



SANTIAGO CANYON COLLEGE
2019 / 2020 CATALOG ADDENDUM



Santiago Canyon College

2019–2020 CATALOG ADDENDUM AND ANNOUNCEMENT OF COURSES

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

INTERNET ADDRESSES

RSCCD (all sites) www.rsccd.edu
SCC www.sccollege.edu
Facebook www.facebook.com/SantiagoCanyonCollege
Twitter www.twitter.com/santiagocanyon
Instagram www.instagram.com/sccollege/

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.

This catalog is available in alternate format to qualified individuals with disabilities.
Accessible version available at www.sccollege.edu/catalog

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 INSTRUCTIONAL CALENDAR

COLLEGE CREDIT CLASSES INSTRUCTIONAL CALENDAR 2019-2020

FALL SEMESTER 2019	
August 19–21	Faculty Projects
August 22–23	Professional Development Week
August 26	INSTRUCTION BEGINS
September 2	Labor Day - Holiday
September 8	Last date to drop with enrollment fee refund (semester-length courses)
September 27	Last date to file Pass/No Pass option (semester-length courses)
October 11	Deadline to submit all Petitions to Graduate
November 11	Veteran's Day - Holiday
November 17	Last date to drop semester-length courses with a "W" grade
November 28-30	Thanksgiving - Holiday
December 15	INSTRUCTION ENDS
December 16–January 5	Winter Break
INTERSESSION 2020	
January 6	INSTRUCTION BEGINS
January 13	Last date to file Pass/No Pass
January 20	Martin Luther King, Jr. - Holiday
February 2	INSTRUCTION ENDS
SPRING SEMESTER 2020	
February 3–5	Faculty Projects
February 6–7	Professional Development Week
February 10	INSTRUCTION BEGINS
February 14	Lincoln's Birthday - Holiday
February 17	President's Day - Holiday
February 23	Last date to drop with enrollment fee refund (semester-length courses)
March 13	Deadline to submit all Petitions to Graduate
March 13	Last date to file Pass/No Pass option (semester-length courses)
March 31	Cesar Chavez Day - Holiday
April 6–12	Spring Recess
May 10	Last date to drop semester-length courses with a "W" grade
May 25	Memorial Day - Holiday
June 5	Commencement - Santiago Canyon College
June 7	INSTRUCTION ENDS
SUMMER SESSION 2020	
June 15	INSTRUCTION BEGINS
June 26	Deadline to submit all Petitions to Graduate
July 3	Independence Day - Holiday Observed
August 9	INSTRUCTION ENDS

For Santiago Canyon College Continuing Education Instructional Calendar, see page 220.

JUNE 2019						
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Credits:

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 Editorial Content Ana Garcia
 Desktop Publisher David Styffe



MESSAGE TO STUDENTS, MISSION STATEMENT, LEARNING OUTCOMES, AND RSCCD INFORMATION

A MESSAGE FROM THE PRESIDENT



Congratulations on making one of the most important decisions of your life, to pursue an education. Whether you plan on earning an associate degree or a certificate or wish to be well-prepared for transfer to a four-year university,

SCC can help you chart your course from today to tomorrow. With 242 certificate and degree programs, including 29 associate degrees for transfer, as well as transfer agreements with four-year colleges in California, the right fit for you is at SCC.

SCC provides students the opportunity to learn from award-winning, dedicated faculty who focus on student success. We offer a vibrant student life – championship athletic teams, student government, clubs and other leadership and enrichment opportunities such as Model United Nations (MUN) or Forensics. You will experience this and much more in a welcoming and supportive campus environment with excellent student services.

It is our belief that what you seek later in life is just as important as what you choose to do today. That is why SCC celebrates what happens here: every course, every lecture, every test, every conversation, and every achievement. Every day is an opportunity we never pass up.

Your future is important. What you do each day to get there is more important. Let us do amazing things, right here, right now.

Welcome to Santiago Canyon College!

Sincerely,
John C. Hernandez, Ph.D.

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.

RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

Governed locally by a seven-member Board of Trustees elected by the citizens of the district, Rancho Santiago Community College District (RSCCD) is a part of the California community college system, one of the three segments of the public post-secondary educational systems in the state.

RSCCD, located in central Orange County, encompasses 193 square miles with a population of approximately 770,000. The district's boundaries include all of the K-12 schools within the Orange and Santa Ana Unified School Districts, as well as a portion of the Garden Grove Unified School District. RSCCD's boundaries extend from the eastern portion of the city of Garden Grove, around the perimeters of Santa Ana, Orange, Villa Park, and Anaheim Hills, and east to the Riverside County line.

Enrollment in district programs for fall 2018 totaled 52,361 with 39,277 enrolled in college credit courses and 13,084 enrolled in Continuing Education. The Community Services Program serves 1,349 residents districtwide in not for credit, fee-supported classes.

Santiago Canyon College and Santa Ana College

SCC is among the newest community colleges in California. RSCCD was formed in 1971 to serve the cities of Orange, Villa Park and Anaheim Hills. SCC (formerly the Orange Campus) began offering classes in 1985, and became an independently accredited college in January 2000.

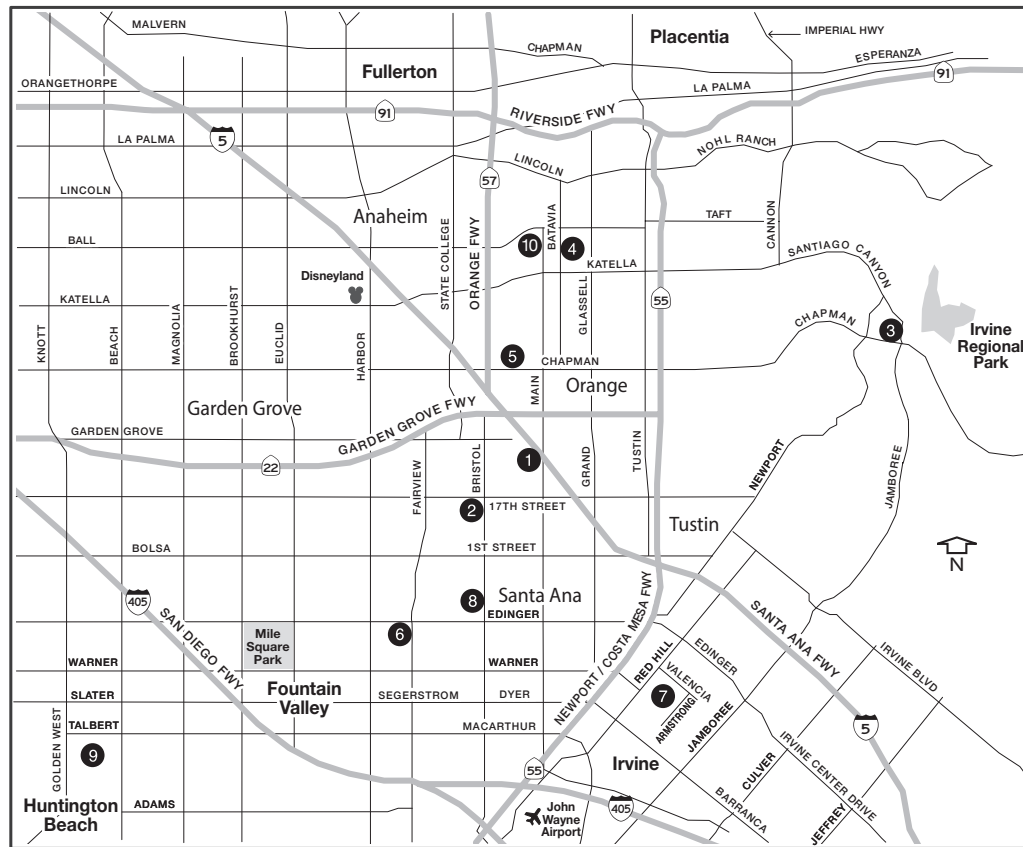
Santa Ana College opened in 1915 as an extension of Santa Ana High School, and is the fourth oldest community college in California. Located first on the campus of Santa Ana High School, it moved to downtown Santa Ana, and then to its present location in 1947.

Enrollment in Santiago Canyon College programs for fall 2018 totaled 15,950 with 11,916 enrolled in college credit courses and 4,034 enrolled in Continuing Education. The Community Services Program serves 840 residents campus-wide in not for credit, fee-supported classes.

Santiago Canyon College offers 178 degrees and certificates in credit programs including transfer and career majors as well as 63 certificates in Continuing Education programs.



RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT INFORMATION



KEY TO LOCATIONS

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

Accreditation

Santiago Canyon College and Santa Ana College are accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, an institutional body recognized by the Council for Higher Education Accreditation, the U.S. Department of Education, and the Veterans Administration. Santa Ana College is also recognized by the California State Board of Nursing Education and the American Bar Association.

Documents concerning the colleges’ accreditation, licenses and approvals are maintained in the Office of the President of each college. Students wishing to examine these documents may do so by contacting the Office of the President.

Complaints associated with an institution’s compliance with academic program quality and accrediting standards can be registered with the ACCJC at the following link: www.accjc.org/complaint-process.

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 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.



RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT INFORMATION

BOARD OF TRUSTEES

President	Phillip E. Yarbrough
Vice President	Claudia C. Alvarez
Clerk	Zeke Hernandez
Member	Arianna P. Barrios
Member	John R. Hanna
Member	Lawrence "Larry" R. Labrado
Member	Nelida Mendoza
Student Trustee	Theodore D. Moreno
Executive Assistant to the Board of Trustees	Anita Lucarelli

RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT ORGANIZATION

CHANCELLOR'S OFFICE

Chancellor	Marvin Martinez
Executive Assistant to the Chancellor	Debra Gerard

BUSINESS OPERATIONS/FISCAL SERVICES

Vice Chancellor	Peter J. Hardash
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 O'Connor
Manager–Fiscal Services	Erika Almaraz
Accounting Manager–Payroll	Nancy Tanner
Manager–Internal Audit	Shelly Randolph

Information Technologies Services

Interim Assistant Vice Chancellor	Yezid "Jesse" Gonzalez
Director–Academic Support	Alfonso Oropeza
Director–Information Systems	Stuart Davis
Interim Director–Network and Communications	Jorge Forero

Purchasing

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

Security/Safety

Interim Chief–District Safety/Security	Michael Toledo
Lieutenant–Santa Ana College	Scott Baker
Lieutenant–Santiago Canyon College	Manny Pacheco
Sergeant–Santa Ana College	Monte Huotari, Raymond Wert
Sergeant–Santiago Canyon College	Francisco Prado, Mike Jensen

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	Karen Childers
Director–LAOCRC, Orange County	Gustavo Chamorro
Executive Director–Institute for Workforce Development	Leila Mozaffari

Educational Services

Interim Assistant Vice Chancellor	Sarah Santoyo
Executive Director–Resource Development	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	Ruth Cossio-Muñiz
Director–Digital Media Center	Vacant
Director–Small Business Development Center	Vacant

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
Assistant Vice Chancellor	Mary Law
Manager–Publications & Electronic Media	Dean Hopkins

HUMAN RESOURCES

Vice Chancellor	Tracie Green
Assistant to the Vice Chancellor	Elvia Garcia
Assistant Vice Chancellor	Alistair Winter
District Administrator–Institutional Equity, Compliance, and Title IX	Veronica J. Estevez
Director–Employment Services, Equity and Diversity	Elouise Marasigan
Director–Information Systems	Vacant

Risk Management and Employee Benefits

Director, Workplace Safety & Risk Management	Don Maus
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SANTIAGO CANYON COLLEGE

PRESIDENT	John Hernandez
Assistant to the President	Esther Odegard

College Advancement/Foundation

Director	Syed Rizvi
Development Coordinator	Karen Bustamante

ADMINISTRATIVE SERVICES

VICE PRESIDENT	Arleen Satele
Manager–Facilities	Charles Wales
Supervisor–Custodial	Gabriel Dueñas
Lieutenant–Safety & Security	Manny Pacheco

ACADEMIC AFFAIRS

VICE PRESIDENT	Marilyn Flores
Curriculum	Anaisabelle Garcia
Instructional Coordinator	Julie Peeken

Arts, Humanities & Social Sciences

Dean	David Vakil
American College English (ACE), Chair	Diana Babayan
Anthropology and 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	Elizabeth Elchlepp
Fine Arts, Chair	Robert Miller
History, Chair	Scott Howell
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

Interim Dean Elizabeth Arteaga
 Associate Dean Vacant
 Business, Co-Chairs Steven Deeley, Stewart Myers
 Child Development, Chair Regina Lamourelle
 Interim Director, Special Programs Amy Styffe
 Apprenticeship
 Cosmetology
 Criminal Justice
 Gemology, Facilitator Diana Sanders
 Public Works, Chair Stephen McLean
 Public Works, Facilitator Carlos Castellanos
 Public Works, Code Enforcement Facilitator Sergio Verino
 Real Estate, Facilitator Alana Gates
 Surveying & Mapping Sciences, Facilitator Vacant
 TV/Video & Communications, Facilitator David Echols
 Water Utility Science, Chair Stephen McLean

Mathematics & Sciences

Dean & Athletic Director Martin Stringer
 Astronomy, Chair Danielle Martino
 Biology, Co-Chairs Denise Foley, Mark Smith
 Chemistry, Co-Chairs Denise Bailey, Jeffery Wada
 Earth Sciences, Chair Debra Brooks
 Kinesiology, Co-Chairs Lisa Camarco, Ian Woodhead
 Mathematics, Co-Chairs Alicia Frost, Vanessa Jones, Scott Sakamoto
 Physics & Engineering, Chair Cynthia Swift

Institutional Effectiveness, Library & Learning Support Services

Dean Aaron Voelcker
 Distance Education, Coordinator Scott James
 Institutional Effectiveness/Research Rudy Tjiptahadi
 Instructional Design Center Silvia Lopez
 Library, Co-Chairs Barbara Sproat, Lana Wong
 Online Tutoring Amanda Carpenter

STUDENT SERVICES

VICE PRESIDENT Syed Rizvi

Office of Student Equity & Success

Director Joseph Alonzo

Counseling & Student Support Services

Dean Ruth Babeshoff
 Counseling, Co-Chairs Phillip Crabill, Lacy Hedenberg
 Education, Chair Janis Perry
 Articulation Leonor Aguilera
 Career Services Dora Contreras-Bright
 First Year Support Center Cindy Partida
 High School & Community Outreach Frank Rivera
 Assessment/AB705 Dora Escobar
 Transfer Success Center Miguel Luna

Extended Opportunity Programs & Services (EOPS) /CARE & CalWORKs

Facilitator Nena Baldizon-Rios

Student Development

Associate Dean Loretta Jordan
 College Assistance Migrant Program (CAMP) Deisy Covarrubias
 Guardian Scholars Maria Hernandez-Figueroa
 Office of Student Life & Leadership Diana Casares
 Student Support Services – TRIO LaKyshia Perez
 Upward Bound Math & Science (UBMS) LaKyshia Perez

Enrollment and Support Services

Interim Dean Jennifer Coto

Admissions & Records

Assistant Dean Tuyen Nguyen
 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
 Scholarship Program Office Elizabeth Bergara
 Veterans Service Office Elizabeth Bergara

Disabled Students Program & Services (DSPS)

Assistant Dean Starr Avedesian
 Co-Chairs Mary Mettler, Laura Wirtz

Student Health & Wellness Services

Nurse Coordinator Beth Hoffman
 Psychological Services Melissa Campitelli-Smith

CONTINUING EDUCATION

VICE PRESIDENT Jose Vargas
 Dean, Instruction & Student Services Lori Fasbinder
 Dean, Instruction & Student Services Joanne Armstrong
 Director, Support Services Patricia Alvano
 Executive Director, Adult Education Block Grant Christine Gascon

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 Eden Quimzon

Inmate Education Program

Coordinator Robert Felipe

Older Adults

Coordinator Nancy Parent

This chart reflects the RSCCD organization as of July 2019.



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 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 Officer and/or Section 504/ADA Coordinator, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7490.

POLITICA DE NO DISCRIMINACION

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 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.

Preguntas sobre el cumplimiento y/o el procedimiento para quejas pueden ser dirigidas al Oficial del Distrito a cargo del Título IX en RSCCD, 2323 N. Broadway, Santa Ana, CA 92706, 714-480-7490.

CHÍNH SÁCH BẮT KỲ THI

Sở Giáo dục Hệ thống Đại học Rancho Santiago (RSCCD) hạ quyết tâm tạo cơ hội bình đẳng trong chương trình giáo dục, trong việc thuê mượn nhân viên, và trong tất cả chương trình và sinh hoạt thuộc phạm vi Sở.

Sở và mỗi cá nhân đại diện cho Sở, sẽ cung cấp dịch vụ, lớp học, và chương trình mà không phân biệt nguồn gốc quốc gia, tôn giáo, tuổi tác, phái tính, đặc điểm phái tính, cách thể hiện phái tính, chủng tộc hoặc dân tộc, màu da, tình trạng sức khỏe, thông tin về di truyền, nguồn gốc tổ tiên, khuynh hướng tính dục, tình trạng hôn nhân, có khuyết tật hoặc bệnh tâm thần, có thai, đang trong quân đội hoặc giải ngũ, hoặc vì người đó được cho là có một hay hơn một đặc tính kể trên, hoặc dựa vào sự liên đới với một người hoặc nhóm có hoặc được cho là có một hay hơn một đặc tính kể trên.

Vị tổng quản trị sẽ đặt ra các thủ tục hành chính nhằm bảo đảm rằng mọi thành viên trong trường đại học có thể khiếu nại việc vi phạm chính sách này, và các khiếu nại được lắng nghe tuân theo các quy định thuộc Điều 5 và các quy định của các cơ quan thi hành luật lệ tiểu bang và liên bang liên quan đến việc bắt kỳ thi.

Ngân quỹ của Sở sẽ không bao giờ được dùng để làm hội viên, hoặc tham gia bất cứ việc gì có trả tiền hoặc đóng góp tiền trên danh nghĩa của Sở hoặc của nhân viên làm việc cho Sở hoặc liên đới với Sở, cho bất cứ tổ chức tu nhân nào mà có sự kỳ thị dựa trên căn bản nguồn gốc quốc gia, tôn giáo, tuổi tác, phái tính, đặc điểm phái tính, cách thể hiện phái tính, chủng tộc, màu da, tình trạng sức khỏe, thông tin về di truyền, nguồn gốc tổ tiên, khuynh hướng tính dục, tình trạng hôn nhân, có khuyết tật hoặc bệnh tâm thần, có thai, đang trong quân đội hoặc giải ngũ, hoặc vì người đó được cho là có một hay hơn một đặc tính kể trên, hoặc vì sự liên đới của người đó với một người hoặc nhóm có hoặc được cho là có một hay hơn một đặc tính kể trên. Nếu có thắc mắc về việc tuân thủ luật lệ và/hoặc về thủ tục khiếu nại, xin liên lạc viên chức chương trình Title IX của Sở và/hoặc điều hợp viên chương trình 504/ADA 2323 N. Broadway, Santa Ana, CA 92706, số điện thoại 714-480-7490.



ADMISSIONS, REGISTRATION, AND RECORDS

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 qualifying for Career Advanced Placement program.

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

Spring semester beginning November 1

Summer session beginning April 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 website. Applications are processed within 1-3 business days. An e-mail 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) supports the transition of new students into the college by providing them services that promote academic achievement and successful completion of degrees, transfer preparation, career technical education certificates, or career advancement.

New students are required to complete orientation and advisement in order to access their priority registration time. During this process, students will receive assistance in completing an abbreviated education plan; however, a course of study (major) and a comprehensive student education plan must be completed 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 in order to reach your 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

AB 705 Implementation: Santiago Canyon College has reformed how placement is determined in English and math courses. Signed into law by Governor Brown on October 13, 2017, all California community colleges are implementing Assembly Bill 705 by Fall 2019. The bill requires that students have access to transfer level coursework in English and math courses. Placement into these courses will be determined by using a student's high school grade point average and high school courses. Where this method does not apply, a Guided Self-Placement tool will facilitate student placement. With the implementation of AB 705, students planning to enroll in English, math, and/or reading courses do not need to take a placement test. High school performance and/or Guided Self-Placement will facilitate course recommendations.

Please note that some requisites are currently being modified for courses that need to be in compliance for AB 705 implementation. Requisites include prerequisites, corequisites, and recommended preparation or advisories. Please contact the Counseling Office for questions about courses with requisites that indicate a Math or English course as they may now include a different course from the placement profile.

Recommendation Based on High School Performance Information:

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

Guided Self-Placement: Students who fall into other circumstances where high school performance does not apply will receive English, math, and reading course recommendations based on completing Guided Self-Placement. This placement tool provides students with the ability to rate their level of comfort with math problems, English prompts, and reading passages.

Assessment for American College English/English as a Second Language (ACE/ESL) and Chemistry:

Placement testing is available for students who are planning to enroll in SCC's ACE program or Chemistry 200A (General Chemistry A).

Steps to Complete for Course Placement Recommendations and/or Assessment for ACE/ESL and Chemistry 200A

1. New students must apply to the college.
2. Students will receive an email from Admissions & Records with instructions on how to obtain course placement recommendations for English, math, and reading.
3. Students planning to enroll in ACE or Chemistry 200A can schedule an assessment appointment by calling 714-628-4985.
4. Students will complete New Student Orientation and counseling to review recommended course placement in English, math, and reading or ACE placement results and develop a first-semester education plan.

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:

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

Disability-Related Accommodations

Students who require disability-related accommodations for American College English (ACE) or Chemistry 200A placement tests



must request them at least two weeks prior to testing and provide disability verification from a qualified professional. To arrange for testing accommodations, contact Disabled Students Programs and Services (DSPS) at 714-628-4860 to schedule an evaluation of needs.

