pump hydraulics measurements, including total static head, total dynamic head, and horsepower requirements

Analyze the cost of operation of pumping systems

Define common groundwater terms

Describe the role of wells in water distribution system operations

Discuss criteria used for selection of pipes for distribution systems

Contrast advantages and disadvantages of various pipe materials

Calculate trench volumes and backfill volumes

Describe appurtenances to pipelines and their role in distribution system operation and maintenance

Discuss the public health ramifications of cross connections

Evaluate a cross connection control program

Identify common customer water meter types and applications
Calculate water consumption from metering information
Calculate customer bills from metering information
Discuss the purposes of drinking water storage reservoirs
Describe the common construction features of water storage reservoirs
Calculate volumes, flow rates, and detention times (water ages) associated with reservoir operations
Define SCADA
Describe the role of automation in modern drinking water distribution systems
Calculate current (milliamp) levels associated with analog field measurements such as pressure, flow rate, and chlorine residual
Contrast the various forms of distribution system maps with respect to the types of information each provides
Analyze an employee safety program for a water distribution system
Discuss the elements of an emergency response program for a water distribution system
Describe the roles of water distribution system employees in maintaining good public relations with the customer base
Calculate a wide variety of applied water mathematics and hydraulics measurements, including areas, volumes, flow rates, detention times, velocities, and chemical dosages

Student Learning Outcomes:
- Evaluate water distribution system components with respect to operations, maintenance, reliability, water quality impacts, and cost.
- Calculate the operational costs associated with water distribution system pumps.

Units & Hours
Minimum Units:
3.0
Maximum Units
3.0
Total Hours
54.0

Electrical Wiring and Controls for Operators
WATR063:
3.0 Units
Theoretical and practical skills needed to perform preventive maintenance and minor repair of basic electrical wiring and control systems used in water and wastewater facilities. Optional field trips may be offered.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Define basic electrical terms
Explain theory of electricity
Describe an electrical circuit
Define basic terms of electricity including amperes, ohms, and volts
Recognize common symbols used in electrical circuits and ladder diagrams
Interpret ladder diagrams of parallel circuits
Recognize symbols used in series circuit diagrams
Contrast series, parallel, and series-parallel circuits
Contrast direct current with alternating current
Identify applications of direct current and alternating current
Define common terms related to alternating current
Explain how electrical power is generated and distributed to water/wastewater facilities
Describe how electrical power is distributed within a water/wastewater facility
Calculate electrical operating costs
Describe the construction of an AC induction motor
Contrast single-phase and three-phase AC power
Describe the construction of a basic motor control center
Distinguish among the functions of the various components of an MCC
Interpret a basic wiring diagram
Explain the common means of field measurement of basic electrical parameters including current and voltage
Analyze a workplace for electrical and related safety hazards
Determine appropriate personal protective equipment and procedures for various electrical maintenance functions
Analyze electrical circuits associated with pump motor control centers and related devices
Describe the composition of a typical SCADA system

**Student Learning Outcomes:**
- Differentiate among common terms in electrical circuits, including ohms, volts, amperes, relays, Programmable Logic Circuits (PLC), and Remote Terminal Units (RTU).
- Analyze a pump control electrical schematic diagram.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units:**
3.0

**Total Hours:**
54.0

**Pumps and Pumping**

**WATR064:**
3.0 Units
Basic pump theory, operation, and repair. Assists operators and technicians in the design, selection, installation and maintenance of various dynamic and positive displacement pumps. Topics include pumps and pump components, hydraulics, and pumping system efficiencies. Optional field trips may be offered.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Identify common pump types
Describe the history of pumps and modern pump applications
Identify pumps as dynamic or displacement
Describe pumps as end suction, vertically mounted, horizontally mounted, lineshaft, and/or can turbine
Contrast the hydraulic performance characteristics of radial flow and axial flow pumps
Identify various types of axial flow and mixed flow pumps
Identify various types of radial flow pumps
Identify the major components of a centrifugal pump
Describe the function of each pump component
Discuss pump coupling types and maintenance
Identify purpose of packing in pumps
Describe the maintenance procedure for packing replacement
Identify common types of mechanical seals
Compare mechanical seals with packing glands
Describe mechanical seal maintenance procedures
Describe common suction and discharge piping configurations
Identify improper configurations and remedies
Define important terms in pump hydraulics, including various categories of head, horsepower, and energy
Interpret the three basic types of pump curves
Calculate important measurements in pump hydraulics, including various categories of head, horsepower, and energy
Define Net positive suction head
Calculate the effect of speed changes and impeller trim using affinity laws
Calculate capacity, head, and horsepower requirements.
Describe the general aspects of a field inspection of a pump installation
Identify the need for pump priming
Describe the procedure for pump priming
Describe the general procedures for lubrication of pump components
Identify the three most frequent causes of poor pump performance
Describe proper adjustment techniques of impellers
Explain impeller upthrust and down thrust
Describe procedures for deep well line shaft turbine construction and overhaul
Describe general troubleshooting techniques for pump operations
Identify procedures used in reliability based maintenance, including vibration analysis, thermography, and lube oil analysis
Calculate actual pump efficiency
Identify factors that result in suboptimal pump efficiency
Identify common and special types of pumps used in water and wastewater applications

Student Learning Outcomes:
- Compare and contrast general hydraulic performance characteristics of dynamic and positive displacement pumps.
- Calculate various pump hydraulic measurements including total static head, total dynamic head, water horsepower, brake horsepower, motor horsepower, pump system efficiency, and cost of operation.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Backflow Prevention Devices
WATR065:
3.0 Units

Theory, testing, and maintenance of backflow prevention devices in water systems. Prepares the journeyman plumber, plant maintenance operator, and water utility operator to become a certified tester in Orange County. Also prepares the student for American Water Works Backflow Prevention certification exam.

Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Discuss the importance of backflow prevention with respect to public health protection
Define common terms associated with backflow
Identify common backflow prevention devices
Discuss applications of various devices
Define a cross connection
Describe the hydraulics associated with back siphonage and back pressure backflow events
Discuss how backflow prevention devices protect water quality in potable water systems
Identify existing codes concerning cross connections
Explain existing codes concerning cross connections
Compare and contrast atmospheric and pressure vacuum breaker devices
Describe the installation of atmospheric and pressure vacuum breaker devices
Describe the installation of spill resistant pressure vacuum breakers
Demonstrate the testing procedure for spill resistant pressure vacuum breakers
Describe the maintenance procedures for spill resistant pressure vacuum breakers
Describe the installation of pressure vacuum breakers
Demonstrate the testing procedure for pressure vacuum breakers
Describe the maintenance procedures for pressure vacuum breakers
Describe the theory of operation of double check valves
Describe the installation of double check valves
Demonstrate the testing procedure for double check valves
Describe the maintenance procedures for double check valves
Describe the installation of double check detector assemblies
Demonstrate the testing procedure for double check detector assemblies
Describe the maintenance procedures for double check detector assemblies
Discuss the installation of reduced pressure principle devices
Demonstrate the testing procedure for reduced pressure principle devices
Discuss the maintenance procedures for reduced pressure principle devices
Describe the installation of reduced pressure principle detector assemblies
Discuss the testing procedures for reduced pressure principle detector assemblies
Describe the maintenance procedures for reduced pressure principle detector assemblies
Demonstrate proper testing procedures and required documentation for all common backflow prevention devices

Student Learning Outcomes:

Compare and contrast general performance characteristics of the following backflow prevention devices: pressure vacuum breakers, spill resistant pressure vacuum breakers, double check valves, and reduced pressure principle devices.
Evaluate common backflow prevention devices with respect to their effectiveness in complying with public health and safety regulations.

Units & Hours

Minimum Units:
3.0

Maximum Units
3.0

Total Hours
Water Treatment Fundamentals
WATR071:

3.0 Units

Presents the basic operating principles and techniques of the conventional surface water treatment process of coagulation, flocculation, sedimentation, and filtration, plus those of common disinfection processes. Assists in preparation for Grade T1 and T2 Water Treatment Operator certification examination given by the California State Water Resources Control Board, Division of Drinking Water Programs. Optional field trips may be offered.

Requisites

Requisites:

Prerequisite

or possession of current certification by the State Water Resources Control Board as a Water Treatment, Water Distribution, or Wastewater Treatment Operator

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Identify the major sources of water in California

Solve basic water mathematics problems

Explain the hydrologic cycle

Identify the two main sources of drinking water supply

Contrast general water quality characteristics of surface water and groundwater

Compare federal and state water quality agencies

Identify categories of primary drinking water standards

Identify categories of secondary drinking water standards

Explain the differences between primary and secondary standards

Explain why stratification occurs in reservoirs

Compare water quality characteristics of the epilimnion and the hypolimnion

Identify common water quality objectives and processes in preliminary treatment

Identify the main requirements of the surface water treatment rule

Compare the effectiveness of pathogen removal and inactivation with respect to viral, bacterial, and protozoan pathogens

Explain how the microbiological safety of water is determined

Name the four unit processes that comprise conventional treatment

Name the three major particle size categories

Identify the purpose of coagulation
Describe the coagulation process
Calculate dosages of primary coagulants and coagulant aids
Describe the fate of colloidal particles during flocculation
Describe the fate of suspended particles during sedimentation
Calculate detention times in flocculation and sedimentation
Identify the four approved filtration process options from the Surface Water Treatment Rule
Explain the fate of dissolved, colloidal, and suspended solids within the filtration process
Explain the changes in head loss that occur during filtration
Explain the changes in turbidity that occur during filtration
Describe the components of conventional filters
Calculate filtration rate
Explain why water is disinfected
Identify the four chemicals approved for disinfection by the Surface Water Treatment Rule
Explain the laboratory procedure for each of the three coliform analyses
Identify the three chemicals that can be used to chlorinate drinking water
Contrast disinfection capabilities of the chemicals involved in chlorination, including hypochlorous acid, hypochlorite ion, and chloramines
Identify the proper safety equipment required for handling chlorine gas
Calculate chlorine disinfection dosages
Solve a variety of water treatment related mathematical problems

**Student Learning Outcomes:**
- Evaluate common water treatment processes with respect to their effectiveness in complying with public health and safety regulations.
- Differentiate among the Primary Drinking Water Standards categories of Inorganic, Organic, Disinfectant/Disinfection By-Product, and Microbiological contaminants.

**Units & Hours**

**Minimum Units:**
3.0

**Maximum Units**
3.0

**Total Hours**
54.0

**Advanced Water Treatment**

**WATR072:**
3.0 Units

Examines advanced topics in conventional drinking water treatment processes and disinfection, as well as non-conventional treatment processes. Assists in preparation for Grade T2 and T3 Water Treatment Operator certification examination given by the California State Water Resources Control Board, Division of Drinking Water Programs. Optional field trips may be offered.

**Requisites**
Requisites:

Prerequisite

WATR071 - Water Treatment Fundamentals

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Identify the two methods employed to address pathogen contamination in drinking water

Calculate chemical requirements for disinfection operations using chlorination chemicals

Compare the relative capabilities of the four chemicals approved for drinking water disinfection

Calculate solution concentrations

Explain the chemistry that shapes the chlorine breakpoint curve

Evaluate various chlorine to ammonia ratios for disinfection effectiveness and overall water quality impacts

Determine compliance with Surface Water Treatment Rule disinfection requirements

Calculate CT

Compare disinfection by-product formation capabilities of the four disinfection chemicals approved by the Surface Water Treatment Rule

Evaluate the effectiveness of the common methods of disinfection by-product control

Analyze results of field water quality measurements to determine location on the chlorine breakpoint curve

Explain the biological process of nitrification and how it may occur in a drinking water distribution system

Calculate ammonia feed rates

Identify fluoridation treatment objectives

Calculate feed rates for fluoridation chemicals

Calculate flow rates required for blending

Define corrosion, deposition, and saturation

Interpret results of the Langlier Index calculation

Describe stabilization treatment by pH adjustment

Describe stabilization treatment by sequestration

Describe iron and manganese removal by oxidation

Calculate iron removal rates

Define total hardness of drinking water

Describe the process of precipitation of hardness at elevated pH levels

Identify potential treatment objectives of the ion exchange process

Identify potential treatment objectives for activated carbon processes

Identify potential treatment objectives for aeration processes
Analyze water quality objectives to identify appropriate use of membrane processes

Identify common methods of pressure measurement

Identify common methods of flow measurement

Describe how a flow proportional chemical feed control system will operate

**Student Learning Outcomes:**

- Evaluate common water disinfection processes with respect to their effectiveness in complying with public health and safety regulations.
- Evaluate non-conventional water treatment processes with respect to their effectiveness in complying with public health and safety regulations.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Water Quality**

**WATR073:**

3.0 Units

Examines basic principles of chemistry and microbiology, and applies them to drinking water quality and related state and federal regulations. Optional field trips may be offered.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**

**Course Objectives:**

- Explain the relevance of chemistry to water quality
- Explain the relevance of microbiology to water quality
- Define basic terms of chemistry
- Distinguish between elements and compounds
- Distinguish between molecular and ionic compounds
- Interpret a chemical formula
- Interpret a chemical equation
- Develop a chemical equation to describe a chemical reaction
- Construct a chemical formula for an organic compound from the compound’s name
Construct the name of an organic compound from that compound's chemical formula

Identify compounds as acids, bases, or salts

Interpret pH measurements

Define alkalinity

Identify common chemicals used in water treatment to adjust pH and alkalinity

Identify the main public health risks associated with water consumption

Differentiate among protozoa, bacteria, and viruses

Identify the applications of the heterotrophic bacterica analysis

Identify the three approved methods for coliform bacteria analysis

Describe the multiple tube fermentation method

Describe the CoLiLert method

Describe the membrane filtration method

Explain the difference in pathogen levels between groundwater and surface water sources

Identify water quality constituents found in most natural waters

Identify the classifications for public water systems

Identify the regulatory agencies responsible for the establishment and enforcement of drinking water regulations

Discuss the differences between primary and secondary drinking water standards

Identify the purpose of the Total Coliform Rule (TCR) and the Surface Water Treatment Rule (SWTR)

Explain the two main violations of the TCR

Identify the two pathogen reduction barriers required by the SWTR

Describe common water quality analyses

Interpret results of common water quality analyses to determine safety of the water supply

**Student Learning Outcomes:**

- Analyze water quality principles, including related State of California public health and safety regulations.
- Perform and interpret a variety of water quality analyses.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units**

3.0

**Total Hours**

54.0

**Water Quality Laboratory Analysis**

**WATR074:**

3.0 Units

This course will present the theory and science behind common analytical methods used in drinking water and wastewater laboratories. Pertinent principles of chemistry and biology will be explored in lecture, and actual procedures will be demonstrated and conducted in the laboratory. No previous study in laboratory sciences is required. Field trips may be required.
Requisites
Requisites:
None

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Identify common laboratory equipment items and their applications

Discuss safe work practices in a laboratory environment

Explain the scientific principles for Physical Analysis

Conduct Physical Analysis laboratory procedures.

Explain the scientific principles for Disinfectant Analysis

Conduct Disinfectant Analysis laboratory procedures.

Explain the scientific principles for pH and Alkalinity Analysis

Conduct pH and Alkalinity Analysis laboratory procedures.

Explain the scientific principles for Cation Analysis

Conduct Cation Analysis laboratory procedures.

Explain the scientific principles for Anion Analysis

Conduct Anion Analysis laboratory procedures.

Explain the scientific principles for Organic Analysis

Conduct Organic Analysis laboratory procedures.

Explain the scientific principles for Biochemical Oxygen Demand Analysis

Conduct Biochemical Oxygen Demand Analysis laboratory procedures.

Explain the scientific principles for common Wastewater Analysis

Conduct common Wastewater Analysis laboratory procedures.

Explain the scientific principles for Microbiological Analysis

Conduct Microbiological Analysis procedures

Student Learning Outcomes:

Explain the scientific principles upon which common Water Quality laboratory analyses are based.

Conduct common Water Quality laboratory analyses.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
Introduction to Wastewater Treatment
WATR080:

3.0 Units

This course provides an overview of the basic principles of wastewater treatment including wastewater characteristics, collection systems, preliminary, primary, secondary, and tertiary treatment, wastewater recycling, and residuals handling. It is intended both for students preparing to become certified wastewater treatment operators, as well as students interested in discovering how the environmental impacts of human activities are minimized through modern wastewater treatment technologies. Field trips may be required.