Right to Appeal

Students who feel that they have been treated in a discriminatory manner regarding any aspect of course placement services may contact the Dean of Counseling and Student Support Services. Call 714-628-4775.

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 and Records Office, and a variety of college services.

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

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.

1. 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.
2. 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. The deadline to apply is 45 days prior to the start date of the term; for exceptions, please contact the International Student Office. 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:

1. International students are required to submit transcripts with their application. For transcripts in a language other than English, translation may be required. Applicants applying within the US who had previously attended a US high school or US college/university must submit transcripts from all previous educational institutions.
2. International students must have sufficient knowledge of English to enable them to profit from instruction at the college level. English proficiency is determined by a satisfactory score as listed on the international student website.

3. The minimum age requirement to attend SCC is 16 years old. Students under 18 years of age must provide proof of high school completion. Student must be 16 years old by the first day of classes of the entering semester as listed in the college schedule.

4. 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. \$300 non-resident tuition per unit + \$46 enrollment fees per unit = \$346 per unit for international students. Health insurance premium is \$1,626 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.

5. Although SCC does not require proof of immunizations, it is strongly recommended that all students planning on coming to the U.S. to study receive all necessary vaccinations and are free of tuberculosis. Students should assure that they are healthy when they come to study in the United States. It is suggested for students to check with Consulate or Embassy for recommended immunizations.

6. Admitted students are required to purchase the health insurance plan approved by the District. Other outside health care plans are not accepted, except students sponsored by a governmental agency or program or covered by a U.S. based health plan of a family member. Proof of health insurance is required prior to registration. The college accepts no responsibility for medical expenses incurred by international students.

7. 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.



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. No balance will be carried over into the start of the semester. However, the college reserves the right to postpone or suspend non-payment drops. 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.

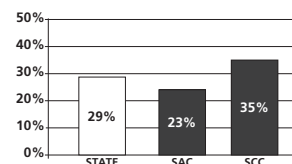
Students may designate a preferred first name. Their legal last name will remain unchanged and will be included with their preferred name. Preferred names are limited to alphabetical characters, a hyphen (-) and a space. Generally, students can set a preferred name to any name, but the college reserves 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 Progress Student Right-To-Know Act

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

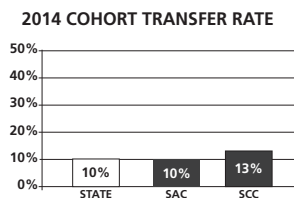
Of the degree, certificate or transfer seeking first-time, full-time freshmen who entered RSCCD colleges in Fall 2014, the "completion rate" represents those students who earned an Associate's Degree, Certificate of Achievement, or 60 UC/CSU transferable credits within three years.

2014 COHORT COMPLETION RATE





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



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.

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 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 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 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 term and is available online. It includes general information, courses offered, hours, rooms, and instructor names.

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.

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.

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 \$23 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.

The Admissions and Records Office does 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.

*Fed Ex fees subject to change

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 associate degree and certificate programs.
- 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 course and program 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.



COLLEGE POLICIES AND PROCEDURES

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:

1. An understanding of our democratic tradition and its methods.
2. A concern for the welfare, growth, maturity, and development of students.
3. The method of scholarship.
4. 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

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 on pages 29-30.

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. 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 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

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.

Academic Renewal Without Course Repetition

1. To be eligible, the student must have completed at least 15 units with a 3.0 G.P.A or 24 units with a 2.0 GPA or higher in sessions subsequent to the substandard work being petitioned. All units from all colleges attended will be counted from the semester immediately following the substandard work.
2. 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 at Santiago Canyon College/Santa Ana College may be disregarded in the computation of the grade point average. The student may choose the 30 units of substandard grades to disregard.
3. After a RSCCD associate degree or CSU-GE Breadth or IGETC certification is posted, academic renewal without course repetition is not accepted.
4. 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.
5. 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.
6. 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 Mathematic 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 Renewal With Course Repetition

1. 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.
2. 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.
3. A student may not repeat a course to change a grade of C or above. Courses repeated under this provision will be indicated as repeated on the student's academic transcript.
4. 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.

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.

Academic Probation and Dismissal

- 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 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 Progress 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 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 and 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.

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 VAF 28-1905 form. Students must submit all required certification request forms directly to the Veterans Service Office (VSO) 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.

Online Drop Policy for Emergency Situations: During the current pandemic and in emergency situations, 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. In Hybrid classes, students are expected to attend all scheduled classroom hours. Students who fail to submit regular and substantive coursework 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 nondegree, 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 student 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.

Career Advanced Placement (CAP)

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

1. Download at www.sccollege.edu a Career Advanced Placement 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 Admissions and Records Office.
2. All college class prerequisites must be met.
3. Math, English, or Chemistry placement testing is no longer required. High school performance and/or Guided Self-Placement will be used to provide the student with course recommendations.
4. Any student who is not yet 15 years of age or below 9th grade must have approval



from the Santiago Canyon College Division Dean.

5. Any CAP student below the 9th grade as well as any CAP student who registers as a full-time student will be charged the regular community college enrollment fees.
6. 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.
7. CAP students by law do not have priority registration.

Career Technical Education (CTE) Transitions

CTE Transitions is funded through the Carl 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

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:

- 1) 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.
- 2) 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.

- 3) 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. Course 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 and 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.

Credit By Examination

Eligible Courses

Arts, Humanities & Social Sciences:
None

Counseling & Student Support Services:
None

Mathematics & Sciences:
Mathematics 080, 086, 140, 160, 170, 180, 219; Physics 150AC, 150BC

1. Applications for credit by examination may be obtained in the Admissions and Records Office at Santiago Canyon College. The student will be advised whether a testing fee is to be charged and where it should be paid. Applicants must be currently enrolled at Santiago Canyon College and be in good standing.

Fee charged for Credit by Examination is enrollment fee + number of units. Financial Aid cannot be used for Credit by Examination. Fee must be paid before exam takes place.

2. **A student must not enroll in a course which is to be challenged.** In the event a student decides to challenge a course in which he or she is already enrolled, he or she must withdraw from that course **prior to the end of the second week of instruction.**

3. Credit may be earned only for courses that are: 1) currently listed in the Santiago Canyon College catalog, and 2) specifically listed as eligible for credit by examination. A student may attempt credit by examination only once in a particular course.

4. Students should be aware that some divisions offer credit by examination only on specific dates; therefore, students should obtain examination schedules from the appropriate offices as early in the semester as possible.

5. The dean, in consultation with the department involved, will determine whether a departmental or a standardized examination is to be administered and when and where it will be administered. At this same time, the student will be given a course outline and any other pertinent information detailing subject matter requirements of the course being challenged.

6. Students may apply for credit by examination in sequential courses, but may take examinations for the courses having prerequisites in the sequence only if credit has been earned by examination or coursework in the earlier course(s) of the sequence.

7. Grading of the examination is on a Pass/No Pass basis. Pass represents a grade of "C" or better and will be shown on the transcript as "credit by examination".

Grades less than "C" will be reported to the Admissions and Records Office but not recorded on the transcript. "Pass" grades will be computed as units earned but will not be counted in the grade point average.

8. The examiner shall transmit examination results to the Santiago Canyon College division office. The division dean will review the examination results and will transmit this information to the Admissions and Records Office.

9. Units for which P is given in this category will not be counted in determining the 12 semester hours of credit in residence required for a certificate or an associate degree.

10. A student cannot take Credit by Examination to improve a substandard grade.

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 58108, establishing enrollment priorities for students attending California Community Colleges. Districts shall



provide highest and equal priority to students eligible for registration priority who are:

1. A member of the armed forces or a veteran pursuant to Education Code section 66025.8,
2. A foster youth or former foster youth pursuant to Education Code section 66025.9,
3. Determined to be eligible for Disabled Student Program and Services as set forth in Education Code section 66025.91,
4. Receiving services through the Extended Opportunity Programs and Services as set forth in Education Code section 66025.91, or
5. 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:

1. Title 5 mandated groups (see above).
2. Continuing students by units completed at R.S.C.C.D.
3. New/returning students.
4. Loss of Priority students and those who have completed 100 or more degree-applicable units at R.S.C.C.D.
5. Career Advance Placement (CAP) Program.

Check online for enrollment priority dates.

Loss of Enrollment Priority

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

- 1) Student has attempted 12 units and their RSCCD cumulative GPA has fallen below 2.0 for two consecutive semesters and is on academic probation.
- 2) 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.
- 3) 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 and Records Office at SCC. Students who are not in good academic standing can appeal for one of the following reasons: 1) there were extenuating circumstances (verified cases of accident, illness) and can provide documentation;

2) 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 Office 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 and Records Office 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.

FERPA Family Education Rights and Privacy Notification

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
- Santa Ana Beauty Academy
- SARS (Counseling center)
- 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 and 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), Report Delayed (RD), and Withdrawals (W, EW, or MW) are not figured into Grade Point Average (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:

Grade	Grade Points
A - Excellent	4 per unit earned
B - Good	3 per unit earned
C - Satisfactory	2 per unit earned
*D - Passing, Less than satisfactory	1 per unit earned
*F - Failing	0 per unit attempted
P - Pass	0 per unit earned
NP - No Pass	0 per unit attempted
W - Withdrawal	0 (no units earned)
EW - Excused Withdrawal	0 (no units earned)
MW - Military Withdrawal	0 (no units earned)



UF - Unauthorized Withdrawal	0 (no units earned)
WF- Withdrawal, Failing	0 (no units earned)
I - Incomplete	0 (no units earned)
CIP- Class In progress	0 (no units earned)
RD - Report delayed	0 (no units earned)

*Does not satisfy prerequisite requirements.

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 course in which 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 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.

1. 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.
2. 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 at a university (other than major requirements for ADTs) typically 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.

If the student is unclear about requirements, it is best to consult with a counselor before using the Pass/No Pass option.

3. Except as in item number one above, a maximum of 6 Pass/No Pass units may be carried during any one semester.
4. 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.
5. Pass/No Pass petitions are available at the Admissions and Records Office. 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 or thirty percent (30%) of the class meeting dates, whichever is less. **Pass/No Pass status cannot be changed back to a letter grade.**
6. Pass indicates a "C" or better.

COVID-19 Pass/No Pass Petition for Spring 2020

- Petition Deadline: May 29, 2020
- Petition form can only be used to petition Santiago Canyon College (SCC) classes. Classes being offered by Santa Ana College (SAC) must be petitioned through SAC.
- Some transfer institutions may require that certain courses be taken for a letter grade and/or may restrict the number of transfer units that may be taken Pass/No Pass. Consultation with a SCC counselor is required.
- Before approval, student is acknowledging that the coursework being submitted may affect degrees and certifications already posted. For example, requesting P/NP for "D" grades removes units counted towards a degree, certificate or transfer requirement.
- Student is responsible for submitting updated transcripts to all institutions, if needed.
- "Pass" indicates an equivalent grade of C or better, and "No Pass" is the equivalent to a substandard performance (equivalent to a grade of D or F).
- Petition will not be accepted without a counselor review and signature/approval.
- Once this petition is submitted and approved, you may not request that it be reverted back to a standard letter grade.
- For Spring 2020, Pass/No Pass will not affect your progress probation status.

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

1. Students may request a grade change no later than one year following the awarding of the original grade.
2. Student shall meet with the instructor to discuss the grade.
3. 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.
4. The student may be requested to set up an appointment with the Division Dean to discuss the written grievance.
5. The Division Dean will review the allegations and consult with the instructor.
6. The Division Dean will review the issue and will notify the student and instructor in writing of his/her decision.
7. 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: rscdd.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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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) at www.accjc.org/complaint-process
- 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 at www.californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx
- If your complaint involves unlawful discrimination, contact the Chancellor's Office Web site at www.cccco.edu/

ChancellorsOffice/Divisions/Legal/Discrimination/tabid/294/Default.aspx.

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 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-90 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.

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*.

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 accessible parking. Vehicles in these areas are NOT required to display a current SCC parking permit or daily permit, but must display a state-issued disability parking placard or license plate. Temporary SCC parking permits may be granted by contacting Disabled Students Programs and Services (DSPS) or Administrative Services while students await a state-issued placard. Verification of disability will be required and temporary permits can only be used in the parking stalls indicated on permit.

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, staff parking or visitor 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.scccollege.edu/parking. A listing of all campus parking and traffic regulations can be found at www.scccollege.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 Recommended Preparation

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, recommended preparation, 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 **Recommended Preparation**. 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.**

Recommended Preparation 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:

- 1) Courses for which specific prerequisites have been established,
- 2) Sequential course work in a degree-applicable program, and
- 3) 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:

- 1) The college has not developed the prerequisite according to its established procedures or has not developed the prerequisite in accord with existing statutes.
- 2) The prerequisite is discriminatory or is being applied in a discriminatory fashion.
- 3) The college has not made the prerequisite course reasonably available.
- 4) 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)

Any sexual assault 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 district property, is a violation of district policies and procedures, and is subject to all applicable punishment, including criminal procedures and employee or student discipline procedures. Students, faculty, and staff who may be victims of sexual and other assaults shall be treated with dignity and provided comprehensive assistance. The Chancellor shall establish administrative procedures that ensure that students, faculty, and staff who are victims of sexual and other assaults receive appropriate information and treatment, and that educational information about preventing sexual violence is provided and publicized as required by law.

The procedures shall meet the criteria contained in EC 67385 and 67385.7 and 34 C.F.R. § 668.46. See Administrative Regulation (AR 3540).

Students who have been the victim of sexual violence should contact SCC Campus Safety and Security at 714-628-4730.

Students can receive care, confidential psychological counseling, and assistance through SCC Student Health and Wellness Services located in T-102, or contact the office by telephone at 714-628-4773.

Additional information and resources can be found at www.rscdd.edu/Departments/Risk-Management/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.rscdd.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.

Standards of Student Conduct

Guidelines for Student Conduct are set forth in the California Education Code, California Administrative Code, Title 5, 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:

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

Specific areas on campus, such as 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 petition 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 (page 45).

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 and academic counselors 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 been provided with written notice that they have failed to pay a proper financial obligation shall have grades, transcripts, diploma, and registration privileges withheld.



STUDENT AND ACADEMIC SUPPORT SERVICES AND OPPORTUNITIES

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. See pages 56-163 for specific instructional programs leading to degrees and certificates.

Bookstore

The official Santiago Canyon College Hawk CampusStore 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, alumni and employers 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,

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 CAMPlanning 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 education 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 community, to allow accessibility to match varying student needs. Specific information regarding admission and registration policies, services available, and description of the courses offered can be found in the Continuing Education section of this Catalog. For more information, call 714-628-5900.

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 Counseling 116, a three-unit CSU/



UC transferable Career/Life Planning & Personal Exploration course for optimal exposure to the world of work and career opportunities.

- **Orientation, Advisement, and Follow-Up**
Through orientation and advisement, counseling faculty assist students with understanding English, reading, and math course placement recommendations as provided through AB705, 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 is the primary 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 through an interactive process and are 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/disatnceeducation, 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. CARE services are in addition to EOPS and may include additional book services, transportation assistance, meal tickets, and additional 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 fees waived. Financial aid staff are available to answer questions and help students through the financial aid process. Financial Aid staff are available in person in Building E-Room 104, by phone 714-628-4876, or email at finaid@sccollege.edu. For more information and general inquiries, please visit sccollege.edu/financialaid.

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

provides step-by-step assistance with all college forms (i.e., admissions application, financial aid, and CA Dream Act) and provides referrals to instructional and student services to support student success in college. Student Success Workshops leading to a Student Success Certificate are offered as well as academic counseling and tutoring in multiple subject areas. The center is open to all students and there is no program application to receive services.

For more information, visit the FYSC in room E-303, call 714-628-5085, or visit our website at www.sccollege.edu/fyisc.

Guardian Scholars

The SCC Guardian Scholars Program serves ambitious, college bound students who are current and former foster youth pursuing 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.

To learn more about Guardian Scholars, contact us at 714-628-4709, come by our center in A-212, or visit our website at www.sccollege.edu/StudentServices/Outreach/Pages/Guardian-Scholars.aspx.

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:

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



High School and Community Outreach

The High School and Community Outreach Department provides information regarding academic programs and student services offered at Santiago Canyon College. The Outreach Department services include: weekly high school visits; college application and financial aid information workshops; campus tours; on-campus counselor led orientations, academic planning, and priority registration sessions through the Early Welcome Program; and, the Summer Advantage Academy for graduating seniors from local high schools prior to start of 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.

1. First time freshmen who graduated from high school with a minimum 3.0 GPA may take an honors class during their first semester at SCC. California High School Proficiency Examination (CHSPE) cannot be used. Official high school transcripts are required.
2. 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.
3. Career Advanced Placement (CAP) students must have a minimum of 6 units with a 3.0 GPA in any college coursework and have a minimum 3.0 GPA in high school.
4. The program recommends that students complete a transfer-level English course within their first year.

Requirements to join the Honors Program

Submit an Honors Program application and requested documentation to the Admissions and Records Office during the fall or spring semester.

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 students:

1. First time freshmen must be eligible to enroll in an honors course.
2. May not be found at fault in any disciplinary action as outlined in the SCC catalog.
3. Meet with Honors Program Counselor once per semester for Comprehensive Educational Plan prior to Pre-Selection of Honors courses.

Continuing College students:

1. Students need a cumulative 3.0 GPA or higher in 6 or more units from all colleges attended.
2. Have no grade lower than a "C" in any college class, including remedial and honors coursework.
3. Meet with Honors Program Counselor once per semester for Comprehensive Educational Plan prior to Pre-Selection of Honors courses.
4. May not be found at fault in any disciplinary action as outlined in the SCC catalog

Career Advanced Placement (CAP) students:

1. Current high school CAP students are not eligible to join the Honors Program.
2. 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

1. Maintain a cumulative 3.0 GPA or higher.
2. Earn grades of "C" or above in all college classes, including remedial and honors coursework.
3. Meet with Honors Program Counselor once per semester for Comprehensive Educational Plan prior to Pre-Selection of Honors courses.
4. Remain free of any disciplinary action as outlined in the SCC catalog.

Requirements to complete the Honors Program

1. Submit the Honors Program Completion Petition to the Admissions and Records Office (E-101). The petition and deadlines are available on the Honors Program website: www.sccollege.edu/honors.
2. Maintain a cumulative 3.0 GPA in all college units, including remedial and honors coursework.
3. Complete Honors Program unit and residency requirements:
 - Complete a minimum of 30 college units at Santiago Canyon College
 - Complete either a minimum of 18 honors units or 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

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:

Humanities
 Art 100H
 Communication 100H, 225H
 English 101H, 102H, 103H
 History 101H, 102H, 120H, 121H
 Music 101H
 Philosophy 106H

Honors Educational Category 2:

Mathematics and Natural Sciences
 Biology 109H
 Chemistry 200AH
 Geography 101H
 Mathematics 180H, 219H

Honors Educational Category 3:

Social and Behavioral Sciences
 Anthropology 100H
 Communication 100H, 225H
 Geography 100H
 History 101H, 102H, 120H, 121H
 Political Science 101H
 Psychology 100H
 Sociology 100H

See Honors Program website or Honors Program Counselor for current course offerings and categories.

4. 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 in all college units, including remedial and honors coursework, or who receive a "D" or "F" in any class will be disqualified from the program.

Students whose cumulative GPA falls below 3.0 anytime in all college units, including remedial and honors coursework, during their enrollment at SCC, or who receive a "D" or "F" in any 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 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 40,000 books in print format and over 14,000 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 workstations, 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 Success Center (MSC), located in D-209, is a free service offered by SCC that provides students a chance to supplement learning done in the classroom and gain study skills to help them be successful in their math course. Math faculty, Instructional Assistants and student tutors are available to assist students with questions or concerns from their math course. Additionally, computers are available for students to access mathematical software or do work for an online math course. To earn a Pass in the lab, students must complete at least 10 hours in the MSC and complete one activity in Canvas. For more information, including a list of services offered and hours, 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, assessment/AB705 information, and eAdvising. Students can also request transcripts, apply for financial aid, find scholarships, pay fees, purchase a parking permit, download forms for most programs and services, access online tutoring, view transfer and First Year Support Center 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, book loan program, appointments with university representatives, teacher preparation resource information, internships, volunteer opportunities and the SCTA TEACH! student organization.

For more information about the Pathways to Teaching Program, go to room E-313, contact us at 714-628-4928, or visit our website at www.sccollege.edu/pathways.

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 an intercession 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 28.

Term = a period of a time within an academic year when courses are scheduled (fall, spring, summer, intercession)

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

Intercession = 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 B-209, or go to our website at www.sccollege.edu/SSSTRIO.

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 Service Office

Students interested in seeking Veterans Services at Santiago Canyon College (SCC) should go to the Veterans Service Office (VSO) 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. 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.

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 VAF 28-1905 form. Students must submit all required certification request forms directly to the Veterans Service Office (VSO) 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.

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 714-628-4800 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 courses with integrated support visit the center to practice the concepts they are learning in the classroom; fortify their mindset, reading skills, and approaches to writing; and maximize their success. Staffed by English faculty, the Writing Center also serves the entire campus community by providing 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 H240, the center is typically open Monday-Thursday, 9:00am-6:00pm. For more information, call 714-628-4701.



STUDENT LIFE AND LEADERSHIP

Student Activities

Alumni Network

The SCC Alumni Network was founded to promote and facilitate a lifelong relationship between SCC and its former students and to encourage ongoing alumni support for the college. Former students qualify for membership in the Network if they have completed at least nine units of academic coursework at SCC.

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, become involved on campus, or just have fun and reconnect with fellow Hawks.