Requisites

None

Transferability & General Education Options

Transferable:

Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:
Identify common characteristics of domestic wastewater.
Contrast common characteristics of domestic and industrial wastes.
Conduct mathematical unit conversions
Identify waste products of aerobic and anaerobic respiration
Discuss the potential impacts of domestic wastes on the natural environment
Define Biochemical Oxygen Demand
Discuss the importance of BOD on assessing the impact of domestic wastes on the natural environment
Discuss the significance of solids in wastewater
Describe the role of sedimentation in wastewater treatment
Calculate percent removal of BOD and suspended solids
Describe diurnal wastewater flow patterns
Calculate areas, volumes, and flow rates that are related to wastewater treatment
Distinguish between gravity sewers and force mains
Calculate pipeline velocities
Describe common preliminary treatment processes
Contrast solids removal capabilities of various preliminary treatment processes
Identify the purpose of Primary Treatment
Describe the impact of Primary Treatment on BOD and Suspended Solids
Describe secondary treatment with lagoons
Describe secondary treatment with trickling filters
Describe the activated sludge process
Contrast expected water quality changes among lagoon, trickling filter, and activated sludge processes
Describe the secondary clarification process
Calculate return activated sludge and waste activated sludge pumping rates
Discuss the needs for tertiary treatment
Describe typical wastewater chlorination/dechlorination facilities
Describe various advanced tertiary treatment processes
Discuss the water quality improvements achieved by advanced tertiary treatment processes
Describe the handling and disposal of waste solids at domestic wastewater treatment plants

Student Learning Outcomes:
- Explain the main characteristics of domestic wastewater and the possible environmental consequences of wastewater disposal.
- Differentiate among preliminary, primary, secondary, and tertiary forms of wastewater treatment, and discuss their common applications.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Wastewater Treatment
WATR081:

3.0 Units

Presents the basic operating principles and techniques of conventional wastewater treatment, including preliminary, primary, and secondary treatment processes, as well as wastewater quality assessment, wastewater collection, and wastewater disposal. Successful completion provides student with 48 Certification for Wastewater Professionals (CWEA) contact hours and 8 State Water Resources Control Board (SWRCB) educational points. Prepares student for SWRCB Wastewater Treatment Plant Operator exam-Grades 1 and 2. Optional field trips may be offered.

Requisites

Requisites:
Prerequisite
WATR050 - Water Mathematics and Hydraulics

or possession of valid certification from the State Water Resources Control Board as a Water Treatment, Water Distribution, or Wastewater Treatment Operator

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Identify common sources of wastewater
Identify the two main measurements made to assess the character and quality of wastewater
Calculate unit conversions for volume and flow rate
Identify common measurements of wastewater quality
Describe biochemical oxygen demand
Discuss the role of the NPDES permit in environmental protection
Calculate volumes of various wastewater structures
Describe how sewage is collected
Describe how industrial sewage may be pretreated
Calculate flow rates of wastewater in sewers and treatment processes
Describe common means of removal and disposal of grit, floating debris and other matter from wastewater
Calculate velocities of wastewater in sewers and treatment processes
Describe the process of removal of suspended solids from wastewater
Calculate various measurements for primary treatment process control, including surface loading rate, weir overflow rate, detention time, efficiency, sludge production rates, and pump operating times
Define aerobic, facultative, and anaerobic forms of metabolism
Discuss food to microorganism ratio and its impact on the operation of biological treatment processes
Calculate food to microorganism ratio
Describe the fixed film biological treatment process employing trickling filters
Describe the fixed film biological treatment process employing rotating biological contactors
Compare the operation and performance of trickling filters and rotating biological contactors
Calculate trickling filter surface areas, volumes, removal efficiencies, and recirculation rates
Calculate trickling filter hydraulic and organic loading rates
Describe the activated sludge treatment process
Contrast the operations and performance of fixed film and suspended growth processes
Calculate various process performance measurements, including areas, volumes, detention times, solids loading rates, BOD loading rates, return activated sludge rates, waste activated sludge rates, and sludge age
Describe the secondary clarification process
Contrast the different characteristics of secondary sludge with primary sludge
Calculate secondary clarification process control variables including surface loading rate and sludge withdrawal rate

**Student Learning Outcomes:**
- Analyze the appropriate use and application of conventional wastewater treatment technology to ensure compliance with public health and safety regulations.
- Calculate basic mathematical measurements related to wastewater treatment, including volumes, flow rates, detention times, chemical dosages, and velocities.

**Units & Hours**
**Minimum Units:**
3.0

**Maximum Units**
3.0
Total Hours
54.0

Advanced Wastewater Treatment
WATR082:

3.0 Units

Presents advanced operating principles and techniques of conventional wastewater treatment. Also presents operating principles and techniques of advanced processes including activated sludge, disinfection, tertiary treatment and sludge handling. Successful completion provides student with 48 Certification for Wastewater Professionals (CWEA) contact hours and 8 State Water Resources Control Board (SWRCB) educational points. Prepares student for SWRCB Wastewater Treatment Plant Operator exam-Grades 1 through 5. Optional field trips may be offered.

Requisites
Requisites:
Prerequisite
WATR081 - Wastewater Treatment

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
Discuss suspended solids, biochemical oxygen demand, and other water quality measurements
Calculate areas, volumes, flow rates, and velocities
Describe the threat of pathogens in natural waters and the role of wastewater treatment in addressing this risk
Discuss eutrophication
Describe the nitrogen cycle
Calculate total maximum daily loads
Describe the processes that comprise conventional wastewater treatment
Evaluate the water quality characteristics of water following conventional treatment
Identify water quality challenges that may remain following conventional treatment
Describe the microbiological environmental factors in biological treatment
Calculate a variety of secondary treatment process control measurements
Discuss the activated sludge process
Contrast food to microorganism ratios at various locations in an activated sludge process
Contrast dissolved oxygen levels at various locations in an activated sludge process
Compare operational practices among the activated sludge variants including step feed, contact stabilization, and complete mix
Calculate waste activated sludge rates required to maintain desired sludge age or mean cell residence times
Discuss the environmental concerns associated with disinfection and dechlorination
Describe common tertiary treatment process schemes
Evaluate water quality following tertiary treatment
Calculate filtration and backwash rates, and turbidity and solids reductions
Describe reverse osmosis, micro-filtration and cation/anion exchange processes
Discuss the treatment requirements for water recycling
Compare densities and other characteristics of primary and secondary sludges
Analyze the impact of low and high sludge densities on digester operations
Describe the process components of an anaerobic sludge digestion process
Calculate volatile acid/alkalinity ratio, solids loading rate, sludge age, and other digestion process control measurements
Compare various methods of sludge dewatering
Discuss the impact on primary and secondary treatment of waste stream recycling
Calculate sludge volume variations related to water content
Describe laboratory procedures related to conventional wastewater treatment process control
Discuss issues associated with proper management of a wastewater treatment plant

**Student Learning Outcomes:**

- Analyze the appropriate use and application of advanced wastewater treatment technologies to ensure compliance with public health and safety regulations.
- Calculate advanced mathematical measurements related to wastewater treatment including those for activated sludge, chlorination, dechlorination, filtration, and sludge handling processes.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours:**

54.0

**Collection Systems**

**WATR083:**

3.0 Units

Sewer construction, inspection and testing, cleaning methods, safety, elementary hydraulics, pipeline repair, equipment maintenance, communications, and record keeping. Successful completion provides student with 48 CWEA contact hours and 4 SWRCB educational points. Preparation for CWEA Wastewater Collection System exam all Grades. Optional field trips may be offered.

**Requisites**

**Requisites:**

None

**Transferability & General Education Options**

**Transferable:**

Not transferable

**Weekly Lecture Hours:**

3.0

**Learning Outcomes**
**Course Objectives:**

- Discuss the history of wastewater collection systems
- Explain the certification process of the California Water Environment Association
- Explain the certification process of the State Water Resources Control Board
- Identify components of wastewater collection systems
- Discuss the role of the various components of collection systems
- Calculate areas and volumes associated with collection systems
- Discuss the quality and quantity of the various sources of wastewater entering a collection system
- Identify common flow measurement devices
- Calculate flow rate and velocity in collection systems
- Define a confined space
- Identify safety risks associated with common gases encountered in collection systems
- Analyze various collection system work tasks for safety concerns
- Evaluate a collection system for operability and potential deficiencies
- Identify unauthorized connections to a collection system
- Describe infiltration and inflow, and their impact on collection system operations
- Identify common methods of sewer cleaning
- Describe safety concerns associated with common sewer cleaning methods
- Analyze clogging and stoppage situations for most appropriate cleaning methods
- Calculate flow rates and velocities before and after cleaning operations
- Discuss safe work practices associated with sewer repairs
- Describe procedures for common sewer repair operations
- Identify the purpose of lift stations
- Discuss the role of lift stations in sustaining wastewater flows in a collection system
- Discuss the operation and maintenance of lift stations
- Differentiate between axial flow and radial flow pumps, especially in terms of hydraulic performance characteristics
- Formulate a maintenance management program for collection system pumps and lift stations
- Calculate pump hydraulics measurements including total static head, total dynamic head, and horsepower

**Student Learning Outcomes:**

- Analyze a wastewater collection system and its components for operational, maintenance, and safety concerns.
- Calculate volumes, flow rates, velocities, and other applied mathematics measurements related to wastewater collection system operation and maintenance.

**Units & Hours**

**Minimum Units:**

3.0

**Maximum Units:**

3.0

**Total Hours**

54.0
Water Reclamation and Reuse
WATR085:

3.0 Units

Fundamentals of reclaimed water, includes case studies and history of reclaimed water development. Planning, design and construction of reclaimed distribution systems. Problems regarding marketing, legislation and regulations for reclaimed water. Includes microbiology and health/safety issues. Optional field trips may be offered.