The list of benefits of being an SCC alumnus continues to grow. For more information, go to sccollege.edu/alumni or 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/studentlife 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 www.sccollege.edu/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 (SLI), 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 cafeteria/student lounge, known as the Hawk's Perch, offers snacks and daily specials.

The Perch is open Monday–Thursday (fall and spring) from 7:00a.m.–9:00p.m. and Fridays from 8:00a.m.–12:00p.m. The Hawk's Perch is located in T-100. More information can be found at sccollege.edu/hawksperch. For summer hours, please contact the Hawks' Perch.

Academic Competitions

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, impromptu, 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 Kubicka-Miller at miller_jared@sccollege.edu.

Model United Nations

Model United Nations offers students the unique opportunity to take knowledge learned in the classroom and apply it to authentic simulations of the United Nations. Students can do so by enrolling in Political Science 150 or 250 where they will prepare for and participate in academic MUN conferences. Through these co-curricular courses, students learn about global politics by conducting research, solving problems, delivering speeches, and engaging in multilateral diplomacy. The SCC MUN program has a storied tradition of excellence and is one of the premier college programs in the country. More importantly, the SCC MUN program helps place students on a path towards personal and professional success by focusing on leadership and practical skills. As one of SCC's signature programs, students are encouraged to take full advantage of MUN during their time here. For more information, contact Cale Crammer at Crammer_Cale@sccollege.edu.

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 eight sports: men's and women's cross country, men's and women's soccer, men's basketball, 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

Regional Finalists 2009, 2008, 2007
Orange Empire Conference Champions
2009, 2007

Women's Soccer

National Champions 2009
State Champions 2018, 2009, 2006
State Finalists 2018, 2017, 2014, 2013, 2012,
2011, 2009, 2007, 2006
Regional Finalists 2018, 2017, 2016, 2015,
2014, 2013, 2012, 2011, 2009, 2008, 2007,
2006, 2005, 2004
Orange Empire Conference Champions
2018, 2017, 2016, 2015, 2014, 2013, 2012,
2011, 2010, 2009, 2008, 2007, 2006, 2005,
2004

Academic State Champions 2012, 2010,
2006, 2005

Women's Softball

State Champions 2016
State Finalists 2014
Super-Regional Finalists 2018, 2017, 2015,
2014, 2013.
Orange Empire Conference Champions 2014

Track and Field

Top-10 State Rank (Team)
2007 Women's Track & Field (#9)
National Community College Record
Women's 3000 Meter Steeplechase 2007-
Jenni Bair-Johnson (Track & Field)



FINANCIAL AID AND SCHOLARSHIPS

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) at www.FAFSA.gov or the California Dream Act Application at www.CalDreamAct.org, which is available in October for the following academic year. To file a FAFSA a student must be a US citizen or an eligible non-citizen. The FAFSA is the main application for all federal and state financial aid. Students who are undocumented and meet AB540 criteria apply for the California Dream Act Application. The California Dream Act Application applies for California financial aid. In order to qualify for financial aid, a student must identify a major or eligible certificate program, maintain satisfactory academic progress, have a high school diploma (or equivalent), and demonstrate financial need.

For additional information visit the Financial Aid Office in Building E–Room 104 or go to www.sccollege.edu/financialaid.

Withdrawals and Repayment of Financial Aid Funds

Federal aid recipients who withdraw, fail, or are dropped (in any combination) 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 60% of the enrollment period are subject to these rules. Based on the date of the complete withdrawal, the Financial Aid Office will determine the amount, if any, of “unearned” federal financial aid received by the student. In addition, these rules apply to students who receive all F grades. Students receiving all F grades are considered an unofficial withdrawal even if the student was enrolled for the entire term, unless the student can demonstrate attendance with proof of an academically related activity.

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 1) avoid total withdrawal from all classes, 2) successfully complete at least 6 units during the semester, 3) 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.

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 at www.chafee.csac.ca.gov/studentapplication.aspx.

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 by completing the FAFSA or California Dream Act application. To be eligible, the student must have at least \$1,104 in financial need based on the students Expected Family Contribution (EFC) and the Cost of Attendance.

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.

In order to remain eligible for the CCPG, students must maintain academic standards. If for two consecutive primary terms, the student is placed on Academic or Progress Probation, or any combination thereof, the student will lose their CCPG Fee Waiver eligibility. If you lose your CCPG eligibility for not meeting academic standards, you may appeal.



California College Promise Scholarship

The Santiago Canyon College Promise Scholarship provides incoming, full-time students with one year of college, tuition free regardless of family income. General requirements include be a first-time, full-time (12+ units) college student, California resident or AB540 eligible, and complete and submit a FAFSA or California Dream Act application. For more information please visit the First Year Support Center in Building E – Room 303 or scccollege.edu/freetuition.

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 amount 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.

Student Success Completion Grant (SSCG)

Cal Grant B & C eligible students attending full-time (12+units) may also be eligible to receive SSCG up to \$4,000 per academic year sponsored by the California Community College Chancellor's Office.

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 more information, please contact the Scholarship Office at 714-628-4793, visit the Scholarship Office located in room A-210 or online at www.scccollege.edu/scholarships.

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 needs-based or merit scholarships and provides supplemental dollars for student support programs such as the Hawks Nest Food Pantry, Guardian Scholars Program for former foster youth, and the Veterans Service Office (VSO). To enhance the quality of our students' overall experience at SCC, the foundation also supports programs such as the Student Leadership Institute and Model United Nations. It also supports important



campus events, including Community Science Night, performing arts productions and the Undergraduate Research Symposium.

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, go to www.sccollege.edu/foundation, 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/studentplacement.

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.

Information on academic honors at graduation is listed on page 14.

Information on associate degree requirements is listed on pages 39-41.

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 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. Information on associate degree for transfer requirements is listed on page 46.

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. Santiago Canyon College's certificate programs are described in the catalog section on SCC Academic Programs (pages 56-163). To qualify for a Certificate of Achievement, a candidate must meet the following requirements:

1. **Courses:** Courses are designated for the specific certificate.
2. **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.
3. **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.
4. **Residency:** Twelve units completed at Santiago Canyon College. (Six of the twelve units required for the certificate must be earned at Santiago Canyon College.)
5. **Petition:** A petition for Certificate of Achievement must be filed by the student by deadline (see Instructional Calendar page 2) 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 (pages 56-163). To qualify for a Certificate of Proficiency, a candidate must meet the following requirements:

1. **Courses:** Courses are designated for the specific certificate.
2. **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.
3. **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.
4. **Residency:** At least 20% of the total units required for the certificate must be earned at Santiago Canyon College.
5. **Petition:** A petition for Certificate of Proficiency must be filed by the student by the deadline (see Instructional Calendar page 2) 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.



ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS AT SANTIAGO CANYON COLLEGE (SCC)

AA = Associate of Arts Degree AS = Associate of Science Degree CA = Certificate of Achievement
 AA-T = Associate in Arts for Transfer Degree AS-T = Associate in Science Degree for Transfer 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.

PROGRAM	AWARDS		PROGRAM	AWARDS	
* Accounting	AS	CA/CP	English	AA/AA-T	
American College English	CA		* Gemology	AS	CA
* American Sign Language	CA		General Education (CSU)	CA	
Anthropology	AA/AA-T		General Education (IGETC)	CA	
* Apprenticeship–Carpentry	AS	CA	Gender, Sexuality, and Women’s Studies	AA	
* Apprenticeship–Cosmetology	CA		Geography	AA-T	
* Apprenticeship–Electricity	AS	CA	Geology	AS-T	
* Apprenticeship–Maintenance Mechanic	AS	CA	History	AA-T	
* Apprenticeship–Operating Engineers	AS	CA	Kinesiology	AA-T	
* Apprenticeship–Power Lineman	AS	CA	Liberal Arts	AA/AS	
* Apprenticeship–Surveying	AS	CA	* Management	AS	CP
* Art	AA/AS/AA-T	CA	* Marketing	AS	CP
Astronomy	AS		Mathematics	AS-T	
* Biology	AS/AS-T	CA/CP	Modern (Foreign) Languages	AA	
* Business	AS/AS-T	CA/CP	Nutrition and Dietetics	AS-T	
Chemistry	AS		Philosophy	AA-T	
* Child Development	AA-T/AS-T	CP	Physics	AS-T	
Communication	AA/AA-T		Political Science	AA-T	
* Computer Information Systems	AS	CA	Psychology	AA-T	
* Computer Science	AS/AS-T	CA/CP	* Public Works	AS	CA/CP
* Cosmetology	AS	CA	* Real Estate	AS	CA/CP
Counseling	AA-T		Sociology	AA/AA-T	
Earth Sciences	AS		Spanish	AA-T	
Economics	AA/AA-T		* Survey/Mapping Sciences	AS	CA
* Education	AA/AA-T	CA	* Water Utility Science	AS	CA/CP
* Electrician	AS	CA			

* Career Education (CTE) training opportunities

For information regarding Gainful Employment and our programs,
 please visit our website at www.sccollege.edu/gainfulemployment

All Associate Degrees and Certificates of Achievement will have a unique identification code in parentheses next to them in the College Credit Instructional Programs Section. Any certificates that do not have a unique identification code will not appear on your transcript.



ASSOCIATE DEGREE REQUIREMENTS • 2019–2020

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 page 41

Plan B: California State University General Education Breadth page 47

Plan C: Intersegmental General Education Transfer Curriculum (IGETC) page 48

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 on page 12.

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 on pages 61-163.

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.

See Pass/No Pass section on page 19. Courses in the student's major may not be taken under the Pass/No Pass policy except for major courses for Associate Degrees for Transfer courses for which Pass/No Pass is the only grading option, and units earned through credit by examination or assessment.

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 2020.**

IV. Proficiencies

The required proficiencies listed on page 41 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 2018, Spring 2019, or Summer 2019). 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 2019.

NOTE: Official transcripts from all colleges attended must be on file.



GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE • PLAN A • 2019–2020

Philosophy

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.

A. Natural Sciences

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.

B. Social and Behavioral Sciences

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.

C. Humanities

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.

D. Cultural Breadth

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.

1. Ethnic Studies/Gender, Sexuality, and Women's Studies.

Courses meeting the Ethnic Studies/Gender, Sexuality, and Women's studies requirement focus on the cultural perspectives of African American, Asian American, Chicano/Latino, Native American, and Gender, Sexuality, 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 historically excluded groups.

2. 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 environment, behavior, structure, and function of society. These courses also include a multi-country perspective.

E. Language and Rationality

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.

F. Lifelong Understanding and Self-Development

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 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.



GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE • PLAN A • 2019–2020

A. Natural Sciences

(3 units are required)

Anthropology 101, 101L
 Astronomy 100L, 102, 103, 112
 Biology 109/109H, 109L/109HL, 115, 139, 149, ~~177~~, 190, 190L, ~~200~~, 211, 229, 239, 259
 Chemistry 100, 200A, 200AH
 Earth Sciences 100, 100L, 111, 120, 121, 130, 160, 200
 Geography 101/101H, 101L
 Physical Science 100
 Physics 100, 150A, 250A
 Water Utility Science 107

B. Social and Behavioral Sciences

(6 units are required)

Select one course from B1 and one course from B2.

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
 Sociology 100/100H, 120, 150, 220

C. Humanities

(3 units are required)

American Sign Language 110, 111, 116, 210
 Anthropology 104
 Art 100/100H, 101/101H, 102/102H, 110
 Chinese 101, 102
 Cinema Studies 103, 104, 105, 107, 108
 Dance 100
 English 102/102H, 231, 232, 233A, 233B, 241, 242, 243, 270, 271, 272
 French 101, 102, 194, 201, 202
History 142
 Italian 101, 102, 194, 195, 201, 202
 Music 101/101H, 102, 104
 Philosophy 106/106H, 108, 112, 115, 118, 120
 Spanish 101/101H or 101A & 101B, 102, 110, 111, 194, 195A, 195B, 201, 202, 213
 Theatre Arts 100

D. Cultural Breadth

(3 units are required)

American Sign Language 116
 Anthropology 100/100H, 104
 Chicano Studies 101
 Child Development 221
 Communication 120/120H, 225/225H
 English 246, 271, 272, 278
 Ethnic Studies 101, 110, 120, 140
 Gender, Sexuality, and Women's Studies 101, 102
 Geography 100/100H, 102/102H
 History 124, 127, 142, 152, 162
 Kinesiology 109, 110
 Music 102, 103
 Philosophy 112
 Psychology 170, 180

E. Language and Rationality

(6 units are required)

Select one course from E1 and one course from E2.

E1. English Composition

English 100, 101/101H with a grade of "C" or better.

E2. Communication and Analytical Thinking

Includes mathematics, logic, statistics, computer languages and programming and related disciplines.

Communication 101, 110, 111
 Computer Science 100, 105, 129, 154
 English 102/102H, 103/103H
 Mathematics 080, 085, 086, 105, 140, 150, ~~160~~, 170, 171, 180/180H, 185, 219/219H, 220, 280, 287, 290, 295
 Philosophy 110, 111
 Reading 102, 150, 151
 Sociology 125/125H

F. Lifelong Understanding and Self-Development

(3 units are required)

Select one course from F1 and one course from F2.

No more than one unit may be counted from F2.

F1: Accounting 100

Business 130
Child Development 107
 Counseling 101, 113, 116, 118
 Interdisciplinary Studies 155
 Kinesiology 100, 101, 102, 104, 110, 111
 Library & Information Studies 100
 Nutrition & Food 115, 120
 Philosophy 111
 Psychology 160, 230
 Sociology 130, 220

F2: Kinesiology 119–283 (excluding Kinesiology 274)

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

See International Transcripts section on page 12.

* Courses may be listed in more than one area, but will not be certified in more than one area.



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 which 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: a) the University of California (UC) system with 10 campuses; b) the California State University (CSU) system with 23 campuses; c) over 200 accredited independent colleges and universities; and, d) the 114 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 which are transferable to the UNIVERSITY OF CALIFORNIA will be designated on the UC Transferable Course Agreement, which can be found on page 49. 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, 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:

1. **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.
2. **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.

3. **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 4,100 bachelor's and master's degrees through both classroom and online instruction. 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 semester or 90 quarter units of transferable coursework and

1. Earn an overall college grade point average (GPA) of 2.0 (C); GPA is calculated using all transfer units attempted. In high-demand majors and campuses a GPA of 2.0 may not be sufficient to be admitted;
2. Are in good standing at the last college or university attended (eligible to enroll).
3. Complete 10 general education courses (30 semester units or 45 quarter units) with a grade of C- or better, which include general education English Composition (A2), College Mathematics (B4), Speech Communication (A1), and Critical Reasoning (A3). If CSU-GE area A1, A2, A3, or B4 courses double-count as general education and a major requirement, it is recommended these courses be completed with a grade of "C" or better.

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 less 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.

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

See page 47 of the Catalog for specific courses which meet these requirements.

- 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
- E. LIFELONG UNDERSTANDING AND SELF DEVELOPMENT – 3 units

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.

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

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 (21 quarter) units 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

See page 48 of the Catalog for specific courses which meet these requirements.

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)

California State University also has an American Institutions requirement which can be satisfied prior to transfer by taking Political Science 101 and an approved American History course in Area 4. Completion of these courses is advised for students completing the IGETC pattern and transferring to a CSU campus. See page 48 for specific details.

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 become certified, which means the student has met all lower-division general education requirements. Partial certification is permitted if a student has completed all but two (2) courses on the IGETC 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.

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 transfer to UC or CSU.

Students requesting CSU GE Breadth certification must complete at least 12 units at Santiago Canyon College.

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 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 at 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 transcript. 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.



ASSOCIATE IN ARTS FOR TRANSFER (A.A.-T) OR ASSOCIATE IN SCIENCE FOR TRANSFER (A.S.-T) DEGREE REQUIREMENTS • 2019–2020

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 or 90 quarter units.

To view the most current list of Santiago Canyon College's Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to www.sccollege.edu/transferdegrees.

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.

Associate Degrees for Transfer

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 page 47

Plan C: Intersegmental General Education Transfer Curriculum (IGETC) page 48

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)

See Pass / No Pass section on page 19. Courses in the student's major may not be taken under the Pass/No Pass policy except for major courses for Associate Degrees for Transfer courses for which Pass/No Pass is the only grading option, and units earned through credit by examination or assessment.

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 requirement 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.



GENERAL EDUCATION BREADTH REQUIREMENT COURSES FOR THE CALIFORNIA STATE UNIVERSITY (CSU) • PLAN B • 2019–2020

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 2019 and are valid through Summer 2020.

- 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 (F'19), 101/101H
- A3: Critical Thinking**
Communication 111*
English 102*/102H*, 103/103H
Philosophy 110/110H, 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. Lab courses are in **bold**. 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 (F'19), 130
Physical Science 100
Physics **100, 150A, 150B, 250A, 250B, 250C**
Reading 151
- B2: Life Science**
Anthropology 101
Biology 109/109H, **115, 139, 149, 177**, 190, **211, 212, 214**, 221, 229, 231, **239, 249, 259, 290**
Psychology 200 (F'17)
- B3: Laboratory Activity**
Anthropology 101L
Astronomy 100L
Biology **109L, 109HL, 115, 139, 149, 190L (F'17), 211, 212, 214**; 221, 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**
Mathematics 105, 140, 150, 170, 171 (F'19), 180/180H, 203, 219/219H, 220 (F'19), 287, 290, 295
Sociology 125 (F'19)

- 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 (F'19), 102/102H (F'19)
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 (F'19), 246, 270, 271, 272, 278*
French 101, 102, 194, 201, 202
History 101*/101H*, 102*/102H*, 132*(F'19), 142, 152, 162
Italian 101, 102, 194, 195, 201, 202
Philosophy 106/106H, 108, 112, 115, 118, 120
Spanish 101/101H, 101B**, 102, 110 (F'19), 111 (F'19), 194, 195A, 195B, 201, 202
- **Both SPAN 101A & 101B must be completed for C2 credit.**

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 courses (in **bold** below) 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)
Courses must be selected from at least 2 different disciplines.
- Anthropology 100/100H, 103, 104
Chicano Studies 101
Child Development 107*, 110
Cinema Studies 105
Communication 120/120H, 225/225H
Counseling 150
Criminal Justice 101
Economics 101, 102
Education 101
English 278
Ethnic Studies 101, 140
Gender, Sexuality, and Women's Studies 101, 102, 103 (F'19)
Geography 100/100H, 102, 140
History 101*/101H*, 102*/102H*, **118, 120/120H, 121/121H, 122+, 124, 126, 127, 132*(F'19)** 133, **142, 152*, 162***, 240
Interdisciplinary Studies 155*
Kinesiology 109
Political Science **101/101H, 110, 150, 200, 201, 220, 221, 230**
Psychology 100/100H, **150**; 157*, 160*(F'19), 170, 180, 190*(F'19), 200, 220, 230*, 240, 250
Sociology 100/100H, 115, 116, 120 (F'19), 130*, 150 (F'19), 220, 240
- +No credit for History 122 if taken after History 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:**
Counseling 101, 113 (F'19), 116
Child Development 107*
Interdisciplinary Studies 155*
Kinesiology 100, 101, 102, 104, 110, 111
Nutrition and Food 115
Psychology 157*, 160*(F'19), 190*(F'19), 230*
Sociology 130*
- E2:**
Kinesiology 119-283 (Excluding 274)

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 or the Santiago Canyon College Counseling Department for deadline information.
- Students following the Associate in Science Biology for Transfer (11856) must follow the CSU-GE for STEM and 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

- * Courses may be listed in more than one area but will not be certified in more than one area.
- B1, B2, B3:** Courses in **bold** have laboratory activity.
- (F' YR) - Indicates the semester and year the course was approved in a general education area.



INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC) FOR THE UNIVERSITY OF CALIFORNIA (UC) AND THE CALIFORNIA STATE UNIVERSITY (CSU) • PLAN C • 2019–2020

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 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 2019 and are valid through Summer 2020.

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 (F'19), 101*/101H*

Group B: Critical Thinking-English Composition

1 course required, minimum 3 semester units.
English 102*/102H*, 103*/103H*
Philosophy 110*
Reading 151

Group C: Oral Communication (CSU 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.
Math 105, 140*, 150*, 170*, 171 (F'19)*, 180*/180H*, 185, 219*/219H*, 220 (F'19)*, 280, 287, 290, 295
Sociology 125 (F'19)

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 (F'19)*, 102*/102H (F'19)*
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 (F'19), 246, 271, 272, 278
French 102, 201, 202
History 101*/101H*, 102*/102H*, 132 (F'19), 142
Italian 102, 201, 202
Philosophy 106*/106H*, 108, 112, 115, 118, 120
Spanish 102*, 111 (F'19), 195A, 195B, 201, 202

* Indicates 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.

** Official High School transcript must be on file in the admissions office.

Area 5A, 5B, 5C: underlined courses have laboratory activity.

(F' YR) - Indicates the semester and year the course was approved in a general education area.

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
Chicano Studies 101
Child Development 107*
Cinema Studies 105
Communication 225*/225H*
Criminal Justice 101
Economics 101, 102
Education 101
Ethnic Studies 101, 140
Gender, Sexuality, and Women's Studies 101*, 102, 103 (F'19)
Geography 100*/100H*, 102, 140
History 101*/101H*, 102*/102H*, 118, 120*/120H*, 121*/121H*, 122*, 124, 126, 127, 133, 142, 152, 162, 240
Interdisciplinary Studies 155
Political Science 101*/101H*, 110, 150, 200, 201, 220, 221, 230
Psychology 100*/100H, 157*, 160 (F'19), 170, 180, 190 (F'19), 200, 220, 230, 240, 250
Sociology 100*/100H*, 115, 116, 120 (F'19), 125, 130, 150 (F'19), 220, 240

AREA 5—PHYSICAL & BIOLOGICAL SCIENCES

Minimum 7–9 semester units. One Physical Science course and one Biological Science course 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 (F'19)*, 130
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, 177, 190 (F'16), 211, 212, 214, 221, 229, 231, 239, 249, 259, 290
Psychology 200 (F'17)

Group C: Laboratory Activity (minimum 1 unit)

Anthropology 101L
Astronomy 100L
Biology 109L, 109HL, 115, 139, 149, 190L (F'17), 211, 212, 214, 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 (F'19), 111 (F'19), 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 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 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.

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. 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).

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

- 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.
- Request certification from the last California community college you attend prior to transfer 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.
- Prior to requesting certification, have official transcripts on file from every high school and college you have attended.
- 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.
- 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.
- Courses completed at foreign institutions are not acceptable except for certification of competence in a language other than English.
- 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.
- 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
 - 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.



UNIVERSITY OF CALIFORNIA AND SANTIAGO CANYON COLLEGE TRANSFER COURSE AGREEMENT 2019–2020

This agreement lists approved Santiago Canyon College courses transferable for unit credit at all UC campuses and explains UC credit provisions. Additional courses for 2019–2020 may be approved after this catalog publication date. Please see an SCC counselor for more information.

Accounting 101, 102	Education 101, 200, 210	Nutrition 115, 120
American College English 102*, 116* *ACE 102 and 116 maximum credit, 8 units	Engineering 210, 220, 225, 230	Philosophy 106, 106H, 108, 110, 111, 112, 115, 118, 120,
American Sign Language 110*, 111, 116, 210 * ASL 110 corresponds to two years of high school study	English 100, 101, 101H, 102, 102H, 103, 103H, 213, 220, 231, 232, 233A, 233B, 241, 242, 243, 246, 271, 272, 278	Physical Science 100
Anthropology 100, 100H, 101, 101L, 103, 104	Ethnic Studies 101	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
Art 100, 100H, 101, 101H, 102, 102H, 110, 111, 130, 131, 139, 141, 149, 195, 230, 231, 232, 233, 241, 242	French 101*, 102, 196, 201, 202 * FREN 101 corresponds to two years of high school study	Political Science 101, 101H, 110, 200, 200H, 201, 220, 221, 222, 230
Astronomy 100L, 102, 103, 112	Gender, Sexuality, and Women's Studies 101, 102, 103	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
Biology 109#, 109H#, 109L, 109HL, 115, 139*, 149, 177, 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	Geography 100, 100H, 101, 101H, 101L, 102, 130, 140, 150, 155 (Same as SURV 155)	Sociology 100, 100H, 115, 116/116H, 120, 125, 130, 150, 220, 240+ + SOC 240 and PSYC 240 maximum credit, one course
Business 100, 105	History 101, 101H, 102, 102H, 118, 120, 120H, 121, 121H, 122+, 124, 126, 127, 132, 133, 152, 162, 240 + No credit for HIST 122 if taken after HIST 120/120H or 121/121H	Spanish 101*, 101H*, 101A+, 101B+, 102, 110, 111, 195A, 195B, 201, 202, 213 * 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
Chemistry 100*, 200A, 200AH, 200B, 280A, 280B * No credit for CHEM 100 if taken after 200A/200AH	Interdisciplinary Studies 155	Surveying/Mapping Sciences 118*, 119*, 155 (Same as GEOG 155) * SURV 118 and 119 maximum credit, one course
Chicano Studies 101	Italian 101*, 102, 195, 201, 202 * ITAL 101 corresponds to two years of high school study	Theatre Arts 100, 111, 118, 121, 122, 180A, 180B, 181A, 181B, 182A, 182B, 183A, 183B, 186A, 186B, 186C
Chinese 101*, 102 * CHNS 101 correspond to two years of high school study.	Kinesiology 101, 102#, 104#, 110#, 119*, 120A*, 120B*, 121A*, 123A*, 123B*, 125A*, 125B*, 126A*, 126B*, 127A*, 127B*, 127C, 128A, 140A*, 140B*, 140C*, 146A*, 146B*, 146C*, 147*, 160A*, 160B*, 163A*, 168A*, 168B*, 185A*, 185B*, 185C*, 189A*, 200*, 201*, 202*, 203*, 204*, 240*, 241*, 242, 245*, 246*, 247, 248, 255*, 256*, 257*, 265*, 267*, 270*, 271*, 272*, 273*, 274+, 281*, 283*, 284+ # 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	Water Utility Science 107
Child Development 107*, 110 * CDEV 107 and PSYC 157 maximum credit, one course	Library & Information Studies 100, 103	
Cinema Studies 103, 104, 105, 107, 108	Mathematics 105, 140+, 150*, 170+, 171, 180*, 180H*, 185, 203, 219, 219H, 220, 280, 287#, 290#, 295# + 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	
Communication 100, 100H, 101, 110, 111, 120, 120H, 134, 135, 225, 225H	Music 101, 101H, 102, 103, 104, 121, 122, 123, 124, 126, 127, 128, 129, 161, 162, 163, 164A, 164B, 182, 185, 186, 187, 188	
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		
Dance 100, 106A, 106B, 108A, 108B, 115A, 115B, 119A, 119B, 204A, 204B, 205, 251, 250A, 250B		
Earth Sciences 100, 100L, 111, 120*, 121+, 130, 160, 200 * No credit for EARTH 120 if taken after EARTH 121 + No credit for EARTH 121 if taken after EARTH 120		
Economics 101, 102		

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 College 12 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.**

Advanced Placement Exam	SCC Course/AA, AS Units Awarded	CSU GE Certification Area/Semester Units ¹	CSU Minimum Admission Semester Units ²	IGETC Certification Area/Semester Units ³	UC Minimum Admission Semester Units ⁴
Art History	ART 101 and 102 Area C 6 units	Area C1 or C2 3 units	6 units	Area 3A or 3B ⁵ 3 units	5.3 units
Studio Art: 2-D Design	ART 110 N/A 3 units	N/A	3 units	N/A	5.3 units (5.3 unit maximum credit for all three Studio Art exams)
Studio Art: 3-D Design	ART 111 N/A 3 units	N/A	3 units	N/A	5.3 units (5.3 unit maximum credit for all three Studio Art exams)
Studio Art: Drawing	ART 130 N/A 3 units	N/A	3 units	N/A	5.3 units (5.3 unit maximum credit for all three Studio Art exams)
Biology	BIOL 109 Area A 3 units	Area B2 and B3 4 units	6 units	Area 5B and 5C 4 units	5.3 units
Calculus AB	MATH 180 Area E2 and G1 4 units	Area B4 3 units	3 units (only one Calculus exam applied to CSU degree)	Area 2A 3 units	2.6 units (5.3 units maximum credit for Calculus AB + BC exams)
Calculus BC	MATH 180 and 185 Area E2 and G1 8 units	Area B4 3 units	6 units (only one Calculus exam applied to CSU degree)	Area 2A 3 units	5.3 units (5.3 units maximum credit for Calculus AB + BC exams)
Calculus BC/AB Subscore ⁹	No Equivalent Course	Area B4 3 units	3 units (only one Calculus exam applied to CSU degree)	Area 2A 3 units	2.6 units (2.6 units maximum credit for Calculus AB + AB Subscore exams)
Chemistry	CHEM 200A Area A 5 units	Area B1 and B3 4 units (6 units prior to F'09)	6 units	Area 5A and 5C 4 units	5.3 units
Chinese Language and Culture	Plan A Area C 3 units	Area C2 3 units	6 units	Area 3B and 6A 3 units	5.3 units
Computer Science A	CMPR 121 N/A 3 units	N/A	3 units (only one CS exam applied to CSU degree)	N/A	5.3 units (beginning May 2018)
Computer Science AB (discontinued after May 2009)	CMPR 121 N/A 3 units	N/A	6 units (only one CS exam applied to CSU degree)	N/A	2.6 units (2.6 units maximum credit for both CS exams)
Computer Science Principles (Beginning May 2017)	No Equivalent Course N/A 3 units	Area B4 3 units	6 units	N/A	5.3 units
Economics: Macroeconomics	ECON 102 Area B2 3 units	Area D 3 units	3 units	Area 4 3 units	2.6 units
Economics: Microeconomics	ECON 101 Area B2 3 units	Area D 3 units	3 units	Area 4 3 units	2.6 units
English: Language and Composition	ENGL 101 Area E1 4 units	Area A2 3 units	6 units	Area 1A 3 units	5.3 units (5.3 units maximum credit for both English exams)



SANTIAGO CANYON COLLEGE ADVANCED PLACEMENT GUIDE AND POLICIES (continued)

Advanced Placement Exam	SCC Course/AA, AS Units Awarded	CSU GE Certification Area/Semester Units ¹	CSU Minimum Admission Semester Units ²	IGETC Certification Area/Semester Units ³	UC Minimum Admission Semester Units ⁴
English: Literature and Composition	ENGL 101 Area E1 or C 4 units	Area A2 and C2 6 units	6 units	Area 1A or 3B ⁵ 3 units	5.3 units (5.3 units maximum credit for both English exams)
Environmental Science	BIOL 200 Area A 3 units	Area B1 and B3 4 units (B2+B3 or B1+B3 prior to F'09)	4 units	Area 5A and 5C 3 units ⁶	2.6 units
French Language and Culture (Prior to F'11-French Language)	FREN 101 and 102 Area C 10 units	Area C2 3 units (6 units prior to F'09)	6 units	Area 3B and 6A 3 units	5.3 units
French Literature	Plan A Area C 3 units	Area C2 (if passed prior to F'09) 3 units	6 units	Area 3B and 6A 3 units	5.3 units
German Language and Culture (Prior to F'11-German Language)	Plan A Area C 3 units	Area C2 3 units (6 units prior to F'09)	6 units	Area 3B and 6A 3 units	5.3 units
Geography (Human)	GEOG 102 Area B2 or D 3 units	Area D 3 units	3 units	Area 4 3 units	2.6 units
Government and Politics: Comparative	POLT 201 Area B2 3 units	Area D 3 units	3 units	Area 4 3 units	2.6 units
+Government and Politics: United States	POLT 101 Area B1 or B2 3 units	Area D and US-2 CSU AI Requirement ⁷ 3 units	3 units	Area 4 and US-2 CSU AI Requirement ⁷ 3 units	2.6 units
History: European	HIST 102 Area B2 or C 3 units	Area C2 or D 3 units	6 units	Area 3B or 4 ⁵ 3 units	5.3 units
+History: US	HIST 120 and 121 Area B1 or C 6 units	Area C2 or D and US-1 CSU AI Requirement ⁷ 3 units	6 units	Area 3B or 4 ⁵ and US-1 CSU AI Requirement ⁷ 3 units	5.3 units
History: World	HIST 101 and 102 Area B1 or C 6 units	Area C2 or D 3 units	6 units	Area 3B or 4 ⁵ 3 units	5.3 units
Italian Language and Culture	ITAL 101 and 102 Area C 10 units	Area C2 3 units	6 units	Area 3B and 6A 3 units	5.3 units
Japanese Language and Culture	Plan A Area C 3 units	Area C2 3 units	6 units	Area 3B and 6A 3 units	5.3 units
Latin: Literature	Plan A Area C 3 units	Area C2 (if passed prior to F'09) 3 units	6 units	Area 3B and 6A 3 units	2.6 units
Latin	Plan A Area C 3 units	Area C2 3 units	6 units	Area 3B and 6A 3 units (From May '13 and beyond)	5.3 units
Latin: Vergil	Plan A Area C 3 units	Area C2 (if passed prior to F'12) 3 units	3 units	Area 3B and 6A 3 units	2.6 units
Music Theory	N/A	Area C1 (if passed prior to F'09) 3 units	6 units	N/A	5.3 units
Physics 1 ^{8,10}	Plan A Area A 4 units	Area B1 and B3 4 units ⁸	4 units	Area 5A and 5C 4 units	5.3 units (5.3 units maximum credit for all Physics exams)
Physics 2 ^{8,10}	Plan A Area A 4 units	Area B1 and B3 4 units ⁸	4 units	Area 5A and 5C 4 units	5.3 units (5.3 units maximum credit for all Physics exams)



SANTIAGO CANYON COLLEGE ADVANCED PLACEMENT GUIDE AND POLICIES (continued)

Advanced Placement Exam	SCC Course/AA, AS Units Awarded	CSU GE Certification Area/Semester Units ¹	CSU Minimum Admission Semester Units ²	IGETC Certification Area/Semester Units ³	UC Minimum Admission Semester Units ⁴
Physics B ^{8,10} (exam available prior to F'15)	PHYS 150A and 150B Area A 8 units	Area B1 and B3 4 units ⁸ (6 units prior F'09)	6 units (maximum 6 units for all 3 exams)	Area 5A and 5C ¹⁰ 4 units	5.3 units (5.3 units maximum credit for all Physics exams)
Physics C (Electricity and Magnetism) ⁸	PHYS 250B Area A 5 units	Area B1 and B3 4 units ⁸	4 units (maximum 6 units for all 3 exams)	Area 5A and 5C 3 units ⁶	2.6 units (5.3 units maximum credit for all Physics exams)
Physics C (Mechanics) ⁸	PHYS 250A Area A 5 units	Area B1 and B3 4 units ⁸	4 units (maximum 6 units for all 3 exams)	Area 5A and 5C 3 units ⁶	2.6 units (5.3 units maximum credit for all Physics exams)
Psychology	PSYC 100 Area B2 3 units	Area D9 3 units	3 units	Area 4 3 units	2.6 units
Seminar	N/A	N/A	3 units	N/A	N/A
Spanish Language and Culture (Prior to S'14 Spanish Language)	SPAN 101 and 102 Area C 10 units	Area C2 3 units (6 units prior to S'14)	6 units	Area 3B and 6A 3 units	5.3 units
Spanish Literature and Culture (Prior to S'13 Spanish Literature)	Plan A Area C 3 units	Area C2 3 units (6 units prior to S'13)	6 units	Area 3B and 6A 3 units	5.3 units
Statistics	MATH 219 Area E2 and G1 4 units	Area B4 3 units	3 units	Area 2A 3 units	2.6 units

- The AP exams listed above may be incorporated into certification of CSU General Education-breadth requirements. All CSU campuses will accept the minimum units shown if the examination is included in full or subject area certification; individual CSU campuses may choose to accept more units than those specified towards completion of general education breadth requirements.
- The CSU Minimum Semester Admission unit column reflects what each campus system-wide will minimally accept towards CSU admission.
- Each AP exam may be applied to one IGETC area, as satisfying one course requirement, with the exception of area 6A – Language Other Than English (LOTE). Exams may be used regardless of when the exam was taken.
- The final column reflects what the University of California will award per AP exam for admission to any UC campus.
- AP exams may be used in either area regardless of where the SCC discipline is located.
- For Environmental Science, Physics C: Mechanics and Physics C: Electricity/Magnetism, 3 semester or 4 quarter units are applied toward general education area 5A + 5C; therefore, students who complete these exams will be required to complete an additional 4 semester or 5 quarter units to satisfy the minimum required 7 semester or 9 quarter units in Area 5 for IGETC certification.
- This AP examination only partially fulfills the CSU US History, Constitution, and American Ideals graduation requirement but can be used toward the requirement. (Please note that no AP exam fulfills the California State and Local Government portion, US-3) see a counselor for more information.
- If a student passes more than one AP Physics exam, only 6 units of credit will apply to the baccalaureate degree, and only 4 units may be used for the CSU GE certification.
- Students who take the Calculus BC exam and earn a subscore of 3 or higher on the Calculus AB portion will receive credit for the Calculus AB exam, even if the student did not receive a score of 3 or higher on the Calculus BC examination.
- Physics B replaced by Physics 1 and Physics 2 exam, 2015.



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.**

CLEP EXAM	Passing Score	SCC GE Area Semester Units Awarded	SCC AA Semester Units Awarded	CSU GE Certification Area/Semester Units Awarded ¹	CSU Minimum Admission Semester Units Awarded ²
American Government	50	Area B1 or B2 3 units	3 units	Area D8 3 units	3 units
American Literature	50	Area C 3 units	3 units	Area C2 3 units	3 units
Analyzing and Interpreting Literature	50	Area C 3 units	3 units	Area C2 3 units	3 units
Biology	50	Area A 3 units	3 units	Area B2 3 units	3 units
Calculus	50	Area E2 and G1 ³ 3 units	3 units	Area B4 3 units	3 units
Chemistry	50	Area A 3 units	3 units	Area B1 3 units	3 units
College Algebra	50	Area E2 and G1 ³ 3 units	3 units	Area B4 3 units	3 units
College Algebra-Trigonometry	50	Area E2 and G1 ³ 3 units	3 units	Area B4 3 units	3 units
English Literature	50	Area C 3 units	3 units	Area C2 3 units	3 units
Financial Accounting	50	N/A 0 units	3 units	N/A 0 units	3 units
French Level I	50	N/A 0 units	6 units ⁴	N/A ⁴ 0 units	6 units
French Level II	59	Area C 3 units	9 units ⁴	Area C2 ⁴ 3 units	9 units (12 units prior to F'15)
German Level I	50	N/A 0 units	6 units ⁴	N/A ⁴ 0 units	6 units
German Level II	60	N/A 0 units	9 units ⁴	Area C2 ⁴ 3 units	9 units (12 units prior to F'15)
History, United States I (Partially fulfills CSU AI requirement)	50	Area B1 3 units	3 units	Area D6 + US-1 ⁵ 3 units	3 units
History, United States II (Partially fulfills CSU AI requirement)	50	Area B1 3 units	3 units	Area D6 + US-1 ⁵ 3 units	3 units
Human Growth & Development	50	Area B2 3 units	3 units	Area E 3 units	3 units
Humanities	50	Area C 3 units	3 units	Area C2 3 units	3 units
Information Systems and Computer Applications	50	N/A 0 units	3 units	N/A 0 units	3 units
Introduction to Educational Psychology	50	N/A 0 units	3 units	N/A 0 units	3 units



SANTIAGO CANYON COLLEGE COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP) PLACEMENT GUIDE AND POLICIES (continued)

CLEP EXAM	Passing Score	SCC GE Area Semester Units Awarded	SCC AA Semester Units Awarded	CSU GE Certification Area/Semester Units Awarded ¹	CSU Minimum Admission Semester Units Awarded ²
Introductory Business Law	50	N/A 0 units	3 units	N/A 0 units	3 units
Introductory Psychology	50	Area B2 3 units	3 units	Area D9 3 units	3 units
Introductory Sociology	50	Area B2 3 units	3 units	Area D10 3 units	3 units
Natural Sciences	50	Area A 3 units	3 units	Area B1 or B2 3 units	3 units
Pre-Calculus	50	E2 and G1 ³ 3 units	3 units	Area B4 3 units	3 units
Principles of Accounting	50	N/A 0 units	3 units	N/A 0 units	3 units
Principles of Macroeconomics	50	Area B2 3 units	3 units	Area D2 3 units	3 units
Principles of Management	50	N/A 0 units	3 units	N/A 0 units	3 units
Principles of Marketing	50	N/A 0 units	3 units	N/A 0 units	3 units
Principles of Microeconomics	50	Area B2 3 units	3 units	Area D2 3 units	3 units
Social Sciences and History	50	N/A 0 units	0 units	N/A 0 units	0 units
Spanish Level I	50	N/A 0 units	6 units ⁴	N/A ⁴ 0 units	6 units
Spanish Level II	63	Area C 3 units	9 units ⁴	Area C2 ⁴ 3 units	9 units (12 units prior to F'15)
Trigonometry (Prior to FA' 06)	50	Area E2 + G1 ³ 3 units	3 units	Area B4 3 units	3 units
Western Civilization I	50	Area B2 3 units	3 units	Area C2 or D6 3 units	3 units
Western Civilization II	50	Area B2 3 units	3 units	Area D6 3 units	3 units

1. The CLEP exams listed above may be incorporated into certification of CSU General Education-Breadth requirements. All CSU campuses will accept the minimum units shown if the examination is included in full or subject area certification; individual CSU campuses may choose to accept more units than those specified towards completion of general education requirements.
2. The CSU Minimum Semester Admission unit column reflects what each campus system-wide will minimally accept toward CSU admission.
3. This CLEP exam satisfies Santiago Canyon College Mathematics Proficiency requirement for Plan A-area G1.
4. If a student passes more than one CLEP exam in the same language other than English (e.g. two exams in French), then only one examination may be applied to the SCC Associate degree or CSU baccalaureate degree. For each of these tests a passing score of 50 earns 6 units of elective credit; higher scores earn more units of placement in Area C for the Associate degree or Area C2 for the CSU GE breadth requirement.
5. This CLEP exam partially fulfills the CSU American Institutions graduation requirement but can be used toward the US-1 requirement.