Requisites

None

Transferability & General Education Options

Transferable:
Not transferable

Weekly Lecture Hours:

3.0

Learning Outcomes

Course Objectives:

Identify common water quality measurement parameters
Explain the water quality significance of nutrients, salts, and organics
Calculate volumes and flow rates
Calculate parameter concentration
Classify various types of recycled water based on the form of treatment employed
Discuss the impact of varying forms of treatment on recycled water quality
Identify the most common sources of recycled water
Identify water quality challenges of various sources of recycled water
Describe the general water quality of secondary treatment effluent
Describe the impact on secondary treatment effluent quality by employing additional processing such as nitrification, phosphorus removal, and organics removal
Discuss the expected cost of installation and operation of various forms of secondary treatment
Describe the main water quality objectives of tertiary treatment
Explain the requirements of CA Title 22 regarding turbidity and pathogen levels
Contrast effluent water quality characteristics among various membrane process alternatives
Discuss the environmental issues associated with waste streams, such as brine
Explain the concept of “Designer Water”
Identify processes capable of trace organics removal
Discuss the need for recycled water storage
Contrast the needs and facilities of short term and long term storage
Describe the facilities employed for recycled water distribution
Discuss the water quality challenges associated with the distribution of recycled water
Identify the main regulations associated with recycled water quality and distribution
Identify the main regulatory agencies with jurisdictions over recycled water

Discuss the benefits and challenges of direct potable reuse of recycled water

Student Learning Outcomes:
- Assess regulations that govern reclaimed water uses in Orange County.
- Differentiate among water quality parameters of wastewater following various treatment processes.

Units & Hours
Minimum Units:
3.0

Maximum Units
3.0

Total Hours
54.0

Water Utility Management
WATR092:

3.0 Units

This course explores various supervision and management issues of particular relevance to the Water Utility Industry, including water quality regulations, other water industry regulations, employee safety programs, facilities security, emergency response, governing body interactions, and public relations. Field trips may be required.

Requisites
Requisites:
Advisory

BUS222 - Business Writing

Previous or concurrent enrollment
OR

Transferability & General Education Options
Transferable:
Not transferable

Weekly Lecture Hours:
3.0

Learning Outcomes
Course Objectives:
- Compare and contrast the governance and regulatory oversight of public and private water agencies
- Describe the various sources of water used in Orange County
- Explain how imported water sources are conveyed to Orange County
- Identify the roles of various government agencies in the conveyance of water to Orange County
- Explain the responsibilities of a water agency with respect to compliance with drinking water regulations
- Explain common water rate structures
- Explain required consumer water quality reports
- Compare various methods of mass communication with customers
Discuss the mandatory programs intended to improve workplace safety
Discuss the challenges of staffing a public utility that must operate continuously
Explain basic operating budget construction and monitoring
Explain general purchasing procedures and requirements
Discuss the management of major capital projects for a Water Utility
Discuss various current events and issues in the Water Industry

Student Learning Outcomes:
- Assemble and organize project teams to perform essential tasks and execute various critical functions in the Water Industry.
- Examine the roles and interactions of the many government agencies involved in providing water in California.

Units & Hours
Minimum Units:
3.0
Maximum Units:
3.0
Total Hours:
54.0

California Water Resources
WATR107:

3.0 Units
A detailed examination of the supply and demand of water in California. Topics addressed include California geography and climate, State history and the effects of population growth, water rights, water quality, water uses, the hydrologic cycle, groundwater and surface water resources. Also addressed are the major water projects in the State and the government agencies responsible for these projects, including projects and agencies that provide water to Orange County.

Requisites
None

Transferability & General Education Options
Transferable:
Transferable to both UC and CSU

Weekly Lecture Hours:
3.0

General Education Plan:
Local - Plan A
  Area A: Natural Sciences

CSU GE - Plan B
  Area B1: Physical Sciences

Learning Outcomes
Course Objectives:
Describe the hydrologic cycle of Planet Earth
Identify where water is stored on Earth
Discuss the quality of water in various states of matter and locations in the hydrologic cycle

Identify the major physical features of California

Discuss the precipitation patterns of California

Contrast land uses versus precipitation patterns in California

Define salinity

Interpret drinking water regulations

Discuss the causes of salinity variations in natural waters

Discuss the impacts of human activities on water quality

Define terms associated with groundwater

Discuss common water quality characteristics of groundwater

Describe the impact of well operation on groundwater levels

Define terms associated with surface water and limnology

Contrast the general water quality characteristics of groundwater and surface waters

Discuss how lake management practices can impact water quality

Identify potential water sources beyond groundwater and surface water

Analyze the water quality of various water sources with respect to possible water uses

Discuss the water quality and economic issues associated with various water sources

List the most common uses of water in California

Identify the relative quantities of water associated with various water uses

Discuss the impact of water shortages on various water uses

Evaluate the potential impacts of water shortages on the economy of California

Identify and describe flood control methods and facilities

Analyze the impact of flood control operations on water supply

Compare and contrast various categories of water rights in California

Explain the mechanisms by which both public and private water agencies are accountable to their customers

Discuss the history, geography, and facilities of the Los Angeles Aqueduct

Discuss the history, geography, and facilities of the Hetch Hetchy Aqueduct

Compare the relative flows of the Los Angeles and the Hetch Hetchy Aqueducts to those of other water projects

Discuss the environmental issues associated with the Los Angeles Aqueduct

Discuss the environmental issues associated with the Hetch Hetchy Aqueduct

Discuss the history, geography, and facilities of the Colorado River System

Discuss the history, geography, and facilities of the Central Valley Project

Compare the relative flows of the Colorado River System and the Central Valley Project to those of other water projects

Discuss the history, geography, and facilities of the State Water Project

Analyze the relative flow contributions of the tributary rivers to the Sacramento River Delta, as well as the relative outflows

Discuss the environmental issues associated with the operation of water projects on the Sacramento River Delta

Discuss the history, geography, and facilities of the major water systems in Orange County

Compare the relative flows of local Orange County projects to those of other water projects
Student Learning Outcomes:
Examine the impacts of physical geography and meteorology on the supply and distribution of natural waters in California. Compare and contrast various southern California water sources with respect to water quantity, quality, and reliability.

Units & Hours
Minimum Units: 3.0
Maximum Units: 3.0
Total Hours: 54.0

Cooperative Work Experience Education
WATR199:
4.0 Units
This course is designed for students majoring in the Water Utility Science. Students must be enrolled in a minimum of six Water Utility Science units. Job site experience will train the student in additional job skills that will enhance academic learning from the classroom to the workplace. May be either paid or unpaid. Open Entry/Open Exit

Requisites
Requisites:
Prerequisite
Successful completion of 6 units in Water Utility Science

Transferability & General Education Options
Transferable:
Transferable to CSU only

Weekly Lecture Hours:
4.0

General Education Plan:
Learning Outcomes
Course Objectives:
Develop learning objectives for the internship.
Develop plans to accomplish each learning objective.
Implement plans for achieving learning objectives.
Analyze performance during internship toward achieving learning objectives.

Student Learning Outcomes:
Develop at least three learning objectives based on work-related duties.
Describe the processes of attaining each of these learning objectives, including a self-assessment of performance.

Units & Hours
Minimum Units: 4.0
Maximum Units: 4.0
Total Hours: 54.0
Transition to Higher Learning
WKPR001:

32.0 Hours

This course is designed to prepare students for the college experience by equipping them with problem-solving, communication, and goal setting skills. The students will also be exposed to the expectations of noncredit classes, certification options, and campus resources. Field trips may be required. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
Understand the importance of self-advocacy in higher learning
Demonstrate the ability to make decision and take initiative to solve problems
Recognize and understand legal rights and responsibilities
Develop communication skills and critical thinking
Demonstrate the ability to make decisions about educational opportunities
Understand and show self-advocacy
Recognize different career tracks choice available through each certificate program
Understand vocabulary
Understand and complete intake form
Choose a certificate program based on individual strengths and interests
Demonstrate the ability to identify on-campus and off-campus resources
Understand and show self-advocacy
Develop related vocabulary
Develop communication skills
Demonstrate the ability to explain the registration process to another student
Recognize and understand legal rights as an adult in higher learning
Demonstrate the ability to ask for help when needed
Identify individuals to develop a network that will be a part of the entire higher learning process

Student Learning Outcomes:
Demonstrate an understanding of the importance of punctuality in a college setting.
Understand the college admission process and how to complete a college application.

Hours

Total Hours
32.0

Self-Advocacy
WKPR002:

60.0 Hours
Students will identify their strengths and weaknesses. Students will define realistic goals, objectives and the skills needed to reach goals. Student will learn how to communicate in a respectful and responsible way, learn rights and employment laws that pertain to people with disabilities and identify advocacy groups. Open Entry/Open Exit.

**Requisites**

**None**

**Learning Outcomes**

**Course Objectives:**

- Demonstrate an understanding of vocabulary
- Make decisions and set goals about employment, housing, transportation, money, relationships and health
- Demonstrate self-determination to reach goals
- Demonstrate communication skills and critical thinking
- Demonstrate understanding about one's abilities and disabilities
- Recognize and identify wants and needs
- Demonstrate how to take action
- Develop strengths and identify weaknesses
- Understand and identify hidden and visible disabilities
- Demonstrate one's capability to others
- Develop plan for changing weaknesses
- Recognize importance of a support team
- Develop a small support team
- Identify and develop a positive path
- Identify manageable steps to short and long-term goals

**Student Learning Outcomes:**

- Demonstrate the ability to speak for themselves in order to meet needs.
- Demonstrate the ability to work more effectively with others.

**Hours**

**Total Hours**

60.0

**Getting Around Town**

**WKPR003:**

60.0 Hours

A class designed for students to enhance independence by introduction to safe practices and knowledge about using public transportation. Open Entry/Open Exit.

**Requisites**

**None**

**Learning Outcomes**

**Course Objectives:**

- Identify three ways to use public transportation
Identify fixed bus routes
Demonstrate how to use Uber, Lyft, or a taxi
Demonstrate how to use the Metro
Demonstrate appropriate behavior at the stops
Recognize, understand and demonstrate paying for public transportation: Money, payment online, or bus card ready
Demonstrate where to sit for safety reasons
Demonstrate appropriate behavior during transportation
Understand and demonstrate how to plan one way trips
Understand and demonstrate transferring to a second bus
Recognize alternate plans due to construction or missed bus
Demonstrate how to plan a round trip
Demonstrate efficient time management when planning trips
Understand safety and security procedures
Recognize stranger danger
Recognize the importance of emergency information

Student Learning Outcomes:
- Demonstrate the ability to exhibit appropriate behaviors at the bus stop while waiting for and taking public and private transportation.
- Demonstrate the ability to plan trips using print and online information for public and private transportation.

Hours
Total Hours
60.0

Choosing the Right Employment Path
WKPR004:

60.0 Hours
This course is intended to assist students in establishing clear and realistic occupational goals. Students will assess their interests and abilities in order to establish attainable objectives to achieve their goal. Student will explore resources for employment in their chose occupational field. Open Entry/Open Exit.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
- Defining goals and objectives
- Choosing realistic goals that fit abilities and interests
- Setting attainable objectives by creating steps to a goal
- Choosing an occupational goal based on interests and ability
- Identifying occupational interests related to personal values and interests
- Complete an online Interest inventory
- Complete online assessments to determine strengths and areas of improvement
Setting objectives to attain the individual student's occupational goal
Identify soft skills to work on
Identifying skills necessary to attain the student's goal and objectives
Identifying resources for acquiring necessary skills
Locate trade schools and colleges that provide educational support in chosen profession
Locate local volunteering opportunities to gain work experience
Setting objectives for promotion and pay increase
Identifying skills necessary for attaining promotion and/or pay increase
Identifying other resources for attaining necessary skills
Identify in-house training opportunities for promotion
Practice finding the right job using Indeed and Linkden
Determine the wage associated with specific jobs
Understand different types of shifts
Understand part-time versus full-time employment
Identify different types of working environment
Identify different types of working conditions
Practice applying for jobs online
Practice making cold calls
Create an email to friends and family asking for help to find a job
Locate and attend a job fair
Understand how vocational agencies for support individuals with disabilities
Determine appropriate job-seeking behavior and attitudes
Identify appropriate interview attire
Determine proper grooming standards
Practice appropriate communication skills for successful job placement

Student Learning Outcomes:
- Identify one obtainable occupational goal and set manageable mini-goals to reach it.
- Demonstrate the ability to use two job-seeking resources to find three potential jobs in their chosen occupational field.

Hours
Total Hours
60.0

Safety on the Job
WKPR005:

60.0 Hours
This course is designed to introduce students to personal safety awareness. Student will be presented with proactive steps to take to avoid dangerous situations in the community, on the job, and at home. Students will be presented with basic techniques for self-defense and first aid. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Understand specific safety-related vocabulary
Identify possibilities of what can create a dangerous situations
Identify what an accident is verses what an intentional decision would be in creating a unsafe situation
Understanding why up to date identification is important
Create a list of emergency phone numbers
Identifying situations that require 911
Demonstrating when and how to call 911
Demonstrate how to alert authorities about a disability
Demonstrate how to avoid dangerous situations
Demonstrate being aware of your surroundings
Demonstrate how to protect your possessions to help stop unsafe situations
Demonstrate how to handle and carry money in a discreet manner
Identify potential dangerous areas in the workplace
Demonstrate how to protect self from assault and/or robbery
Demonstrate how to report a crime
Demonstrate giving necessary information to police, paramedics, and others
Identify characteristics of an employee who may be under the influence
Identify burns and demonstrate how to immediately treat a burn before help arrives
Demonstrate how to treat cuts and abrasions before help arrives
Identify poisonous work materials that require safety masks and goggles

Student Learning Outcomes:
Demonstrate the ability to recognize 90% of situations presented that might present harm in the community, on the job, and at home.
Demonstrate the ability to call for help and conduct very basic first aid.

Hours
Total Hours
60.0

Communication Skills for Successful Employment
WKPR006:

60.0 Hours
This course is designed to help students improve communication skills related to employment. Open Entry/Open Exit.

Requisites

Requisites:
None
Course Objectives:
- Apply for a job
- Contact employers
- Fill out the application
- Identify and develop general knowledge of social attitudes
- Identify and develop cultural knowledge
- Identify the differences between the resume and interview
- Identify questions commonly asked at an interview
- Complete video mock interview
- Develop an action plan for after the interview
- Demonstrate how to make a good impression
- Recognize and understand how to use an employer's time fairly
- Understand the do's and don'ts on the job
- Anticipate first day questions
- Recognize and demonstrate what employers like in an employee
- Understand what employers should provide an employee
- Understand the necessary skills to keep the job
- Demonstrate how to get along with co-workers
- Recognize, understand, and demonstrate what people like in other people
- Demonstrate how to avoid problems with other people
- Learn to compromise
- Develop and demonstrative an assertive attitude
- Evaluate themselves
- Recognize strengths
- Recognize, understand, and demonstrate how to overcome/accommodate barriers
- Develop appropriate career goals

Student Learning Outcomes:
- Demonstrate communication strategies that create good first impressions.
- Demonstrate basic job interview skills.

Hours
Total Hours
60.0

Social Skills and Necessary Etiquette
WKPR007:

60.0 Hours

This course is designed to introduce students with an overview of appropriate social skills at school, work, and in the community. Various areas of social skill challenges and coping strategies will be taught and explored through examples in their own lives and through instructional materials. Open Entry/Open Exit.
Requisites

Requisites: None

Learning Outcomes

Course Objectives:
Recognizing feelings of happiness, joy, pleasure, calmness, fear, anger, sadness, hurt, disappointment, anxiety, frustration, etc.
Recognize, understand, and demonstrate how to cope with feelings
Demonstrate the ability to express feelings
Recognize, understand, and demonstrate self-talk: positive and negative
Demonstrate self-control
Develop calming techniques and stress reduction techniques
Discuss and demonstrate techniques for discussing problems and issues
Identify Conflict and demonstrate problem solving
Demonstrate being assertive
Recognize, understand, and demonstrate how to cope with challenging people, behaviors, and situations
Identify and demonstrate basic social skills at school, work, and in the community by showing respect for others, having a good attitude, and using good manners.
Develop active listening skills
Recognize and demonstrate different body language cues
Develop personal boundaries
Develop and demonstration conversational skills
Develop techniques to respond to success and accomplishment
Develop techniques to respond to failure, mistakes, and embarrassment

Student Learning Outcomes:
Define and demonstrate three examples of each basic social skill: Respect, positive attitude, polite manners, and good conversation skills.
Recognize own feelings and identify three ways to cope with difficult feelings, including calming and stress reduction skills

Hours
Total Hours
60.0

Building Critical Thinking Skills

WKPR008:
60.0 Hours

This course is intended to prepare students to develop acquiring or improving critical thinking skills necessary to function independently in a variety of activities, situation, and environments for successful employment. Emphasis on problems solving and decision-making through understanding and evaluation situations, utilizing knowledge of cause and effect relationships, exploring options and planning and implementing strategies. Open Entry/Open Exit.