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.**

INTERNATIONAL BACCALAUREATE (IB) EXAM ⁹	SCC GE Area Semester Units Awarded	SCC Minimum AA/AS Semester Units Awarded	CSU GE Certification Area/Semester Units Awarded ¹	CSU Minimum Admission Semester Units Awarded ²	IGETC Certification Area/Semester Units Awarded ³	IGETC Minimum Admission Semester Units Awarded ⁴
IB Biology HL	Area A 3 units	3 units	Area B2 (without lab) 3 units	6 units	Area 5B (without lab) 3 units	5.3 units
IB Chemistry HL	Area A 3 units	3 units	Area B1 (without lab) 3 units	6 units	Area 5A (without lab) 3 units	5.3 units
IB Economics HL	Area B2 3 units	3 units	Area D2 3 units	6 units	Area 4 3 units	5.3 units
IB Geography HL	Area B2 3 units	3 units	Area D5 3 units	6 units	Area 4 3 units	5.3 units
IB History (any Region) HL	Area B1 or B2 ⁵ 3 units	3 units	Area C2 or D6 ⁵ 3 units	6 units	Area 3B or 4 ⁵ 3 units	5.3 units
IB Language A Literature HL ⁷	Area C 3 units	3 units	Area C2 3 units ⁶	6 units ⁶	Area 3B 3 units	5.3 units
IB Language A Literature HL ⁷	Area C 3 units	3 units	Area C2 3 units ⁶	6 units ⁶	Area 3B and 6A (any language, except English) 3 units	5.3 units
IB Language A Language and Literature HL	Area C 3 units	3 units	Area C2 3 units	6 units ⁶	Area 3B 3 units	5.3 units
IB Language A Language and Literature HL ⁷	Area C 3 units	3 units	Area C2 3 units	6 units ⁶	Area 3B and 6A (any language, except English) 3 units	5.3 units
IB Language B (any language) HL ⁷	Area C 3 units	3 units	N/A 0 units	6 units	Area 6A 3 units	5.3 units
IB Mathematics HL	Area E2 + G1 ⁸ 3 units	3 units	Area B4 3 units ⁶	6 units ⁶	Area 2A 3 units	5.3 units
IB Psychology HL	Area B2 3 units	3 units	Area D9 3 units	3 units	Area 4 3 units	5.3 units
IB Theatre HL	Area C 3 units	3 units	Area C1 3 units ⁶	6 units ⁶	Area 3A 3 units	5.3 units

- The IB exams listed above may be incorporated into certification of CSU General Education-Breadth requirements. All CSU campuses will accept the minimum units shown if the examination is included in full or subject area certification; individual CSU campuses may choose to accept more units than those specified towards completion of general education requirements.
- The column reflects the CSU system-wide minimum units awarded per exam for CSU admission eligibility. Some CSU campuses may award more than the minimum listed in the column, for further information consult each CSU catalog.
- The column lists how each IB exam may be applied to one IGETC area, as satisfying one course requirement, with the exception of area 6A – Language Other Than English (LOTE). Exams may be used regardless of when the exam was taken.
- This column reflects the University of California system-wide minimum units awarded per IB exam for UC admissions eligibility.
- IB Exams may be used in either area regardless of where the SCC discipline is located.
- CSU accepts a score of 4 or higher for each of these exams.
- The IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.
- Exam satisfies Santiago Canyon College Mathematics Proficiency requirement of Plan A area G1.
- The IB organization awards either a diploma or a certificate for individual IB exams. Students who complete the IB diploma with a score of 30 or above will receive 30 quarter units (20 semester units) towards a UC baccalaureate degree.



SCC ACADEMIC PROGRAMS

Departments are listed alphabetically as identified with a program heading. Faculty contact, program information, awards and courses are listed under each program.

ASSOCIATE DEGREES AND CERTIFICATES

Santiago Canyon College offers a variety of traditional degrees and certificates. Associate degrees are programs of study within a specific major and require general education. Certificates of achievement are programs of study in a particular academic or occupational area and exclude general education. All degrees and certificates of achievement have a State-approved program control number in parentheses which will appear on student transcripts. Certificates of proficiency are specialized vocational areas, excluding general education, which do not appear on student transcripts.

Programs which lead to transfer to universities and four-year colleges do not necessarily reflect the transfer requirements of specific schools. In planning a program for transfer, it should be noted that the transfer requirements for both the major and general education vary widely. Hence it is recommended that the student review the catalog of the school of transfer and consult with the counseling staff at Santiago Canyon College in planning transfer objectives.

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 or 90 quarter units.

To view the most current list of Santiago Canyon College's Associate Degrees for Transfer and to find out which CSU campuses accept each degree, please go to www.sccollege.edu/transferdegrees.

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.

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 University of California (UC) and are applicable to the associate degree. See Transferability of Courses on page 42 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. See Honors Program and Honors Courses on pages 29-30.

001-099: Courses numbered 001-099 are not transferable to California State University (CSU) or 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 University of California (UC) and are not applicable to the associate degree. These courses count toward 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 42 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. See page 3 for additional information.

Credit by Exam: See Credit by Examination on page 18.

Experimental Courses: See Experimental Courses on page 19.

Grade Pass/No Pass: See Pass/No Pass on page 20.

Prerequisites, Corequisites and Recommended Preparation: See section on pages 22-23.

Repeatable Courses: See Course Repeatability and Repetition pages 17-18.

Same as: Identifies an identical course in a different discipline.



COURSE IDENTIFICATION NUMBERING SYSTEM (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from 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 www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

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 for specific information on C-ID course designations. Santiago Canyon College counselors can always help students interpret or explain this information.

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 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
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

Course Identification Number	SCC Course
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
CHEM 120S	CHEM 200A + CHEM 200B, General Chemistry + General Chemistry and Qualitative Analysis
CHEM 120S	CHEM 200AH + CHEM 200B, Honors General Chemistry + General Chemistry and Qualitative Analysis
CHEM 150	CHEM 280A, Organic Chemistry I
CHEM 160S	CHEM 280A + CHEM 280B, Organic Chemistry I + Organic Chemistry II
COMM 110	COMM 110, Public Communication
COMM 120	COMM 111, Argumentation and Debate
COMM 130	COMM 100, Introduction to Interpersonal Communication
COMM 130	COMM 100H, Honors Introduction to Interpersonal Communication
COMM 140	COMM 101, Group Dynamics
COMM 150	COMM 120, Introduction to Intercultural Communication
COMM 150	COMM 120H, Honors Introduction to Intercultural Communication
COMM 170	COMM 134, Oral Interpretation
CMPR 122	CMPR 122, Programming Concepts and Methodology I
CMPR 132	CMPR 132, Programming Concepts and Methodology II
CMPR 142	CMPR 154, Computer Architecture and Organization
CMPR 152	CMPR 149, Discrete Structures for Computer Science
ECE 120	CDEV 111A, Principles and Practices of Teaching Young
ECE 130	CDEV 111B, Introduction to Curriculum for Young
ECE 200	CDEV 108, Observation and Assessment for Early Learning and Development (DS3)
ECE 210	CDEV 298A, Practicum in Early Childhood Programs
ECE 220	CDEV 112, Health, Safety and Nutrition for Children
ECE 230	CDEV 221, Teaching in a Diverse Society
ECON 201	ECON 101, Principles / Micro
ECON 202	ECON 102, Principles / Macro
EDUC 200	EDUC 200, Introduction to Elementary Classroom Teaching
ENGL 100	ENGL 101, Freshman Composition
ENGL 100	ENGL 101H, Honors Freshman Composition
ENGL 120	ENGL 102, Literature and Composition
ENGL 120	ENGL 102H, Honors Literature and Composition
ENGL 105	ENGL 103, Critical Thinking and Writing
ENGL 105	ENGL 103H, Honors Critical Thinking and Writing
ENGL 110	ENGL 102, Literature and Composition
ENGL 110	ENGL 102H, Honors Literature and Composition
ENGL 130	ENGL 241, Survey of American Literature, 1600-1865
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 260/260L	ENGR 230, Network Analysis
GEOG 110	GEOG 101, Physical Geography
GEOG 111	GEOG 101L, Physical Geography Laboratory



Course Identification		Course Identification	
Number	SCC Course	Number	SCC Course
GEOG 120	GEOG 102, Cultural Geography	PHYS 140	PSC 100, Survey of Chemistry and Physics
GEOG 125	GEOG 100, World Regional Geography	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
GEOG 125	GEOG 100H, Honors World Regional Geography	PHYS 205	PHYS 250A, Physics for Scientists and Engineers I
GEOG 130	GEOG 130, Introduction to Weather and Climate	PHYS 210	PHYS 250B, Physics for Scientists and Engineers II
GEOG 140	GEOG 140, California Geography	PHYS 215	PHYS 250C, Physics for Scientists and Engineers III
GEOG 150	GEOG 150, Map Interpretation and Analysis	POLS 110	POLT 101, Introduction to American Government
GEOG 155	GEOG 155, Introduction to Geographic Information Systems	POLS 110	POLT 101H, Honors Introduction to American Government
GEOG 155	SURV 155, Introduction to Geographic Systems	POLS 120	POLT 230, Political Theory
GEOG 160	GEOG 160, Regional Field Studies	POLS 140	POLT 220, International Politics
GEOL 100	ERTH 100, Physical Geology	PSY 110	PSYC 100, Introduction to Psychology
GEOL 100L	ERTH 100L, Physical Geology Laboratory	PSY 110	PSYC 100H, Honors Introduction to Psychology
GEOL 111	ERTH 111, Historical Geology	PSY 120	PSYC 250, Introduction to Abnormal Psychology
GEOL 120	ERTH 120, Earth Sciences	PSY 150	PSYC 200, Introduction to Biological Psychology
GEOL 130	ERTH 130, Environmental Geology	PSY 170	PSYC 240, Introduction to Social Psychology
GEOL 200	ERTH 200, Geology of California	PSY 170	SOC 240, Introduction to Social Psychology
HIST 130	HIST 120, The United States to 1877	PSY 180	PSYC 160, Introduction to Lifespan
HIST 130	HIST 120H, Honors The United States to 1877	PSY 200	PSYC 220, Introduction to Research Methods Psychology
HIST 140	HIST 121, The United States Since 1877	SJS 120	GSWS 101, Introduction to Women's Studies
HIST 140	HIST 121H, Honors The United States Since 1877	SOCI 110	SOC 100, Introduction to Sociology
HIST 150	HIST 101, World Civilization to the 16th Century	SOCI 110	SOC 100H, Honors Introduction to Sociology
HIST 150	HIST 101H, Honors World Civilization to the 16th Century	SOCI 115	SOC 116, Social Problems
HIST 160	HIST 102, World Civilizations Since the 16th Century	SOCI 120	SOC 120, Introduction to Sociological Research Methods
HIST 160	HIST 102H, Honors World Civilizations Since the 16th Century	SOCI 130	SOC 130, Relationships, Marriages, and Family Dynamics
KIN 100	KIN 100, Introduction to Kinesiology	SOCI 140	SOC 220, Introduction to Gender and Sexualities
KIN 101	KIN 101, First Aid and CPR	SOCI 150	SOC 150, Introduction to Race and Ethnicity
MATH 110	MATH 219, Statistics	SPAN 100	SPAN 101, Elementary Spanish I
MATH 110	MATH 219H, Honors Statistics	SPAN 100	SPAN 101H, Honors Elementary Spanish I
MATH 120	MATH 203, Fundamental Concepts of Elementary Mathematics	SPAN 100	SPAN 101A, Elementary Spanish 1A + SPAN 101B, Elementary Spanish 1B
MATH 140	MATH 150, Calculus for Biological, Management and Social Sciences	SPAN 110	SPAN 102, Elementary Spanish II
MATH 210	MATH 180, Single Variable Calculus I	SPAN 200	SPAN 201, Intermediate Spanish I
MATH 210	MATH 180H, Honors Single Variable Calculus I	SPAN 210	SPAN 202, Intermediate Spanish II
MATH 220	MATH 185, Single Variable Calculus II	SPAN 230	SPAN 111, Spanish for Spanish Speakers 2
MATH 230	MATH 280, Intermediate Calculus	THTR 112	THEA 100, Introduction to Theatre
MATH 240	MATH 295, Differential Equations	THTR 152	THEA 111, Intermediate Acting
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		



FORMER COURSE TITLES

Adult Basic Education 009, Academic Skills <i>(formerly Adult Basic Education 009, Adult Basic Education)</i>	Dance 106A, Modern Dance Fundamentals <i>(formerly Dance 106A, Introduction to Modern Dance)</i>
Apprenticeship Carpentry 034B, Solid and Stone Surfaces <i>(formerly Apprenticeship Carpentry 034B, Solid Surface and Stone Countertops)</i>	Dance 106B, Intermediate Modern Dance <i>(formerly Dance 106B, Introduction to Modern Dance)</i>
Astronomy 100L, Astronomy Laboratory <i>(formerly Astronomy 140, Astronomy Laboratory)</i>	Dance 108A, Ballet Fundamentals <i>(formerly Dance 108A, Introduction to Ballet)</i>
Astronomy 102, Introduction to Stars and Galaxies <i>(formerly formerly Astronomy 110, Introduction to Stars and Galaxies)</i>	Dance 108B, Intermediate Ballet <i>(formerly Dance 108B, Introduction to Ballet)</i>
Astronomy 103, Introduction to the Solar System <i>(formerly Astronomy 109, Introduction to the Solar System)</i>	Dance 115A, Tap Dance Fundamentals <i>(formerly Dance 115A, Introduction to Tap Dance)</i>
Biology 191, Biotech A: Basic Lab Skills <i>(formerly Biology 191, Biotechnology A: Basic Lab Skills)</i>	Dance 115B, Intermediate Tap Dance <i>(formerly Dance 115B, Introduction to Tap Dance)</i>
Biology 192, Biotech B: Proteins <i>(formerly Biology 192, Biotechnology B: Proteins)</i>	Dance 119A, Jazz Dance Fundamentals <i>(formerly Dance 119A, Introduction to Jazz Dance)</i>
Biology 193, Biotech C: Nucleic Acids <i>(formerly Biotechnology C: Nucleic Acids)</i>	Dance 119B, Intermediate Jazz Dance <i>(formerly Dance 119B, Introduction to Jazz Dance)</i>
Child Development 206, Curriculum and Intervention Strategies for Children with Special Needs <i>(formerly Child Development 206, Curriculum and Strategies for Children with Special Needs)</i>	Gender, Sexuality and Women's Studies 101, Introduction to Women's Studies <i>(formerly Women's Studies 101, Introduction to Women's Studies)</i>
Cinema Studies 103, History of Film to 1945 <i>(formerly TV/Video Communications 103, History of Film to 1945)</i>	Gender, Sexuality and Women's Studies 102, Money, Sex, and Power <i>(formerly Women's Studies 102, Women in America: Work, Family, Self)</i>
Cinema Studies 104, History of Film From 1945 to Present <i>(formerly TV/Video Communications 104, History of Film From 1945 to Present)</i>	Geography 150, Exploring Maps and Geographic Technologies <i>(formerly Geography 150, Map Interpretation and Analysis)</i>
Cinema Studies 105, Mass Media and Society <i>formerly TV/Video Communications 105, Mass Media and Society)</i>	Political Science 101, American Government and Politics <i>(formerly Political Science 101, Introduction to American Government)</i>
Cinema Studies 122, Screenwriting for Digital Media <i>(formerly TV/Video Communications 122, Screenwriting for Digital Media)</i>	Political Science 101H, Honors American Government and Politics <i>(formerly Political Science 101H, Honors Introduction to American Government)</i>
Cinema Studies 124, Introduction to Digital Media Production <i>(formerly TV/Video Communications 124, Introduction to Digital Media Production)</i>	Psychology 220, Introduction to Research Methods in Psychology <i>(formerly Psychology 219, Introduction to Research Methods in Psychology)</i>
Communication 135, Readers' Theatre <i>(formerly Communication 135, Reader's Theatre)</i>	Workforce Preparation 601, Money Matters <i>(formerly Adult Basic Education 010, Money Matters: Financial Literacy)</i>
Computer Science 157, Introduction to Robotics <i>(formerly Computer Science 157, Introduction to Robotics Programming)</i>	Workforce Preparation 500, Workforce Readiness <i>(formerly Vocational Business 012, Workforce Readiness)</i>



SCC ACADEMIC PROGRAMS

ACCOUNTING (ACCT)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Co-Chairs, Business: Steven Deeley, Stewart Myers

Faculty: DeAnna Martin, Melissa Shirah

The Associate of Science degree and Certificate of Achievement in Accounting prepare 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 enable 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.

Associate of Science Accounting (11858)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be prepared for a job or transfer to a four-year institution.

Major requirements*	Units
Accounting 101, Financial Accounting	4
Accounting 102, Managerial Accounting	4
OR Accounting 204, Managerial Cost Accounting	3
OR Accounting 205, Intermediate Accounting I	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
Computer Information Systems 106, Microsoft Excel	3
TOTAL	20

Certificate of Achievement Accounting (21631)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible to apply for a job in accounting.

Certificate requirements	Units
Accounting 101, Financial Accounting	4
Accounting 102, Managerial Accounting	4
OR Accounting 204, Managerial Cost Accounting	3
OR Accounting 205, Intermediate Accounting I	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
Computer Information Systems 106, Microsoft Excel	3
TOTAL	20

Students intending to obtain a bachelor's degree in accounting are advised to meet with a Santiago Canyon College (SCC) counselor, and to also look at the Business Administration requirements listed in the catalog of the transfer university of their choice. Students planning to transfer to California State University, Fullerton (CSUF) should strongly consider taking Business 222, Business Writing, to meet the communication requirement above and taking Business 150, Introduction to Information Systems and Applications to meet the associate degree requirements for computer skills and knowledge.

Certificate of Proficiency General Accounting

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible for an entry-level job in accounting.

Certificate requirements	Units
Accounting 101, Financial Accounting	4
Accounting 102, Managerial Accounting	4
OR Business 150, Introduction to Information Systems and Applications	3
OR Computer Information Systems 101, Introduction to Microsoft Office	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
TOTAL	14

Certificate of Proficiency Computerized Accounting

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible for employment as a bookkeeper, accounting clerk, or other comparable jobs.

Certificate requirements	Units
Accounting 035, QuickBooks	2
OR Accounting 100, Accounting for Small Business (3)	3-4
OR Accounting 101, Financial Accounting (4)	3-4
OR Computer Information Systems 101, Introduction to Microsoft Office	3
OR Computer Science 100, The Computer and Society	3
OR Computer Information Systems 106, Microsoft Excel	3
TOTAL	11- 12

Courses

Accounting 035 QuickBooks

Unit(s): 2.0

Class Hours: 36 Lecture total.

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.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Accounting 100 Accounting for Small Business

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Accounting 101 Financial Accounting

Unit(s): 4.0

Class Hours: 72 Lecture total.

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. **CSU/UC (C-ID ACCT 110)**

Accounting 102 Managerial Accounting

Unit(s): 4.0

Class Hours: 72 Lecture total.

Prerequisite: Accounting 101.

Study of 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. **CSU/UC (C-ID ACCT 120)**

Accounting 204 Managerial Cost Accounting

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Accounting 102.

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. **CSU**

Accounting 205 Intermediate Accounting I

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Accounting 102.

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. **CSU**

AMERICAN COLLEGE ENGLISH (ACE)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, ACE: Diana Babayan

Faculty: Diana Babayan

Certificate of Achievement American College English (37478)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Communicate effectively in conversations, oral presentations, and written work.

Certificate requirements

Units

American College English 102, Refining Academic Writing and Reading (4)	
American College English 116, Introduction to Academic Composition (4)	4

Select nine (9) units from the following:

(may not select a course that is used to satisfy the unit requirement from the list above):

American College English 093, Refining Academic Speaking Skills (2)

American College English 116, Introduction to Academic Composition (4)

Communication 100, Introduction to Interpersonal Communication (3)

Communication 100H, Honors Introduction to Interpersonal Communication (3)

Reading 101, Introduction to Academic Reading (3)

Reading 128, Expanding ESL Reading Skills (1)

Reading 129, Refining ESL Reading Skills (1)

Select (3) units from the following:

(may not select a course that is used to satisfy the unit requirement from the list above)

Counseling 101, Educational, Personal, Cultural, and Career Exploration (3)

Communication 100, Introduction to Interpersonal Communication (3)

Communication 100H, Honors Introduction to Interpersonal Communication (3)

Communication 120, Intercultural Communication (3)

Communication 120H, Honors Introduction to Intercultural Communication (3)

Reading 101, Introduction to Academic Reading, (3)

6/17/2019	TOTAL	16
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Courses

American College English N80

Writing Review

Unit(s): 0.5

Class Hours: 9 Lecture total.

Recommended Preparation: Concurrent enrollment in another American College English course.

This course offers individualized practice in creating better paragraphs and short essays emphasizing correct grammar, spelling and punctuation. Students can work on computers in the Language Lab and will conference with the instructor regularly. Grade: Pass/No Pass. 1/13/2020

American College English N81
Improving Pronunciation

Unit(s): 3.0

Class Hours: 54 Lecture total.

Students will improve pronunciation of vowel and consonant sounds, word stress and intonation. Students will also practice reduced forms and thought groups. Some assignments require students to use the Academic Success Center outside of class hours.

Santiago Canyon College

AMERICAN COLLEGE ENGLISH PROGRAM (ACE/ESL)

The ACE program is for students who have English as a Second Language (ESL) backgrounds or who had English Language Learner/Development (ELL or ELD) classes in high school.

ACE courses are intensive and emphasize writing, reading and speaking skills development to prepare you for success in all of your college-level courses.

Before you can register for ACE, you need to take the TELD placement test. ESL students who try to take English 100 or 101 too soon might not pass because they lack the

necessary fluency in writing. To register for the TELD, go to <http://www.sccollege.edu/Departments/testing>. NOTE: The TELD can place very advanced ESL students into the English 100/101 level.

The following chart shows the levels in the ACE program. Students who place below ACE 052 can take classes in SCC's Continuing Education ESL program, which can be contacted at (714) 628-5900. Not all ACE courses are offered every semester.