Requisites

Requisites: None

Learning Outcomes
Course Objectives:
- Recognize a negative situation and/or problem
- Demonstrate the ability to gather all pertinent information
- Understand how to analyze information
- Develop appropriate response
- Formulate plans
- Determine sequential steps
- Predict possible consequences
- Implement a plan
- Evaluate outcome
- Re-evaluate plan
- Substitute different facts to see if the outcomes would be the same
- Use situations in the media to apply the strategy used to see the outcome
- Develop deeper knowledge of situations

Student Learning Outcomes:
- Demonstrate understanding of the cause and effect of their actions.
- Demonstrate the appropriate steps in setting goals.

Hours
Total Hours
60.0

Beginning Computers
WKPR009:

60.0 Hours

Provides students with introductory instruction in keyboarding by touch and develop for basic computer applications such as, but not limited to, Windows, word processing, data entry, PowerPoint, email, and Internet navigation.

Requisites

Requisites:
None

Learning Outcomes

Course Objectives:
- Explain Student Learning Outcomes, Attendance Requirements, and Grading Criteria
- Explain and Show Equipment That Will Be Used
- Demonstrate Booting Sequence
- Understand Desktop Screen Components
- Demonstrate Basic Shortcuts, Menus, an Commands
- Understand and Demonstrate Navigating within Windows
- Identify and Demonstrate Letters, Numbers, and Symbols by Sight
- Identify and Demonstrate Letters, Number, and Symbols by Touch
- Develop Keyboard Speed and Accuracy
Demonstrate Creating, Selecting, and Opening a Folder

Demonstrate Creating, Editing, Saving, and Printing a Document

Demonstrate Naming, Renaming, Moving, and Searching for Documents

Understand, Identify, and Demonstrate Use of Inbox, Drafts, Spam, and Trash

Demonstrate the Use of Tabs, Backward and Forward Buttons

Create a Contact List

Demonstrate Acceptable Email Etiquette

Demonstrate How to Compose a Message with Attachments

Create a PowerPoint Presentation

Demonstrate How to Choose a Slide Layout, Inserting Content, Using Different Backgrounds, and Slide Transitions With and Without Animation Sound

Student Learning Outcomes:
- Demonstrate basic touch-typing proficiency.
- Demonstrate basic MS Windows OS navigation.

Hours
Total Hours
60.0

Customer Service for the Medical Field
WKPR010:

60.0 Hours

This course is intended to prepare students in acquiring or improving critical thinking, communication skills, and basic clerical skills necessary to work independently in a variety of hospital departments. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Explain the student guide and SLOs

Identify and discuss the types and responsibilities of hospital departments

Develop active listening skills

Develop assertive communication skills

Recognize and demonstrate different body language cues

Develop and demonstrate conversational skills

Maintain positive behaviors, attitudes, and relationships using expressive language

Recognize both positive and negative situations and/or problems

Recognize verbal and non-verbal communication cues

Gather pertinent information connected to issue

Formulate a plan of action

Demonstrate the skills needed to implement a plan of action
Evaluate outcomes
Demonstrate the ability to
File alphabetically, numerically, or other
Collate and assemble packets
Maintain personnel files
Conduct data entry
Cross-reference and verify hard copy documents with data base and server files
Distribute inter-office letter mail
Stock and organize office supplies
Complete an inventory of office supplies
Maintain a clean office area
Run errands
Maintain order sheet
Demonstrate the ability to
Use a scanner
Use a copy machine
Use a fax machine

**Student Learning Outcomes:**
- Demonstrate proper communication techniques with staff, patients, and visitors.
- Demonstrate knowledge of providing basic clerical support.

**Hours**

**Total Hours**
60.0

**Introduction to Handling Money**

**WKPR011:**
60.0 Hours

This course is designed to introduce the skills necessary for accurate money exchanges. Students will learn how to count money, give correct amounts of money for purchases, and make change. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Review the syllabus
- Explain the student learning outcomes
- Explain overview of projects
- Demonstrate basic addition and subtraction skills
- Demonstrate place value
- Demonstrate rounding
Demonstrate single digit and multiple digit addition and subtraction skills
Compute word problems using real-life examples
Utilize a calculator for calculating numbers with decimals
Demonstrate adding and subtracting decimals
Solve problems using rounding techniques
Identify coins and value recognition
Add and subtract coins and bills
Identify bills and value recognition
Demonstrate money skills
Count money amounts
Make change with and without a calculator

**Student Learning Outcomes:**
- Increase proficiency in basic mathematical computations.
- Demonstrate making correct change.

### Hours

**Total Hours**

60.0

### Applying Reading Skills on the Job

**WKPR012:**

60.0 Hours

This course is designed to increase reading comprehension skills necessary for successful employment. Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Review the syllabus
- Explain the student learning outcomes
- Identify projects
- Demonstrate skimming strategies such as preview, overview, and review
- Demonstrate scanning strategies such as finding the answer to a question, seeking an appropriate quotation reference or statement, and locating names in a dictionary or words in a dictionary
- Use and define new vocabulary that is used in the workplace
- Identify main ideas and details such as who, what, when, where, why, and how
- Demonstrate how to summarize text
- Demonstrate how to make educated guesses (inferences)
- Demonstrate how to predict conclusions
- Identify context cues
Explain comparisons by discriminating between fact and opinion, identifying tone, and recognizing and demonstrating using figurative language

Paraphrase instructions

Demonstrate following directions by identifying cause and effect relationships when read incorrectly

Demonstrate how to answer questions

Develop strategies to assist in situations that require reading

**Student Learning Outcomes:**
- Identify basic elements such as theme, purpose, and anticipate outcomes.
- Demonstrate the ability to read and comprehend instructions, directions, labels, and other written information found in the workplace.

**Hours**

**Total Hours**

60.0

**Applying Writing Skills on the Job**

**WKPR013:**

60.0 Hours

This course is designed to assist students with the writing process and includes activities to improve written composition skills. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Outline the syllabus

Discuss the student learning outcomes

Identify the projects

Develop accuracy in decoding words

Develop basic survival vocabulary

Develop specific work-related vocabulary related to work

Review and illustrate knowledge of spelling, punctuation, quotation, and capitalization

Distinguish between the different parts of speech

Recognize and apply different parts of a sentence

Use proper punctuation at the end of a sentence

Identify sentence fragments

Identify run-on sentences

Demonstrate knowledge of prewriting strategies

Demonstrate writing a memo, phone message, email, notes, or a full-page ad

Identify written errors

Proofread aloud

Edit through peer reading

https://sccollege.elumenapp.com/catalog/all-pages/4a0d0669-c6e1-4cbc-bed7-dd32ba6f6eb18
Read backwards
Rest and re-read

Student Learning Outcomes:
Use appropriate word choice and punctuation in well-written sentences.
Demonstrate proficiency in work-related written communication.

Hours
Total Hours
60.0

Basic Finances in the Workforce
WKPR014:

32.0 Hours
This is an introductory course to teach students how to manage and maintain a budget for payroll services. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Describe the certificate requirements
Describe the difference between part-time and full-time employment
Describe the difference between seasonal and temporary employment
Give examples of different types of shifts
Day
Night
Swing
Identify minimum wage
Describe competitive wages
Explain what depends on experience (DOE) means
Recognize taxes on a paycheck stub
Federal
State
Social security
Medicare
Describe the difference between gross and net income
Give an example of a minimum wage paycheck per week
Part-time at 20 hours per week
Full-time at 40 hours per week
Give an example of a competitive wage paycheck per week
Part-time at 20 hours per week
Full-time at 40 hours per week

Give an example of a minimum wage paycheck per month

Part-time at 20 hours per week

Full-time at 40 hours per week

Give an example of a competitive wage paycheck per month

Part-time at 20 hours per week

Full-time at 40 hours per week

Identify methods of payment

Check

Direct Deposit

Prepaid debit card

Demonstrate balancing an account

Schedule next payment by the due date

**Student Learning Outcomes:**
- Understand how to read a paycheck stub.
- Demonstrate balancing an account.

**Hours**

**Total Hours**

32.0

**Public Communications**

**WKPR015:**

32.0 Hours

This course is designed to teach students public speaking skills through the use of demonstrative, informative, and persuasive speeches. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**
- Describe the certification requirements
- Define and explain a demonstrative speech
- View a demonstrative speech
- Identify a demonstrative speech
- Demonstrate a demonstrative speech for a minimum of two minutes
- How to do something or how something works
- Use visual aids such as charts, graphs, maps, or pictures
- Define and explain an informative speech
- View an informative speech
- Identify an informative speech
Demonstrate an informative speech for a minimum of two minutes

Explain a subject, person, or place to the audience

Using descriptions, demonstrations, vivid detail, and definitions

Define and explain a persuasive speech

View a persuasive speech

Identify a persuasive speech

Demonstrate a persuasive speech for a minimum of two minutes

Convince the audience to accept their point of view on a topic of their choice

Use visual aids such as charts, graphs, maps, or pictures

**Student Learning Outcomes:**

- Describe the differences between a demonstrative, informative, and persuasive speech.
- Demonstrate two of the three types of speeches listed in outcome one.

**Hours**

**Total Hours**

32.0

**Long Term Competitive Employment Training**

**WKPR016:**

180.0 Hours

This course is designed to provide students with critical thinking, decision-making, and problem-solving skills necessary for long-term competitive employment opportunities. Open Entry/Open Exit.

**Requisites**

None

**Learning Outcomes**

**Course Objectives:**

- Describe the certification requirements
- Describe pre-screening requirements
- Background check
- Online Modules
- Application materials
- Required clearances
- Understand and demonstrate knowledge of rights
- Personal
- Professional
- Develop ideas, positive attitudes, and beliefs
- Growth mindset
- Demonstrate the importance of positive emotional and mental health for successful employment
- Science of sleep
- Mental health
Cognitive Distortions
Self-help techniques
Professional help
Stress reduction techniques
Demonstrate basic technology skills
Using electronic devices in the workplace
MS Word
MS PowerPoint
Google Docs
Apps for time management
Social media
Smartphones
Create a professional resume
Pre-write
Rewrite
Demonstrate verbal and non-verbal communication skills necessary during teamwork
Negotiation techniques
Active listening
Passive, aggressive, and assertive
Demonstrate skills to maintain a safe working environment
Workplace safety lessons
Understanding site codes
Injury scenarios
Accident reports
Workplace safety acronyms
Sexual harassment
Perpetrator
Victim
Reporting
Demonstrate positive work ethic skills during teamwork
Efficiency
Dependability
Adaptability
Integrity
Self-confidence
Professionalism
Demonstrate appropriate workplace behavior
Good attendance
Using sick days and vacation time
Appropriate appearance and attire
Follow human resources rules
Appropriate social etiquette
Good manners
Personal space
How to address an individual
Responding to email
Leadership skills
Personal growth for promotion

**Student Learning Outcomes:**
- Create a professional resume.
- Demonstrate adaptability during teamwork.

**Hours**

**Total Hours**
180.0

**Applying Math Skills on the Job**
**WKPR017:**

60.0 Hours

This course is designed to increase students’ mathematical reasoning skills necessary for successful employment.

**Requisites**

**Requisites:**
None

**Learning Outcomes**

**Course Objectives:**
- Recognize addition and equal symbols
- Distinguish words that signify addition
- Develop skip counting
- Develop memorization of doubles
- Demonstrate understanding of addition using manipulatives
- Discuss and solve word problems
- Recognize the subtraction symbol
- Distinguish words that signify multiplication
- Develop counting back
- Understand breaking numbers apart
- Demonstrate understanding of subtraction using manipulatives
- Recognize multiplication symbols
- Distinguish words that signify multiplication
Develop the zero property
Develop the identity property
Demonstrate the use of a multiplication chart
Develop memorization of multiplication table
Demonstrate understanding of multiplication using manipulatives
Recognize division symbols
Distinguish words that signify division
Demonstrate dividing numbers one to ten
Demonstrate understanding of division using manipulatives
Recognize basic measurement symbols
Distinguish words that signify measurement
Demonstrate basic measures by measuring objects and recording information
Demonstrate understanding of units of time

Student Learning Outcomes:
- Identify symbols used for addition, subtraction, multiplication, division, and customary measurement.
- Identify words that signify addition, subtraction, multiplication, division, and customary measurement.

Hours
Total Hours
60.0

Social Media and Online Safety in the Workplace
WKPR018:

60.0 Hours
This course is designed to provide students with the knowledge to increase personal and professional safety while online, creating, and maintaining social media accounts.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Define the concept of social media
Discuss advantages and disadvantages of social media
Analyze the importance of social networking
Review how to store personal information safely
Discuss when to disclose personal information Assess strong usernames and passwords
Explain “cookies” in websites
Demonstrate how to post public information online safely
Illustrate how to delete your digital footprint
List information necessary to complete a profile
Identify and apply proper online etiquette
Choose appropriate pictures to post online
Identify and discuss sexting
Identify bullying vocabulary
Demonstrate how to report an individual
Memorize safety tips
Demonstrate how to create a video
Demonstrate how to publicly share a video
Evaluate analytics on video
Discuss the importance for marketing your place of business
Practice building a friend list and client base
Identify how online networking can help you with employment and social engagements
Discuss how your digital footprint can affect your employment
Demonstrate how to build and maintain different social media platforms and applications.

Student Learning Outcomes:
- Demonstrate increased proficiency with internet safety skills while using social media.
- Demonstrate knowledge of current social media applications.

Hours
Total Hours
60.0

Attitudes for Success

WKPR099:

36.0 Hours
Provides students with classroom discussion and information about discovering/accepting responsibility for attitudes and behaviors (past, present and future), and making choices based on principles that influence success in their personal, educational, and career development. Open Entry/Open Exit.

Requisites
Requisites:
None

Learning Outcomes

Course Objectives:
Apply listening
Identify five poor listening styles
Keep hope alive
What about sex
Real life or art
Define a personal mission statement
A person's best friend
Melons
Employ communicating with parents:
Distinguish symptoms of a poor versus healthy personal bank account:

Describe taking time for a time out
The yes-man
The slacker
Recognize win - lose –the totem pole
Goals in action
Demonstrate how to think win-win
Tolerators profile
Review student syllabus
Recognize the crossroads of life:
We can control only one thing
Your spiritual diet
Getting back to nature
Be honest
Discovery getting to synergy
Identify how (7) habits can help
Celebrators profile
Do small acts of kindness
Time quadrants
Recognize principles as the real thing and understand why principles never fail
Practice saying sorry - you’re sorry
Choose to celebrate differences:
Listen to your language
You have to win
Compare the comfort zone and the courage zone:
Practice I can quit whenever I want
Mental barriers
Explain roadblocks of celebrating differences
Define win the private victory first
Oranges
Competing
Adapt daily
Identify we are all a minority of one:
Demonstrate teamwork and synergy
What about school
Bananas
It pays to be proactive
Demonstrate the refusal skill
Rising above abuse
Organize uncovering your talent
Sharpen your mind
Finding the "high" way
Growing your proactive muscles
The procrastinator
Grapes
Review student learning outcomes
Choose pick up a planner:
Define the common ingredient of success
Discuss sex and relationship
Go for the goal
Recognize it's all about how you feel; not how you look:
Genuine listening in action
Overcoming peer pressure
Interpret the fruits of the win-win spirit:
Define the key to unlocking your future:
Post educational goals
Discover how to feel your soul:
Just push pause self-awareness conscience imagination willpower
Describe baby steps and why they are important
Find your niche
Recognize you are what you eat
Categorize paradigms of self, others and life
Describe lose-lose- the downward spiral
Fried frogs
Be gentle with yourself
Demonstrate laugh or you'll cry
Recognize avoiding the tumor twins:
Watch how it makes you feel
Recognize celebrate your own diversity
Identify lose - win- the doormat
Turning setbacks into triumphs
The victimitis virus
Recognize you are going to make it
Employ keeping promises
Comparing
Practice being loyal
Tap into your talents
Identify who's in the lead
Illustrate the great discovery
Define private victory, public victory and renewal
Human tool in action
Get real
Renew yourself
Use a personal challenge
Relate getting started on your mission statement:
Becoming a change agent
Recognize and demonstrate you can do it:
Demonstrate doing small acts of kindness
Practice makes your life extraordinary
Review course objectives
Plan weekly
Does it really work
Then seek to be understood
Don't let school get in the way of your education.
Practice win –win- the all you can eat buffet
Express balance is better
Demonstrate packing more into your life:
Keep promises to yourself
Your disturbing my sleep
Demonstrate setting clear expectations
Turning weakness into strengths
Practice use it or lose it
Can do
Describe begin with the end in mind meaning
Shunner's profile
Describe sticking up for diversity:
What about friends
Demonstrate genuine listening:
Be strong in the hard moments
Winning means rising each time you fall
Examine the other half
Recognize synergy is everywhere
The prioritizer
Never let your fears make your decisions
Three watch-outs
Analyze a final word
Recognize the deepest need of the human heart
Demonstrate proactive and reactive, the choice is yours:

**Student Learning Outcomes:**
- Define life purpose, vision, and a mutual respect for others.
- Demonstrate effective communication and relationship building.
- Identify self-renewal and express wellness balance through physical, spiritual, emotional, social, intellectual and occupational development.