ACE COURSE	PREREQUISITE	+ SUPPORT COURSES and Continuing Education ESL
ACE 052 , Writing/Reading 4 units, 6 hours/week	Placement test profile	Reading 128 (1 unit) ACE N81, Pronunciation (3 units)
ACE 053 , Speaking/Listening 2 units, 2 hours/week	ACE 052 students are strongly advised to also enroll in ACE 053.	Continuing Education ESL 305 Continuing Education ESL 570 or 580
ACE 102* , Writing/Reading 4 units, 6 hours/week	Placement test profile OR "C" or above in ACE 052.	Reading 129 (1 unit) Reading 101 (3 units) ACE N81, Pronunciation (3 units)
ACE 093 , Speaking/Listening 2 units, 2 hours/week	ACE 102 students are strongly advised to enroll in ACE 093.	Continuing Education ESL 601 Continuing Education ESL 580
ACE 116* , Intro to Composition 4 units, 6 hours/week	Placement test profile OR "C" or above in ACE 102.	Reading 101 (3 units) ACE N81, Pronunciation (3 units) Communication 100 (3 units) Counseling 101 (3 units) Counseling 116 (3 units)

***ACE 102 AND 116 TRANSFER TO some CSUs AND UCs.**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



American College English 052 Expanding Academic Writing and Reading

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Qualifying placement profile.

Recommended Preparation: Concurrent enrollment in American College English 053 is strongly advised.

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. Some homework will require the use of the Academic Success Center. 1/13/2020

American College English 053 Expanding Academic Speaking Skills

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. Some assignments in the Academic Success Center will be required. 1/13/2020

American College English 091 Improving Oral Expression and Pronunciation

Unit(s): 2.0

Class Hours: 36 Lecture total.

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 1/13/2020

American College English 093 Refining Academic Speaking Skills

Unit(s): 2.0

Class Hours: 36 Lecture total.

Recommended Preparation: Concurrent enrollment in American College English 102.

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 may be required for some assignments. 1/13/2020

American College English 094 Academic Listening and Speaking 1

Unit(s): 2.0

Class Hours: 36 Lecture total.

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 1/13/2020

American College English 095 Academic Listening and Speaking 2

Unit(s): 2.0

Class Hours: 36 Lecture total.

Recommended Preparation: Concurrent enrollment in ACE 102 is strongly advised. ACE 102 will be ACE 106 in Fall 2020.

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 1/13/2020

American College English 102 Refining Academic Writing and Reading

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: American College English 052 or qualifying placement profile.

Recommended Preparation: Concurrent enrollment in American College English 093.

Students receive intensive practice with strategies to improve their writing skills at the paragraph and short essay level. They also expand their grammar, 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. **CSU/UC** 1/13/2020

American College English 104 Academic Reading and Writing 1

Unit(s): 4.5

Class Hours: 72 Lecture total, 36 Laboratory total.

Prerequisite: Qualifying placement profile.

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 1/13/2020

American College English 106 Academic Reading and Writing 2

Unit(s): 4.5

Class Hours: 72 Lecture total, 36 Laboratory total.

Prerequisite: ACE 052. ACE 052 will be ACE 104 in Fall 2020

Recommended Preparation: Concurrent enrollment in ACE 093.

ACE 093 will be ACE 095 in Fall 2020

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 **CSU/UC** 1/13/2020

American College English 116 Introduction to Academic Composition

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Unit(s): 4.5

Class Hours: 72 Lecture total, 36 Laboratory total.

Prerequisite: American College English 102 or qualifying placement profile. ACE 102 will become ACE 105 in Fall 2020

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. **CSU/UC** 1/13/2020



AMERICAN SIGN LANGUAGE (ASL)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Modern Languages: Lourdes Fajardo

Faculty: Charlie Malone

Certificate of Achievement

American Sign Language (11905)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Maintain an ongoing dialogue in ASL at an intermediate conversational level.

Certificate requirements

Certificate requirements	Units
American Sign Language 110, American Sign Language I	4
American Sign Language 111, American Sign Language II	4
American Sign Language 113, Introduction to Interpreting for the Deaf	3
American Sign Language 114, Classifiers, Fingerspelling and Numbering	3
American Sign Language 116, Introduction to Deaf Studies	3
American Sign Language 210, American Sign Language III	4
Select one (1) course from the following:	3
Child Development 107, Child Growth and Development (DS1) (3)	
Child Development 205, Introduction to Children with Special Needs (3)	
Communication 100/100H, Introduction to Interpersonal Communication (3)	
Communication 120/120H, Introduction to Intercultural Communication (3)	
Education 209, Roles and Responsibilities of the Special Education Paraprofessional (3)	
Psychology 157, Introduction to Child Psychology (3)	
Theatre Arts 110, Acting Fundamentals (3)	
TOTAL	24

Courses

American Sign Language 110

American Sign Language I

Unit(s): 4.0

Class Hours: 72 Lecture total, 18 Laboratory total.

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. **CSU/UC**

American Sign Language 111

American Sign Language II

Unit(s): 4.0

Class Hours: 72 Lecture total, 18 Laboratory total.

Prerequisite: American Sign Language 110.

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. **CSU/UC**

American Sign Language 113

Introduction to Interpreting for the Deaf

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: American Sign Language 210.

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. Students will be required to attend two off-campus events. **CSU**

American Sign Language 114

Classifiers, Fingerspelling, and Numbering

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: American Sign Language 111.

This course is designed to provide specialized instruction in the development of advanced skills and application of expanded conceptualization of American Sign Language (ASL) classifiers, fingerspelling, and numbering concepts. Expressive and receptive techniques will be emphasized. **CSU**

American Sign Language 116

Introduction to Deaf Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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 are required to attend at least one off-campus event. **CSU/UC**

American Sign Language 210

American Sign Language III

Unit(s): 4.0

Class Hours: 72 Lecture total, 18 Laboratory total.

Prerequisite: American Sign Language 111.

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. **CSU/UC**



ANTHROPOLOGY (ANTH)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Anthropology: Vanessa Engstrom

Faculty: Yanina Valdós

Associate in Arts

Anthropology for Transfer (32043)

The Associate in Arts in Anthropology for Transfer degree is designed to provide students with an understanding of the scientific and humanistic study of past and present cultures, nonhuman primate relatives and archaeology. Courses in this program explore the influence of anthropology on various professional areas such as archeology, ethnography, linguistics, physical anthropology, museology, elementary and secondary social science education, art, economics, history, international relations, music, law, political science, psychology, religion, social work and foreign service. Successful completion of the transfer degree in Anthropology guarantees the student acceptance to the California State University system to pursue a baccalaureate degree in Anthropology or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Anthropology 100/100H, Introduction to Cultural Anthropology	3
Anthropology 101, Introduction to Physical Anthropology	3
Anthropology 103, Introduction to Archaeology	3
Select one (1) course from the following (List A):	3
Anthropology 104, Language and Culture (3)	
Geography 102/102H, Cultural Geography (3)	
Earth Sciences 100, Physical Geology (3)	
Geography 101/101H, Physical Geography (3)	
Select one (1) course from the following (List B):	3-4
Any list A course not already used.	
Mathematics 219/219H, Statistics and Probability (4)	
Mathematics 220 - Statistics and Probability with Integrated Review (4)	
Geography 155, Introduction to Geographic Information Systems (3)	
Select one (1) course from the following (List C):	3
An additional course from Lists A or B (3-4)	
(may not be a course used to satisfy the requirements in List A or B)	
Chicano Studies 101, Introduction to Chicano Studies (3)	
Communication 225/225H, Gender Communication (3)	
English 271, Survey of World Literature I (3)	
English 272, Survey of World Literature II (3)	
Ethnic Studies 101, Introduction to Ethnic Studies (3)	
Ethnic Studies 130, Introduction to Chicano Studies (3)	
Gender, Sexuality, and Women's Studies 101, Introduction to Women's Studies (3)	
Geography 100/100H, World Regional Geography (3)	
History 101/101H, World Civilizations to the 16th Century (3)	
History 102/102H, World Civilizations Since the 16th Century (3)	
Music 102, World Music (3)	
History 124, Mexican-American History in the United States (3)	
Philosophy 112, World Religions (3)	
Psychology 170, Multicultural Psychology (3)	
Sociology 100/100H, Introduction to Sociology (3)	
1/13/2020	TOTAL 18-19

Associate of Arts

Anthropology (11939)

The Associate of Arts degree in Anthropology is designed as a program of basic courses for students considering professional careers as archeologists, 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

Units

Anthropology 100/100H, Introduction to Cultural Anthropology	3
Anthropology 101, Introduction to Physical Anthropology	3
Anthropology 103, Introduction to Archaeology	3
Anthropology 104, Language and Culture	3

If emphasis is Cultural Anthropology, select courses from List A. If emphasis is Physical Anthropology, select courses from List B.

Select six (6) units from List A (Cultural Anthropology)	6
Economics 120 102, Principles/Macro (3)	
Ethnic Studies 101, Introduction to Ethnic Studies (3)	
Gender, Sexuality, and Women's Studies 101, Introduction to Women's Studies (3)	
Geography 100/100H, World Regional Geography (3)	
Geography 102/102H, Cultural Geography (3)	
History 101/101H, World Civilizations to the 16th Century (3)	
Psychology 100/100H, Introduction to Psychology (3)	
Sociology 100/100H, Introduction to Sociology (3)	
Select six (6) units from List B (Physical Anthropology)	6
Anthropology 101L, Physical Anthropology Laboratory (1)	
Biology 109/109H, Fundamentals of Biology (3)	
Biology 109L/109HL, Fundamentals of Biology Laboratory (1)	
Biology 149, Human Anatomy and Physiology (4)	
Biology 177, Human Genetics (3)	
Biology 211, Cellular and Molecular Biology (5)	
Biology 212, Animal Diversity and Ecology (5)	
Earth Sciences 100, Physical Geology (3)	
Earth Sciences 100L, Physical Geology Laboratory (1)	
Earth Sciences 111, Historical Geology (4)	
Geography 101/101H, Physical Geography (3)	
Geography 101L, Physical Geography Laboratory (1)	
1/13/2020	TOTAL 18

It is strongly recommended that anthropology majors transferring to the CSU or UC system complete Foreign Language courses at the 201 and 202 level, and Social Sciences 219/219H or Mathematics 219/219H.



Courses

Anthropology 100

Introduction to Cultural Anthropology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID ANTH 120)*

Anthropology 100H

Honors Introduction to Cultural Anthropology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

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. *CSU/UC (C-ID ANTH 120)*

Anthropology 101

Introduction to Physical Anthropology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Anthropology 101L

Physical Anthropology Laboratory

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Anthropology 101/101H or concurrent enrollment.

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. *CSU/UC*

Anthropology 103

Introduction to Archaeology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID ANTH 150)*

Anthropology 104

Language and Culture

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*



APPRENTICESHIP CARPENTRY (ACA)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Carpentry-Acoustical Installer

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Acoustical Installer provide 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.

Associate of Science Acoustical Installer (31107)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible to work as an Acoustical Installer journeyworker.

Major requirements*	Units
Apprenticeship Carpentry 061A, Acoustical Ceilings	1.5
Apprenticeship Carpentry 062, Standard Acoustical Grids	1.5
Apprenticeship Carpentry 063, Suspended Ceilings	1.5
Apprenticeship Carpentry 064, Acoustical Soffits	1.5
Apprenticeship Carpentry 066, Concealed/Glue-Up/ Staple-Up Systems	1.5
Apprenticeship Carpentry 067, Designer and Specialty Trims	1.5
Apprenticeship Carpentry 068, Metal Pan and Security Systems	1.5
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 071C, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry 079A, Drywall/Acoustical Ceilings	1.5

Select four (4) courses from the following: 6-6.5

Apprenticeship Carpentry 061B, Advanced Acoustical Ceiling Layout (1.5)	
Apprenticeship Carpentry 061C, Advanced Acoustical Ceiling Installation (1.5)	
Apprenticeship Carpentry 065, Prefab/Sound Panels (1.5)	
Apprenticeship Carpentry 072A, Basic Metal Framing (1.5)	
Apprenticeship Carpentry 073C, Framing Curves and Arches (1.5)	
Apprenticeship Carpentry 074B, Advanced Print Reading (2)	
Apprenticeship Carpentry 083, Door/Door Frames (1.5)	

TOTAL 25.5-26

Certificate of Achievement Acoustical Installer (31109)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible to work as an Acoustical Installer journeyworker.

Certificate requirements	Units
Apprenticeship Carpentry 061A, Acoustical Ceilings	1.5
Apprenticeship Carpentry 062, Standard Acoustical Grids	1.5
Apprenticeship Carpentry 063, Suspended Ceilings	1.5
Apprenticeship Carpentry 064, Acoustical Soffits	1.5
Apprenticeship Carpentry 066, Concealed/Glue-Up/ Staple-Up Systems	1.5
Apprenticeship Carpentry 067, Designer and Specialty Trims	1.5
Apprenticeship Carpentry 068, Metal Pan and Security Systems	1.5
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 071C, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry 079A, Drywall/Acoustical Ceilings	1.5

Select four (4) courses from the following: 6-6.5

Apprenticeship Carpentry 061B, Advanced Acoustical Ceiling Layout (1.5)	
Apprenticeship Carpentry 061C, Advanced Acoustical Ceiling Installation (1.5)	
Apprenticeship Carpentry 065, Prefab/Sound Panels (1.5)	
Apprenticeship Carpentry 072A, Basic Metal Framing (1.5)	
Apprenticeship Carpentry 073C, Framing Curves and Arches (1.5)	
Apprenticeship Carpentry 074B, Advanced Print Reading (2)	
Apprenticeship Carpentry 083, Door/Door Frames (1.5)	

TOTAL 25.5-26

Apprenticeship Carpentry-Concrete

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Concrete are 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.

Associate of Science Concrete (13235)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible to work as a Concrete journeyworker.
- Have a basis for further college education.



Major requirements*	Units
Apprenticeship Carpentry 004C, Print Reading	2
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 021E, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 025A, Foundations and Flatwork	1.5
Apprenticeship Carpentry 026A, Tilt-Up Panel Construction	1.5
Apprenticeship Carpentry 026B, Wall Forming	1.5
Apprenticeship Carpentry 026C, Gang Forms/Columns	1.5
Apprenticeship Carpentry 026D, Abutments	1.5
Apprenticeship Carpentry 027C, Beam and Deck Forming	1.5
Apprenticeship Carpentry 027D, Stairs and Ramp Forming	1.5
Apprenticeship Carpentry 028A, Bridge Construction	1.5
Select four (4) courses from the following:	6-7
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 022A, Commercial Floor Framing (1.5)	
Apprenticeship Carpentry 023B, Basic Roof Framing (1.5)	
Apprenticeship Carpentry 024A, Basic Commercial Framing (1.5)	
Apprenticeship Carpentry 024D, Transit Level/Laser (2)	
Apprenticeship Carpentry 025D, Advanced Print Reading (2)	
Apprenticeship Carpentry 028E, Bridge Falsework (1.5)	
Apprenticeship Carpentry 029A, Rigging (1.5)	
Apprenticeship Carpentry 029C, Solar Installer Level 1 (1.5)	
Apprenticeship Carpentry 095, Water Treatment Facilities (1.5)	
TOTAL	25.5-26.5

**Certificate of Achievement
Concrete (21657)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible to work as a Concrete journeyworker.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Carpentry 004C, Print Reading	2
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 021E, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 025A, Foundations and Flatwork	1.5
Apprenticeship Carpentry 026A, Tilt-Up Panel Construction	1.5
Apprenticeship Carpentry 026B, Wall Forming	1.5
Apprenticeship Carpentry 026C, Gang Forms/Columns	1.5
Apprenticeship Carpentry 026D, Abutments	1.5
Apprenticeship Carpentry 027C, Beam and Deck Forming	1.5
Apprenticeship Carpentry 027D, Stairs and Ramp Forming	1.5
Apprenticeship Carpentry 028A, Bridge Construction	1.5
Select four (4) courses from the following:	6-7
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 022A, Commercial Floor Framing (1.5)	
Apprenticeship Carpentry 023B, Basic Roof Framing (1.5)	
Apprenticeship Carpentry 024A, Basic Commercial Framing (1.5)	
Apprenticeship Carpentry 024D, Transit Level/Laser (2)	
Apprenticeship Carpentry 025D, Advanced Print Reading (2)	
Apprenticeship Carpentry 028E, Bridge Falsework (1.5)	
Apprenticeship Carpentry 029A, Rigging (1.5)	
Apprenticeship Carpentry 029C, Solar Installer Level 1 (1.5)	
Apprenticeship Carpentry 095, Water Treatment Facilities (1.5)	
TOTAL	25.5-26.5

Apprenticeship Carpentry-Drywall Finisher

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Drywall Finisher are 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.

**Associate of Science
Drywall Finisher (13234)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Have a basis for further college education.
- Begin a career as a journeyworker drywall finisher.

Major requirements*	Units
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 072A, Basic Metal Framing	1.5
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry 076A, Basic Hand Finishing	1.5
Apprenticeship Carpentry 076B, Automatic Finishing Tools	1.5
Apprenticeship Carpentry 077A, Drywall Installation/Finish Trims	1.5
Apprenticeship Carpentry 077B, Advanced Hand Finishing	1.5
Apprenticeship Carpentry 077C, Advanced Automatic Finishing Tools	1.5
Apprenticeship Carpentry 078B, Advanced Metal Framing	1.5
Apprenticeship Carpentry 078C, Wet Wall Finishes	1.5
Apprenticeship Carpentry 078D, Ceiling and Soffit Finishing	1.5
Apprenticeship Carpentry 079A, Drywall/Acoustical Ceilings	1.5
Apprenticeship Carpentry 082B, Firestopping Procedures	1.5
Apprenticeship Carpentry 082C, Decorative Trims and Textures	1.5
TOTAL	24

**Certificate of Achievement
Drywall Finisher (21663)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Have a basis for further college education.
- Begin a career as a journeyworker drywall finisher.

Certificate requirements	Units
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 072A, Basic Metal Framing	1.5
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry 076A, Basic Hand Finishing	1.5
Apprenticeship Carpentry 076B, Automatic Finishing Tools	1.5
Apprenticeship Carpentry 077A, Drywall Installation/Finish Trims	1.5
Apprenticeship Carpentry 077B, Advanced Hand Finishing	1.5
Apprenticeship Carpentry 077C, Advanced Automatic Finishing Tools	1.5
Apprenticeship Carpentry 078B, Advanced Metal Framing	1.5
Apprenticeship Carpentry 078C, Wet Wall Finishes	1.5
Apprenticeship Carpentry 078D, Ceiling and Soffit Finishing	1.5
Apprenticeship Carpentry 079A, Drywall/Acoustical Ceilings	1.5
Apprenticeship Carpentry 082B, Firestopping Procedures	1.5
Apprenticeship Carpentry 082C, Decorative Trims and Textures	1.5
TOTAL	24

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Carpentry-Drywall/Lather

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Drywall/Lather provide 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.

Associate of Science Drywall/Lather (11988)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 071C, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 072A, Basic Metal Framing	1.5
Apprenticeship Carpentry 072B, Basic Lathing	1.5
Apprenticeship Carpentry 073A, Framing Ceilings and Soffits	1.5
Apprenticeship Carpentry 073B, Framing Suspended Ceilings	1.5
Apprenticeship Carpentry 073C, Framing Curves and Arches	1.5
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry 074B, Advanced Print Reading	2
Apprenticeship Carpentry 075A, Light Gage Welding AWS - A	1.5
Apprenticeship Carpentry 083, Door/Door Frames	1.5

Select six (6) units from the following:	6
Apprenticeship Carpentry 072C, Advanced Lathing (1.5)	
Apprenticeship Carpentry 074C, Air, Moisture and Thermal Barrier (1.5)	
Apprenticeship Carpentry 075B, Light Gage Welding LAC (1.5)	
Apprenticeship Carpentry 075C, Light Gage Welding AWS - B (1.5)	
Apprenticeship Carpentry 076A, Basic Hand Finishing (1.5)	
Apprenticeship Carpentry 076B, Automatic Finishing Tools (1.5)	
Apprenticeship Carpentry 077A, Drywall Installation/Finish Trims (1.5)	
Apprenticeship Carpentry 077B, Advanced Hand Finishing (1.5)	
Apprenticeship Carpentry 077C, Advanced Automatic Finishing Tools (1.5)	
Apprenticeship Carpentry 078B, Advanced Metal Framing (1.5)	
Apprenticeship Carpentry 078C, Wet Wall Finishes (1.5)	
Apprenticeship Carpentry 078D, Ceiling and Soffit Finishing (1.5)	
Apprenticeship Carpentry 079A, Drywall/Acoustical Ceilings (1.5)	
Apprenticeship Carpentry 079C, Drywall Applications (1.5)	
Apprenticeship Carpentry 082B, Firestopping Procedures (1.5)	
Apprenticeship Carpentry 082C, Decorative Trims and Textures (1.5)	
Apprenticeship Carpentry 089, Freeform Lathing (1.5)	
TOTAL	26

Certificate of Achievement Drywall/Lather (21664)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 071C, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 072A, Basic Metal Framing	1.5
Apprenticeship Carpentry 072B, Basic Lathing	1.5
Apprenticeship Carpentry 073A, Framing Ceilings and Soffits	1.5
Apprenticeship Carpentry 073B, Framing Suspended Ceilings	1.5
Apprenticeship Carpentry 073C, Framing Curves and Arches	1.5
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry 074B, Advanced Print Reading	2
Apprenticeship Carpentry 075A, Light Gage Welding AWS - A	1.5
Apprenticeship Carpentry 083, Door/Door Frames	1.5

Select six (6) units from the following:	6
Apprenticeship Carpentry 072C, Advanced Lathing (1.5)	
Apprenticeship Carpentry 074C, Air, Moisture and Thermal Barrier (1.5)	
Apprenticeship Carpentry 075B, Light Gage Welding LAC (1.5)	
Apprenticeship Carpentry 075C, Light Gage Welding AWS - B (1.5)	
Apprenticeship Carpentry 076A, Basic Hand Finishing (1.5)	
Apprenticeship Carpentry 076B, Automatic Finishing Tools (1.5)	
Apprenticeship Carpentry 077A, Drywall Installation/Finish Trims (1.5)	
Apprenticeship Carpentry 077B, Advanced Hand Finishing (1.5)	
Apprenticeship Carpentry 077C, Advanced Automatic Finishing Tools (1.5)	
Apprenticeship Carpentry 078B, Advanced Metal Framing (1.5)	
Apprenticeship Carpentry 078C, Wet Wall Finishes (1.5)	
Apprenticeship Carpentry 078D, Ceiling and Soffit Finishing (1.5)	
Apprenticeship Carpentry 079A, Drywall/Acoustical Ceilings (1.5)	
Apprenticeship Carpentry 079C, Drywall Applications (1.5)	
Apprenticeship Carpentry 082B, Firestopping Procedures (1.5)	
Apprenticeship Carpentry 082C, Decorative Trims and Textures (1.5)	
Apprenticeship Carpentry 089, Freeform Lathing (1.5)	
TOTAL	26

Apprenticeship Carpentry-Finish Carpentry

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Finish Carpentry provide 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.

Associate of Science Finish Carpentry (13231)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker carpenter.
- Have a basis for further college education.



Major requirements*	Units
Apprenticeship Carpentry 004C, Print Reading	2
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 021C, Basic Wall Framing	1.5
Apprenticeship Carpentry 024D, Transit Level/Laser	2
Apprenticeship Carpentry 025D, Advanced Print Reading	2
Apprenticeship Carpentry 033A, Cabinet Millwork and Assembly	1.5
Apprenticeship Carpentry 033B, Cabinet Installation	1.5
Apprenticeship Carpentry 033C, Show Case/Loose Store Fixture	1.5
Apprenticeship Carpentry 033D, Moldings and Trims	1.5
Apprenticeship Carpentry 034A, Plastic Laminates	1.5
Apprenticeship Carpentry 034B, Solid Surface and Stone Countertops	1.5
Apprenticeship Carpentry 034C, Stair Trim	1.5
Apprenticeship Carpentry 034D, Doors and Door Hardware	1.5
Apprenticeship Carpentry 035C, Exit and Electrical Security Devices	1.5
TOTAL	25

**Certificate of Achievement
Finish Carpentry (21658)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker carpenter.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Carpentry 004C, Print Reading	2
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 021C, Basic Wall Framing	1.5
Apprenticeship Carpentry 024D, Transit Level/Laser	2
Apprenticeship Carpentry 025D, Advanced Print Reading	2
Apprenticeship Carpentry 033A, Cabinet Millwork and Assembly	1.5
Apprenticeship Carpentry 033B, Cabinet Installation	1.5
Apprenticeship Carpentry 033C, Show Case/Loose Store Fixture	1.5
Apprenticeship Carpentry 033D, Moldings and Trims	1.5
Apprenticeship Carpentry 034A, Plastic Laminates	1.5
Apprenticeship Carpentry 034B, Solid Surface and Stone Countertops	1.5
Apprenticeship Carpentry 034C, Stair Trim	1.5
Apprenticeship Carpentry 034D, Doors and Door Hardware	1.5
Apprenticeship Carpentry 035C, Exit and Electrical Security Devices	1.5
TOTAL	25

Apprenticeship Carpentry-Framing

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Framing provide 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.

**Associate of Science
Framing (13232)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Apprenticeship Carpentry 004C, Print Reading	2
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 021C, Basic Wall Framing	1.5
Apprenticeship Carpentry 021E, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 022A, Commercial Floor Framing	1.5
Apprenticeship Carpentry 022B, Basic Stairs	1.5
Apprenticeship Carpentry 022D, Exterior Finish Details	1.5
Apprenticeship Carpentry 023B, Basic Roof Framing	1.5
Apprenticeship Carpentry 024A, Basic Commercial Framing	1.5
Apprenticeship Carpentry 024B, Advanced Commercial Framing	1.5
Apprenticeship Carpentry 025C, Advanced Stairs	1.5
Select four (4) courses from the following:	6-7
Apprenticeship Carpentry 023C, Advanced Roof Framing (1.5)	
Apprenticeship Carpentry 024C, Panelized Roofing (1.5)	
Apprenticeship Carpentry 024D, Transit Level/Laser (2)	
Apprenticeship Carpentry 025D, Advanced Print Reading (2)	
Apprenticeship Carpentry 026B, Wall Forming (1.5)	
Apprenticeship Carpentry 072A, Basic Metal Framing (1.5)	
TOTAL	25.5-26.5

**Certificate of Achievement
Framing (21659)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Apprenticeship Carpentry 004C, Print Reading	2
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 021C, Basic Wall Framing	1.5
Apprenticeship Carpentry 021E, Tool/Equipment Applications	1.5
Apprenticeship Carpentry 022A, Commercial Floor Framing	1.5
Apprenticeship Carpentry 022B, Basic Stairs	1.5
Apprenticeship Carpentry 022D, Exterior Finish Details	1.5
Apprenticeship Carpentry 023B, Basic Roof Framing	1.5
Apprenticeship Carpentry 024A, Basic Commercial Framing	1.5
Apprenticeship Carpentry 024B, Advanced Commercial Framing	1.5
Apprenticeship Carpentry 025C, Advanced Stairs	1.5
Select four (4) courses from the following:	6-7
Apprenticeship Carpentry 023C, Advanced Roof Framing (1.5)	
Apprenticeship Carpentry 024C, Panelized Roofing (1.5)	
Apprenticeship Carpentry 024D, Transit Level/Laser (2)	
Apprenticeship Carpentry 025D, Advanced Print Reading (2)	
Apprenticeship Carpentry 026B, Wall Forming (1.5)	
Apprenticeship Carpentry 072A, Basic Metal Framing (1.5)	
TOTAL	25.5-26.5

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Carpentry-Tilt-Up

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Tilt-up are 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.

Associate of Science Tilt-Up (13233)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Apprenticeship Carpentry 002B, Slabs/Interior-Exterior Footings	1.5
Apprenticeship Carpentry 003A, Tilt-Up Introduction	1.5
Apprenticeship Carpentry 004A, Lifting and Bracing Safety	1.5
Apprenticeship Carpentry 005A, Wall-Column Forms/ Cutting and Burning	1.5
Apprenticeship Carpentry 005C, Specialized Forms and Rigging	1.5
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 024D, Transit Level/Laser	2
Apprenticeship Carpentry 027D, Stairs and Ramp Forming	1.5
Select six (6) units from the following:	6
Apprenticeship Carpentry 004B, Poured-in-Place Wall Forms (1.5)	
Apprenticeship Carpentry 005B, Site Work/Curb and Gutter (1.5)	
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 022A, Commercial Floor Framing (1.5)	
Apprenticeship Carpentry 022E, Commercial Roof Framing (1.5)	
Apprenticeship Carpentry 025A, Foundations and Flatwork (1.5)	
Apprenticeship Carpentry 026B, Wall Forming (1.5)	
Apprenticeship Carpentry 029A, Rigging (1.5)	
TOTAL	21

Certificate of Achievement Tilt-Up (21660)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Major requirements*	Units
Apprenticeship Carpentry 002B, Slabs/Interior-Exterior Footings	1.5
Apprenticeship Carpentry 003A, Tilt-Up Introduction	1.5
Apprenticeship Carpentry 004A, Lifting and Bracing Safety	1.5
Apprenticeship Carpentry 005A, Wall-Column Forms/ Cutting and Burning	1.5
Apprenticeship Carpentry 005C, Specialized Forms and Rigging	1.5
Apprenticeship Carpentry 021A, Orientation	2
Apprenticeship Carpentry 021B, Safety and Health Certifications	2
Apprenticeship Carpentry 024D, Transit Level/Laser	2
Apprenticeship Carpentry 027D, Stairs and Ramp Forming	1.5
Select six (6) units from the following:	6
Apprenticeship Carpentry 004B, Poured-in-Place Wall Forms (1.5)	
Apprenticeship Carpentry 005B, Site Work/Curb and Gutter (1.5)	
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 022A, Commercial Floor Framing (1.5)	
Apprenticeship Carpentry 022E, Commercial Roof Framing (1.5)	
Apprenticeship Carpentry 025A, Foundations and Flatwork (1.5)	
Apprenticeship Carpentry 026B, Wall Forming (1.5)	
Apprenticeship Carpentry 029A, Rigging (1.5)	
TOTAL	21

Courses

Apprenticeship Carpentry 002B Slabs/Interior-Exterior Footings

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 003A Tilt-Up Introduction

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 004A Lifting, and Bracing Safety

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

This class will describe the lifting procedures and accident preventions 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. Manufactures 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.



**Apprenticeship Carpentry 004B
Poured-in-Place Wall Forms**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 004C

Print Reading

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 005A

Wall-Column Forms/Cutting and Burning

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 005B

Site Work/Curb and Gutter

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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 print specifications. Open Entry/Open Exit.

Apprenticeship Carpentry 005C

Specialized Forms and Rigging

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

This course will instruct students in the construction of specialized forms used to create exterior architectural design feature 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.

**Apprenticeship Carpentry 021A
Orientation**

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 021B
Safety and Health Certifications**

Unit(s): 2.0

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 021C
Basic Wall Framing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 021E
Tool/Equipment Applications**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

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.

**Apprenticeship Carpentry 022A
Commercial Floor Framing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



Apprenticeship Carpentry 022B

Basic Stairs

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 022D

Exterior Finish Details

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 022E

Commercial Roof Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 023B

Basic Roof Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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 incorporate to facilitate the gable roof assembly techniques and installation procedures that are the focus of this training. Open Entry/Open Exit.

Apprenticeship Carpentry 023C

Advanced Roof Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 024A

Basic Commercial Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 024B

Advanced Commercial Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 024C

Panelized Roofing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 024D

Transit Level/Laser

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

This course covers the terminology, optical principles, and operating procedures for the transit and laser levels. Open Entry/Open Exit.

Apprenticeship Carpentry 024E

Total Station I

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

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.



**Apprenticeship Carpentry 025
Welding Fabrication**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

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.

**Apprenticeship Carpentry 025A
Foundations and Flatwork**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 025C
Advanced Stairs**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 025D
Advanced Print Reading**

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 026A
Tilt-Up Panel Construction**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 026B
Wall Forming**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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, pre-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.

**Apprenticeship Carpentry 026C
Gang Forms/Columns**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 026D
Abutments**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 027C
Beam and Deck Forming**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 027D
Stairs and Ramp Forming**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



Apprenticeship Carpentry 028A Bridge Construction

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 028C Intermediate Commercial Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 028E Bridge Falsework

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

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.

Apprenticeship Carpentry 029A Rigging

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 029AJ Rigging - Journeyworker

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Active Carpenter Union Member.

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. Upon successful completion, a student will be issued United Brotherhood of Carpenters (UBC) Rigging Qualification Cards. Grade: Pass/No Pass. 1/13/2020

Apprenticeship Carpentry 029BJ Rigging Qualification Studies - Journeyworker

Unit(s): 0.5

Class Hours: 8 Lecture total.

Prerequisite: Active Carpenter Union Member.

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. Grade: Pass/No Pass.

Apprenticeship Carpentry 029C Solar Installer Level 1

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

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. Grade: Pass/No Pass.

Apprenticeship Carpentry 030A Standard First Aid

Unit(s): 0.4

Class Hours: 5.75 Lecture total, 2.25 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Carpentry 033A Cabinet Millwork and Assembly

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 033B Cabinet Installation

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



Apprenticeship Carpentry 033C
Show Case/Loose Store Fixtures

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 033D
Molding and Trims

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 034A
Plastic Laminates

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 034B
Solid and Stone Surfaces

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Must be a state-indentured apprentice. Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 034C
Stair Trim

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 034D
Doors and Door Hardware

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 035C
Exit and Electrical Security Devices

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 040CJ
Scaffold Erector, Standard 40 Hour - Journeyworker

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Active Carpenter Union Member.

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. Grade: Pass/No Pass.

Apprenticeship Carpentry 040EJ
Scaffold Erector, Systems Scaffold - Journeyworker

Unit(s): 0.6

Class Hours: 8 Lecture total, 8 Laboratory total.

Prerequisite: Active Carpenter Union Member.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Carpentry 041A
Powered Industrial Truck Operator - Rough Terrain

Unit(s): 0.4

Class Hours: 6 Lecture total, 2 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Apprenticeship Carpentry 041AJ

Powered Industrial Truck Operator - Rough Terrain - Journeyworker

Unit(s): 0.4

Class Hours: 6 Lecture total, 2 Laboratory total.

Prerequisite: Active Carpenter Union Member.

This course provides an overview of powered industrial lift truck design principles, controls, and lift operating functions. An emphasis will be placed on all the up-to-date industrial lift safety: specific operating limitations; accident prevention; worksite and equipment inspection, and maintenance criteria. Students will inspect equipment and demonstrate the safe operation of a typical rough terrain lift truck. Upon successful completion, students will be issued a valid United Brotherhood of Carpenters Powered Industrial Lift Truck Operator Qualification Card. Grade: Pass/No Pass.

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Apprenticeship Carpentry 041B

Powered Industrial Truck Operator - Industrial Terrain

Unit(s): 0.4

Class Hours: 6 Lecture total, 2 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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 a United Brotherhood of Carpenters (UBC) Powered Industrial Truck Operator-Industrial Truck (IT) Qualification Card. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Carpentry 041BJ

Powered Industrial Truck Operator - Industrial Terrain - Journeyworker

Unit(s): 0.4

Class Hours: 6 Lecture total, 2 Laboratory total.

Prerequisite: Active Carpenter Union Member.

This course provides an overview of powered rough terrain lift truck design principles, controls, and lift operating functions. An emphasis will be placed on all the up-to-date industrial lift safety: specific operating limitations; accident prevention; worksite and equipment inspection, and maintenance criteria. Students will inspect equipment and demonstrate the safe operation of a typical rough terrain lift truck. Upon successful completion, students will be issued a valid United Brotherhood of Carpenters Powered Rough Terrain Lift Truck Operator Qualification Card. Grade: Pass/No Pass.

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Apprenticeship Carpentry 061A

Acoustical Ceilings

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 061B

Advanced Acoustical Ceiling Layout

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 061C

Advanced Acoustical Ceiling Installation

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 062

Standard Acoustical Grids

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 063

Suspended Ceilings

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 064

Acoustical Soffits

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 065

Prefab/Sound Panels

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 066

Concealed/Glue-Up/Staple-Up Systems

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



**Apprenticeship Carpentry 067
Designer and Specialty Trims**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 068
Metal Pan and Security Systems**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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 install these components to direct wire and indirect channel suspension ceiling grid systems. Open Entry/Open Exit.

**Apprenticeship Carpentry 071A
Orientation**

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 071B
Safety and Health Certifications**

Unit(s): 2.0

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 071C
Tool/Equipment Applications**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 072A
Basic Metal Framing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 072B
Basic Lathing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 072C
Advanced Lathing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

This course presents advanced methods and application techniques for lath and trim products used on exterior-interior metal framing. Open Entry/Open Exit.

**Apprenticeship Carpentry 073A
Framing Ceilings and Soffits**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 073B
Framing Suspended Ceilings**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 073C
Framing Curves and Arches**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 074A
Print Reading**

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Must be a state-indentured apprentice.

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.



Apprenticeship Carpentry 074B Advanced Print Reading

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 074C Air, Moisture and Thermal Barrier

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 071A and 071B.

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.

Apprenticeship Carpentry 075A Light Gage Welding AWS - A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 075B Light Gage Welding LAC

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 075C Light Gage Welding AWS - B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 076A Basic Hand Finishing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 076B Automatic Finishing Tools

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 077A Drywall Installation/Finish Trims

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 077B Advanced Hand Finishing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 077C Advanced Automatic Finishing Tools

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



**Apprenticeship Carpentry 078B
Advanced Metal Framing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 078C
Wet Wall Finishes**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 078D
Ceiling and Soffit Finishing**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 079A
Drywall/Acoustical Ceilings**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 079C
Drywall Applications**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 079D
Drywall Applications**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 082B
Firestopping Procedures**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 082C
Decorative Trims and Textures**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 083
Door/Door Frames**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Carpentry 083C
Doors/Door Frame**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

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.



Apprenticeship Carpentry 085 Supervisory Training

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

~~This course covers the supervisor's role and crew leadership skills required for professional development in the construction industry. Typical work processes, communication methods, project considerations, motivational concepts and problem solving techniques will be presented. When exercised these skills lead to efficient and effective management of projects. Various project scenarios will be used to conduct classroom exercises. Open Entry/ Open Exit.~~

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Apprenticeship Carpentry 086A Exterior Insulation Finish Systems (EIFS)

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 089 Freeform Lathing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 090 Residential Steel Stud Framing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Carpentry 094J Confined Space - Journeyworker

Unit(s): 0.8

Class Hours: 12 Lecture total, 4 Laboratory total.

Prerequisite: Active Carpenter Union Member.

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. Grade: Pass/ No Pass.

Apprenticeship Carpentry 095 Water Treatment Facilities

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Carpentry 021A and 021B.

This course provides instruction in the detailing, layout and construction of concrete formwork and waterstop used in water treatment facilities. Open Entry/Open Exit.

APPRENTICESHIP CARPENTRY PILE DRIVER (ACPD)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Carpentry-Pile Driver

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Pile Driver are 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.

Associate of Science

Apprenticeship Carpentry-Pile Driver (31588)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible to work as a Pile Driver journeyworker.
- Continue their college education, using the units earned.

Major requirements*	Units
Apprenticeship Carpentry Pile Driver 021, Orientation	2
Apprenticeship Carpentry Pile Driver 022, Safety and Health Certifications	2
Apprenticeship Carpentry Pile Driver 023, Tool/Equipment Applications	1.5
Apprenticeship Carpentry Pile Driver 024A, Piles and Hammers A	1.5
Apprenticeship Carpentry Pile Driver 024B, Piles and Hammers B	1.5
Apprenticeship Carpentry Pile Driver 025A, Pile Caps and Columns A	1.5
Apprenticeship Carpentry Pile Driver 025B, Pile Caps and Columns B	1.5
Apprenticeship Carpentry Pile Driver 027A, Abutment A	1.5
Apprenticeship Carpentry Pile Driver 027B, Abutment B	1.5
Apprenticeship Carpentry Pile Driver 026A, Falsework A	1.5
Apprenticeship Carpentry Pile Driver 026B, Falsework B	1.5
Apprenticeship Carpentry Pile Driver 028A, Bridge and Deck Forms A	1.5

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Select four (4) courses from the following:

Apprenticeship Carpentry Pile Driver 028B, Bridge and Deck Forms B (1.5)	6-7.5
Apprenticeship Carpentry Pile Driver 029A, Structural Welding-AWS A (1.5)	
Apprenticeship Carpentry Pile Driver 029B, Structural Welding-AWS B (1.5)	
Apprenticeship Carpentry Pile Driver 030, Print Reading (2)	
Apprenticeship Carpentry Pile Driver 031A, Welding Fabrication A (1.5)	
Apprenticeship Carpentry Pile Driver 031B, Welding Fabrication B (1.5)	
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 024D, Transit Level/Laser (2)	
Apprenticeship Carpentry 027D, Stairs and Ramp Forming (1.5)	
Apprenticeship Carpentry 029A, Rigging (1.5)	
Apprenticeship Millwright 026, Cutting and Burning (1.5)	
TOTAL	25-26

**Certificate of Achievement
Apprenticeship Carpentry-Pile Driver (31589)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible to work as a Pile Driver journeyworker.
- Continue their college education, using the units earned.

Certificate requirements	Units
Apprenticeship Carpentry Pile Driver 021, Orientation	2
Apprenticeship Carpentry Pile Driver 022, Safety and Health Certifications	2
Apprenticeship Carpentry Pile Driver 023, Tool/Equipment Applications	1.5
Apprenticeship Carpentry Pile Driver 024A, Piles and Hammers A	1.5
Apprenticeship Carpentry Pile Driver 024B, Piles and Hammers B	1.5
Apprenticeship Carpentry Pile Driver 025A, Pile Caps and Columns A	1.5
Apprenticeship Carpentry Pile Driver 025B, Pile Caps and Columns B	1.5
Apprenticeship Carpentry Pile Driver 027A, Abutment A	1.5
Apprenticeship Carpentry Pile Driver 027B, Abutment B	1.5
Apprenticeship Carpentry Pile Driver 026A, Falsework A	1.5
Apprenticeship Carpentry Pile Driver 026B, Falsework B	1.5
Apprenticeship Carpentry Pile Driver 028A, Bridge and Deck Forms A	1.5

Select four (4) courses from the following:

Apprenticeship Carpentry Pile Driver 028B, Bridge and Deck Forms B (1.5)	6-7.5
Apprenticeship Carpentry Pile Driver 029A, Structural Welding-AWS A (1.5)	
Apprenticeship Carpentry Pile Driver 029B, Structural Welding-AWS B (1.5)	
Apprenticeship Carpentry Pile Driver 030, Print Reading (2)	
Apprenticeship Carpentry Pile Driver 031A, Welding Fabrication A (1.5)	
Apprenticeship Carpentry Pile Driver 031B, Welding Fabrication B (1.5)	
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 024D, Transit Level/Laser (2)	
Apprenticeship Carpentry 027D, Stairs and Ramp Forming (1.5)	
Apprenticeship Carpentry 029A, Rigging (1.5)	
Apprenticeship Millwright 026, Cutting and Burning (1.5)	
TOTAL	25-26

Courses

Apprenticeship Carpentry Pile Driver 021

Orientation

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Must be a State-indentured Pile Driver Union Apprentice.

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.

Apprenticeship Carpentry Pile Driver 022

Safety and Health Certifications

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021.

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 emergencies 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.

Apprenticeship Carpentry Pile Driver 023

Tool/Equipment Applications

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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.