**Hours**

**Total Hours**

36.0

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**Understanding Employees with Disabilities in the Workplace**

**WKPR100:**

0.0 Units

This is the first of two courses designed to assist employers in hiring and retaining employees who have a disability. This course provides an overview of the laws pertaining to disabilities in the workplace and how to distinguish different disabilities. Open Entry/Open Exit.

**Requisites**

**Requisites:**
None

**Transferability & General Education Options**

**Transferable:**
Not transferable

**Learning Outcomes**

**Course Objectives:**
- Describe the certification requirements and the sequence of the course
- Identify and Evaluate the Effectiveness Medical Disability Model and the Social Disability Model
- Compare and contrast the Medical Disability and Social Disability Model
- Summarize specialized terms and definitions
- Identifying physical and mental conditions under the ADA and Section 503
- Explain Title 1 under the Americans with Disabilities Act of 1990 (ADA) and identify which employers are subject to this requirement
- Explain Section 503 of the Rehabilitation Act of 1973 and identify which employers are subject to this requirement
- Distinguish between employment discrimination and nondiscrimination
- Explain employment discrimination cases and provide examples
- Understand, identify, and show reasonable accommodations
- Define and explain developmental, intellectual, learning, physical, and mental disabilities
- Recognize physical, emotional, and mental characteristics associated with specific disabilities

**Student Learning Outcomes:**
- Summarize the American with Disabilities Act of 1990 (ADA) and the Americans with Disabilities Act Amendments Act of 2008 ("ADA Amendments Act" or "Act").
Identify and define developmental, intellectual, learning, and physical disabilities.

Units & Hours
Total Hours
40.0

Strategies for Working with Employees with Disabilities
WKPR101:

0.0 Units

The second of two courses designed to assist employers in hiring and retaining employees who have a disability. This course focuses on supporting employees in communicating and collaborating with their co-workers who have a disability, to sustain an inclusive, productive, and rewarding work environment. Open Entry/Open Exit.

Requisites
Requisites:
Advisory

WKPR100 - Understanding Employees with Disabilities in the Workplace

Transferability & General Education Options
Transferable:
Not transferable

Learning Outcomes
Course Objectives:
Identify appropriate expectations
Describe the certification requirements and the sequence of the course
Recognize different learning styles
Discuss ADA Compliance in the workplace
Discuss and follow disability etiquette
Briefly recap Creating an Inclusive Working Environment 1
Recognize and understand roles
Instill independence versus creating dependence
Recognize and utilize different communication strategies

Student Learning Outcomes:
Identify three workplace obstacles and appropriate replacement strategies.
Create action plan for implementation of strategies appropriate for the workplace.

Units & Hours
Total Hours
40.0

Understanding Students with Disabilities
WKPR102:

40.0 Hours

This course is designed to provide students with a basic overview of different disabilities and neurodiversity in classrooms.
Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Define and explain the term neurodiversity
Summarize disability related legislation
Identify common misconceptions about students with disabilities
Understand why students with disabilities may think differently
Define and explain different disability categories
Recognize signs of disabilities
Summarize the term executive function
Summarize the history of executive function
Identify typical executive function challenges
Explore strategies for supporting executive function

Student Learning Outcomes:
  - Identify six different disabilities that are commonly seen in a classroom.
  - Recognize executive functioning difficulties.

Hours
Total Hours
40.0

Strategies for Instructing Students with Disabilities
WKPR103:

40.0 Hours

This course is designed to provide students with instructional strategies to meet the needs of a diverse classroom.

Requisites
Requisites:
None

Learning Outcomes
Course Objectives:
Identify effective classroom management strategies
Identify root causes of behaviors and develop support strategies
Explain how and why structure and routines benefit students with Autism Spectrum disorder (ASD)
Illustrate the impact of social communication difficulties
Identify unspoken social expectations
Identify classroom support strategies for communication and language difficulties
Explain what sensory processing is and how it effects students specifically with Autism Spectrum Disorder (ASD)
Demonstrate tools for supporting self-regulation
Identify classroom support strategies for sensory processing
Define and explain Universal Design for Learning (UDL)
Recognize the three main principles of Universal Design for Learning (UDL)
Apply Universal Design for Learning (UDL) teaching strategies in the classroom
List assistive technology tools that can support students with disabilities
Identify use of Disabled Students Program and Services (DSPS) and other resources on campus
Access community-based resources

Student Learning Outcomes:
- Identify two causes of possible learning barriers for student on the spectrum
- Discuss two ways to implement Universal Design for Learning (UDL) in the classroom

Hours
Total Hours
40.0

Workforce Readiness
WKPR500:

60.0 Hours
Provides instruction in office skills for employment preparation. Students will learn communication, decision-making, interpersonal, leadership, lifelong learning, and job seeking skills. Open Entry/Open Exit. Previous Title: Vocational Business 012, Workforce Readiness (2018)

Requisites
None

Learning Outcomes

Course Objectives:
Develop Networking Correspondence
Guide Others Toward a Desired Outcome

Writing
Solve Problems and Make Decisions Frequently Encountered at the Workplace
Solve Problems and Communicate Results
Recall Interview Techniques

Reading
Research Occupational Interests
Identify course objectives
Identify Appropriate Work Characteristics
Reflect and Evaluate Personality Profiles

Advocate for and Influence Others
Recognize Employee Responsibilities

Needs analysis
Prepare a Job Application, Resume, and Cover Letter
Observing
Demonstrate how to Serve Customers Effectively Through:

Apply Note Taking and Time Management Tools Using:

Prompt follow-up

Demonstrate Skills in Telephone Techniques, Filing, and Keyboarding in Employment Situations

Demonstrate Types of Interviews

Demonstrate how to Cooperate with Others

MS Word, Outlook Notes and other smart devices for digital note taking

Listening

Practice Personal Responsibilities

Develop a Plan

Empathy

Resolve Conflict and Negotiate with Others

Research employers

Demonstrate communication skills appropriate for the workplace including:

Demonstrate how to use Information and Communications Technology

Discuss Effective Leadership Skills

Outlook calendaring

Prepare questions for hiring manager

Speaking

Create Social Media Profiles

**Student Learning Outcomes:**

Consider and use effective communication, decision-making, interpersonal, leadership, job seeking, and lifelong learning skills as tools to draw on selectively to more effectively achieve their purpose.

Successfully carry out their roles as community members, workers, and citizens.

**Hours**

**Total Hours**

60.0

**Attitudes for Success**

**WKPR600:**

36.0 Hours

Provides students with classroom discussion and information about discovering/accepting responsibility for attitudes and behaviors (past, present and future), and making choices based on principles that influence success in their personal, educational, and career development. Open Entry/Open Exit.

**Requisites**

**Requisites:**

None

**Learning Outcomes**

**Course Objectives:**

Recognize and celebrate diversity

Demonstrate genuine listening
Identify the differences between being proactive and reactive

Distinguish between symptoms of a poor versus healthy personal bank account

Identify how the "seven habits" can help

Recognize the effects of diet and nutrition on wellness

Identify synergies in the environment

Identify five poor listening styles

Demonstrate practices for packing more into your life

Recognize the crossroads of life and describe how to begin with the end in mind

Recall the importance of doing small acts of kindness, being loyal, setting expectations, and apologizing

Demonstrate the refusal skill

Recognize the elements of win-win thinking

Define private victory, public victory and renewal

Define the key to unlocking your future

Compare the comfort zone and the courage zone

Explain potential roadblocks to teamwork

Describe how work/life balance is beneficial

Review course objectives, syllabus, learning outcomes

**Student Learning Outcomes:**
- Define life purpose, vision, and a mutual respect for others.
- Demonstrate effective communication and relationship building.
- Explain how to achieve wellness through physical, emotional, social, intellectual and occupational development.

**Hours**
**Total Hours**
36.0

**Money Matters**
**WKPR601:**

36.0 Hours

Prepares the student for the world of financial management by developing sound decision-making skills in personal and household money matters. Open Entry/Open Exit. Previous Title: Adult Basic Education 010, Money Matters: Financial Literacy (2018)

**Requisites**
**Requisites:**
None

**Learning Outcomes**
**Course Objectives:**
- Identify the sources of money for college
- Recognize how to put personal assets to work to build wealth
- Explain education as an investment in future employment prospects
- Develop a personal budget that works
- Demonstrate how to boost earning capacity
Recognize signs of a scam

Identify the sources of investment information to make sound investment selections

List steps to protect against identity theft

Develop an educational plan and set financial goals

Describe successful job application and interview strategies

Analyze tables, charts, and graphs

Demonstrate how to manage personal spending

Identify the advantages and disadvantages of credit and debt

Explain how to avoid credit card fraud

List elements of internet safety

Identify means to earn extra money

**Student Learning Outcomes:**

- Create a budget of monthly income and expenses.
- Develop a savings plan.
- Demonstrate how to calculate interest on loans and credit cards.

**Hours**

**Total Hours**

36.0