Apprenticeship Carpentry Pile Driver 024A

Piles and Hammers A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 021 and 022 022.

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 training. Open Entry/Open Exit.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Carpentry Pile Driver 024B Piles and Hammers B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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 training. Open Entry/Open Exit.

Apprenticeship Carpentry Pile Driver 026A

Falsework A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 021 and 022 022.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Carpentry Pile Driver 026B

Falsework B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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 supports. Related safety, math and print reading will be covered in the training. Open Entry/Open Exit.

Apprenticeship Carpentry Pile Driver 027A

Abutment A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 021 and 022 022.

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.

Apprenticeship Carpentry Pile Driver 027B Abutment B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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/head wall panel formwork construction will be the main focus during this part of abutment training. Open Entry/Open Exit.

Apprenticeship Carpentry Pile Driver 028A

Bridge and Deck Forms A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 021 and 022 022.

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 project 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.

Apprenticeship Carpentry Pile Driver 028B

Bridge and Deck Forms B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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 project 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.

Apprenticeship Carpentry Pile Driver 029A

Structural Welding-AWS A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union Apprentice. Must be a State-indentured Pile Driver Union Apprentice. Apprenticeship Carpentry Pile Driver 021 and 021 and 022 022.

This course is designed to be compliant with 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.



**Apprenticeship Carpentry Pile Driver 029B
Structural Welding-AWS B**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union

Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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.

Apprenticeship Carpentry Pile Driver 030

Print Reading

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union

Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

This course introduces print reading skill as a basic communication tool of the trades. 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. Student will develop skills through a series of exercises including identifying parts of drawings, locating building, pier, and heavy highway features, calculating dimensions, and using views to determine construction methods. Open Entry/Open Exit.

Apprenticeship Carpentry Pile Driver 031A

Welding Fabrication A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union

Apprentice. Must be a State-indentured Pile Driver Union

Apprentice. Apprenticeship Carpentry Pile Driver 021 and 021 and 022 022.

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.

**Apprenticeship Carpentry Pile Driver 031B
Welding Fabrication B**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a State-indentured Pile Driver Union

Apprentice. Apprenticeship Carpentry Pile Driver 021 and 022.

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 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.



APPRENTICESHIP CARPENTRY PLASTERER (ACPL)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Carpentry-Plastering

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry Plastering provide 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.

Associate of Science Plastering (31705)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry Plastering 023, Tool/Equipment Applications	1.5
Apprenticeship Carpentry Plastering 025, Basic Plastering	1.5
Apprenticeship Carpentry Plastering 026, Exterior Plastering	1.5
Apprenticeship Carpentry Plastering 027, Dot and Screed Techniques	1.5
Apprenticeship Carpentry Plastering 028, Interior Plastering	1.5
Apprenticeship Carpentry Plastering 029, Tender and Plastering Equipment	1.5
Apprenticeship Carpentry Plastering 030, Exterior Insulation Finish Systems (EIFS)	1.5
Apprenticeship Carpentry Plastering 031, Ornamental Plastering	1.5
Apprenticeship Carpentry Plastering 032, Plastering Equipment Application	1.5

Select four (4) courses from the following:

Apprenticeship Carpentry 072B, Basic Lathing (1.5)	6-7.5
Apprenticeship Carpentry 074B, Advanced Print Reading (2)	
Apprenticeship Carpentry 074C, Air, Moisture and Thermal Barrier (1.5)	
Apprenticeship Carpentry 082B, Firestopping Procedures (1.5)	
Apprenticeship Carpentry Plastering 033, Finish Applications (1.5)	
Apprenticeship Carpentry Plastering 034, Theme Plastering (1.5)	
Apprenticeship Modular Furnishings Installation 030, Crew Lead Customer Service Training (2.5)	

TOTAL 25.5-27

Certificate of Achievement Plastering (31706)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements

	Units
Apprenticeship Carpentry 071A, Orientation	2
Apprenticeship Carpentry 071B, Safety and Health Certifications	2
Apprenticeship Carpentry 074A, Print Reading	2
Apprenticeship Carpentry Plastering 023, Tool/Equipment Applications	1.5
Apprenticeship Carpentry Plastering 025, Basic Plastering	1.5
Apprenticeship Carpentry Plastering 026, Exterior Plastering	1.5
Apprenticeship Carpentry Plastering 027, Dot and Screed Techniques	1.5
Apprenticeship Carpentry Plastering 028, Interior Plastering	1.5
Apprenticeship Carpentry Plastering 029, Tender and Plastering Equipment	1.5
Apprenticeship Carpentry Plastering 030, Exterior Insulation Finish Systems (EIFS)	1.5
Apprenticeship Carpentry Plastering 031, Ornamental Plastering	1.5
Apprenticeship Carpentry Plastering 032, Plastering Equipment Application	1.5

Select four (4) courses from the following:

Apprenticeship Carpentry 072B, Basic Lathing (1.5)	6-7.5
Apprenticeship Carpentry 074B, Advanced Print Reading (2)	
Apprenticeship Carpentry 074C, Air, Moisture and Thermal Barrier (1.5)	
Apprenticeship Carpentry 082B, Firestopping Procedures (1.5)	
Apprenticeship Carpentry Plastering 033, Finish Applications (1.5)	
Apprenticeship Carpentry Plastering 034, Theme Plastering (1.5)	
Apprenticeship Modular Furnishings Installation 030, Crew Lead Customer Service Training (2.5)	

TOTAL 25.5-27

Courses

Apprenticeship Carpentry Plasterer 023

Tool/Equipment Applications

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice.

Apprenticeship Carpentry 071A and 071B.

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 United Brotherhood of Carpenters (UBC) Aerial Lift and Scaffold Erector-Welded Frame Qualification Cards. Open Entry/Open Exit.

Apprenticeship Carpentry Plasterer 025

Basic Plastering

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

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.



**Apprenticeship Carpentry Plasterer 026
Exterior Plastering**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 027
Dot and Screed Techniques**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 028
Interior Plastering**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 029
Tender and Plastering Equipment**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 030
Exterior Insulation Finish Systems (EIFS)**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 031
Ornamental Plastering**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 032
Plastering Equipment Application**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice.

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.

**Apprenticeship Carpentry Plasterer 033
Finish Applications**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

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 a focus of the class. Students will coat multiple surfaces using the correct material and finishes detailed on project prints. Open Entry/Open Exit.

**Apprenticeship Carpentry Plasterer 034
Theme Plastering**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Plasterer apprentice. Must be a state-indentured Plasterer apprentice.

This course is designed to encourage 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.



APPRENTICESHIP COSMETOLOGY (ACS)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Cosmetology

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.

Certificate of Achievement Cosmetology (11991)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a licensed cosmetologist.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Cosmetology 035, Cosmetology Apprentice	14
TOTAL	14

Courses

Apprenticeship Cosmetology 035 Cosmetology Apprentice

Unit(s): 0.5-14.0

Class Hours: 8-224 Lecture total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

APPRENTICESHIP ELECTRICITY (AEL)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Electricity-Industrial

The Associate of Science degree and Certificate of Achievement in Apprenticeship Electricity Industrial provide 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.

Associate of Science Industrial (11985)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Electrician 051, Inside Wireman 1	4.5
Apprenticeship Electrician 052, Inside Wireman 2	4.5
Apprenticeship Electrician 053, Inside Wireman 3	4.5
Apprenticeship Electrician 054, Inside Wireman 4	4.5
Apprenticeship Electrician 055, Inside Wireman 5	4.5
Apprenticeship Electrician 056, Inside Wireman 6	4.5
Apprenticeship Electrician 057, Inside Wireman 7	4.5
Apprenticeship Electrician 058, Inside Wireman 8	4.5
Apprenticeship Electrician 059, Inside Wireman 9	4.5
Apprenticeship Electrician 060, Inside Wireman 10	4.5
Apprenticeship Electrician 061, Electrical Safety and First Aid	1.5
TOTAL	46.5

Certificate of Achievement Industrial (21661)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Electrician 051, Inside Wireman 1	4.5
Apprenticeship Electrician 052, Inside Wireman 2	4.5
Apprenticeship Electrician 053, Inside Wireman 3	4.5
Apprenticeship Electrician 054, Inside Wireman 4	4.5
Apprenticeship Electrician 055, Inside Wireman 5	4.5
Apprenticeship Electrician 056, Inside Wireman 6	4.5
Apprenticeship Electrician 057, Inside Wireman 7	4.5
Apprenticeship Electrician 058, Inside Wireman 8	4.5
Apprenticeship Electrician 059, Inside Wireman 9	4.5
Apprenticeship Electrician 060, Inside Wireman 10	4.5
Apprenticeship Electrician 061, Electrical Safety and First Aid	1.5
TOTAL	46.5



Apprenticeship Electricity-Intelligent Transportation Systems Electrician

The Associate of Science degree and Certificate of Achievement in Apprenticeship Electricity Intelligent Transportation Systems Electrician provide 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.

Associate of Science Intelligent Transportation Systems Electrician (22271)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Apprenticeship Electrician 031, Intelligent Transportation Systems Electrician Apprentice 1	4.5
Apprenticeship Electrician 032, Intelligent Transportation Systems Electrician Apprentice 2	4.5
Apprenticeship Electrician 033, Intelligent Transportation Systems Electrician Apprentice 3	4.5
Apprenticeship Electrician 034, Intelligent Transportation Systems Electrician Apprentice 4	4.5
Apprenticeship Electrician 035, Intelligent Transportation Systems Electrician Apprentice 5	4.5
Apprenticeship Electrician 036, Intelligent Transportation Systems Electrician Apprentice 6	4.5
Apprenticeship Electrician 037, Intelligent Transportation Systems Electrician Apprentice 7	4.5
Apprenticeship Electrician 038, Intelligent Transportation Systems Electrician Apprentice 8	4.5
Apprenticeship Electrician 039, Intelligent Transportation Systems Electrician Apprentice 9	4.5
Apprenticeship Electrician 040, Intelligent Transportation Systems Electrician Apprentice 10	4.5
TOTAL	45

Certificate of Achievement Intelligent Transportation Systems Electrician (22270)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journey worker intelligent transportation systems electrician.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Electrician 031, Intelligent Transportation Systems Electrician Apprentice 1	4.5
Apprenticeship Electrician 032, Intelligent Transportation Systems Electrician Apprentice 2	4.5
Apprenticeship Electrician 033, Intelligent Transportation Systems Electrician Apprentice 3	4.5
Apprenticeship Electrician 034, Intelligent Transportation Systems Electrician Apprentice 4	4.5
Apprenticeship Electrician 035, Intelligent Transportation Systems Electrician Apprentice 5	4.5
Apprenticeship Electrician 036, Intelligent Transportation Systems Electrician Apprentice 6	4.5
Apprenticeship Electrician 037, Intelligent Transportation Systems Electrician Apprentice 7	4.5
Apprenticeship Electrician 038, Intelligent Transportation Systems Electrician Apprentice 8	4.5
Apprenticeship Electrician 039, Intelligent Transportation Systems Electrician Apprentice 9	4.5
Apprenticeship Electrician 040, Intelligent Transportation Systems Electrician Apprentice 10	4.5
TOTAL	45

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Electricity-Sound Installer

The Associate of Science degree and Certificate of Achievement in Apprenticeship Electricity Sound Installer provide 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.

Associate of Science Sound Installer (19588)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Electrician 021, Sound and Communication Apprentice 1	4.5
Apprenticeship Electrician 022, Sound and Communication Apprentice 2	4.5
Apprenticeship Electrician 023, Sound and Communication Apprentice 3	4.5
Apprenticeship Electrician 024, Sound and Communication Apprentice 4	4.5
Apprenticeship Electrician 025, Sound and Communication Apprentice 5	4.5
Apprenticeship Electrician 026, Sound and Communication Apprentice 6	4.5
TOTAL	27

Certificate of Achievement Sound Installer (19587)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Electrician 021, Sound and Communication Apprentice 1	4.5
Apprenticeship Electrician 022, Sound and Communication Apprentice 2	4.5
Apprenticeship Electrician 023, Sound and Communication Apprentice 3	4.5
Apprenticeship Electrician 024, Sound and Communication Apprentice 4	4.5
Apprenticeship Electrician 025, Sound and Communication Apprentice 5	4.5
Apprenticeship Electrician 026, Sound and Communication Apprentice 6	4.5
TOTAL	27

Apprenticeship Electricity-Sound Technician

The Associate of Science degree and Certificate of Achievement in Apprenticeship Electricity Sound Technician provide 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.

Associate of Science Sound Technician (19590)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Electrician 021, Sound and Communication Apprentice 1	4.5
Apprenticeship Electrician 022, Sound and Communication Apprentice 2	4.5
Apprenticeship Electrician 023, Sound and Communication Apprentice 3	4.5
Apprenticeship Electrician 024, Sound and Communication Apprentice 4	4.5
Apprenticeship Electrician 025, Sound and Communication Apprentice 5	4.5
Apprenticeship Electrician 026, Sound and Communication Apprentice 6	4.5
Apprenticeship Electrician 027, Sound and Communication Apprentice 7	4.5
Apprenticeship Electrician 028, Sound and Communication Apprentice 8	4.5
TOTAL	36

Certificate of Achievement Sound Technician (19589)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker electrician.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Electrician 021, Sound and Communication Apprentice 1	4.5
Apprenticeship Electrician 022, Sound and Communication Apprentice 2	4.5
Apprenticeship Electrician 023, Sound and Communication Apprentice 3	4.5
Apprenticeship Electrician 024, Sound and Communication Apprentice 4	4.5
Apprenticeship Electrician 025, Sound and Communication Apprentice 5	4.5
Apprenticeship Electrician 026, Sound and Communication Apprentice 6	4.5
Apprenticeship Electrician 027, Sound and Communication Apprentice 7	4.5
Apprenticeship Electrician 028, Sound and Communication Apprentice 8	4.5
TOTAL	36

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Courses

Apprenticeship Electrician 021

Sound and Communication Apprentice 1

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 022

Sound and Communication Apprentice 2

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 023

Sound and Communication Apprentice 3

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 024

Sound and Communication Apprentice 4

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 025

Sound and Communication Apprentice 5

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 026

Sound and Communication Apprentice 6

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 027

Sound and Communication Apprentice 7

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in BICSI Certification, Tyco (AMP) ACT I, and National Institute for Certification in Engineering Technologies (NICET) Level I Fire Alarm Systems. Open Entry/Open Exit.

Apprenticeship Electrician 028

Sound and Communication Apprentice 8

Unit(s): 4.5

Class Hours: 68 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction for indentured Sound Electrician Apprentices in Building Industry Consulting Services International (BICSI) Technician training, high pair count copper splicing, connectors for audiovisual and communications, Master Antenna Television/Cable Television Radio Frequency (MATV/CATV) Radio Frequency (RF) Broadband Distribution, National Institute for Certification in Engineering Technologies (NICET) Level II Audio Systems Technician training. Open Entry/Open Exit.

Apprenticeship Electrician 031

Intelligent Transportation Systems Electrician Apprentice 1

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state indentured apprentice.

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.

Apprenticeship Electrician 032

Intelligent Transportation Systems Electrician Apprentice 2

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 033

Intelligent Transportation Systems Electrician Apprentice 3

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 034

Intelligent Transportation Systems Electrician Apprentice 4

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



Apprenticeship Electrician 035
Intelligent Transportation Systems Electrician Apprentice 5

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 036
Intelligent Transportation Systems Electrician Apprentice 6

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 037
Intelligent Transportation Systems Electrician Apprentice 7

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 038
Intelligent Transportation Systems Electrician Apprentice 8

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction required for Intelligent Transportation Apprentice Electricians in Code Calculations, Code and Practices and Motor Control. Open Entry/Open Exit.

Apprenticeship Electrician 039
Intelligent Transportation Systems Electrician Apprentice 9

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Ninth semester of a five-year program. Provides related and supplemental instruction in becoming a Journeyworker in the Intelligent Transportation Systems Industry. Torqueing 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.

Apprenticeship Electrician 040
Intelligent Transportation Systems Electrician Apprentice 10

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction required for Intelligent Transportation Apprentice Electricians in Torqueing methods and requirements for electrical equipment, Photovoltaic Systems and OSHA 30 safety practices in construction for inside wireman apprentices. Open Entry/Open Exit.

Apprenticeship Electrician 051
Inside Wireman 1

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 052
Inside Wireman 2

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 053
Inside Wireman 3

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 054
Inside Wireman 4

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 055
Inside Wireman 5

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 056
Inside Wireman 6

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Electrician 057
Inside Wireman 7

Unit(s): 4.5

Class Hours: 62 Lecture total, 30 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



**Apprenticeship Electrician 058
Inside Wireman 8**

Unit(s): 4.5
 Class Hours: 62 Lecture total, 30 Laboratory total.
 Prerequisite: Must be a state-indentured apprentice.
 Eighth semester of a five year program. Provides related and supplemental instruction in Code Calculations, Code and Practices and Motor Control for inside wireman apprentices. Open Entry/Open Exit.

**Apprenticeship Electrician 059
Inside Wireman 9**

Unit(s): 4.5
 Class Hours: 62 Lecture total, 30 Laboratory total.
 Prerequisite: Must be a state-indentured apprentice.
 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.

**Apprenticeship Electrician 060
Inside Wireman 10**

Unit(s): 4.5
 Class Hours: 62 Lecture total, 30 Laboratory total.
 Prerequisite: Must be a state-indentured apprentice.
 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.

**Apprenticeship Electrician 061
Electrical Safety and First Aid**

Unit(s): 1.5
 Class Hours: 30 Lecture total.
 Prerequisite: Must be a state-indentured apprentice.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

APPRENTICESHIP INSULATOR (AIN)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Carpentry, Insulator

The Associate of Science degree and Certificate of Achievement in Apprenticeship Carpentry, Insulator provide 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..

**Associate in Science
Apprenticeship Carpentry, Insulator (35233)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 1. Be eligible to work as an Insulator journeyworker.

Major requirements*	Units
Apprenticeship Insulator 021, Orientation	2
Apprenticeship Insulator 022, Safety and Health Certifications	2
Apprenticeship Insulator 023, Insulation Basics	1.5
Apprenticeship Insulator 024, Construction Methods	1.5
Apprenticeship Insulator 025A, Print Reading	2
Apprenticeship Insulator 026, Sound Control and Weatherstripping	1.5
Apprenticeship Insulator 027, Flexible Foam Insulation	1.5
Apprenticeship Insulator 034, Firestop/Fireproofing Procedures	1.5
Apprenticeship Insulator 035, Infiltration and Moisture Control	1.5
Apprenticeship Insulator 036, Loose Fill and Spray Insulation	1.5
Apprenticeship Insulator 037, Rigid Foam and Cellular Glass Insulation Installations	1.5
Apprenticeship Insulator 043, Tool/Equipment Applications	1.5
Select four (4) units from the following:	4
Apprenticeship Insulator 025B, Advanced Print Reading (2)	
Apprenticeship Insulator 031, Green Building and Weatherization (1.5)	
Apprenticeship Insulator 032, Specialty Installations (1.5)	
Apprenticeship Insulator 033, Energy Audit (1.5)	
Apprenticeship Insulator 041, Supervisory Training (2.5)	
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 072A, Basic Metal Framing (1.5)	
TOTAL	25.5-27

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Certificate of Achievement Apprenticeship Carpentry, Insulator (35234)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 1. Be eligible to work as an Insulator journeyworker.

Major requirements*	Units
Apprenticeship Insulator 021, Orientation	2
Apprenticeship Insulator 022, Safety and Health Certifications	2
Apprenticeship Insulator 023, Insulation Basics	1.5
Apprenticeship Insulator 024, Construction Methods	1.5
Apprenticeship Insulator 025A, Print Reading	2
Apprenticeship Insulator 026, Sound Control and Weatherstripping	1.5
Apprenticeship Insulator 027, Flexible Foam Insulation	1.5
Apprenticeship Insulator 034, Firestop/Fireproofing Procedures	1.5
Apprenticeship Insulator 035, Infiltration and Moisture Control	1.5
Apprenticeship Insulator 036, Loose Fill and Spray Insulation	1.5
Apprenticeship Insulator 037, Rigid Foam and Cellular Glass Insulation Installations	1.5
Apprenticeship Insulator 043, Tool/Equipment Applications	1.5
Select four (4) units from the following:	4
Apprenticeship Insulator 025B, Advanced Print Reading (2)	
Apprenticeship Insulator 031, Green Building and Weatherization (1.5)	
Apprenticeship Insulator 032, Specialty Installations (1.5)	
Apprenticeship Insulator 033, Energy Audit (1.5)	
Apprenticeship Insulator 041, Supervisory Training (2.5)	
Apprenticeship Carpentry 021C, Basic Wall Framing (1.5)	
Apprenticeship Carpentry 072A, Basic Metal Framing (1.5)	
TOTAL	25.5-27

Courses

Apprenticeship Insulator 021

Orientation

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

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.

Apprenticeship Insulator 022

Safety and Health Certifications

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021.

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.

Apprenticeship Insulator 023

Insulation Basics

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021 and 022.

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.

Apprenticeship Insulator 024

Construction Methods

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021 and 022.

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.

Apprenticeship Insulator 025A

Print Reading

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021 and 022.

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.

Apprenticeship Insulator 025B

Advanced Print Reading

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021 and 022.

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.

Apprenticeship Insulator 026

Sound Control and Weatherstripping

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021 and 022.

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.

Apprenticeship Insulator 027

Flexible Foam Insulation

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Insulator apprentice.

Apprenticeship Insulator 021 and 022.

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.



**Apprenticeship Insulator 031
Green Building and Weatherization**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.

**Apprenticeship Insulator 032
Specialty Insulation**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 or 022.

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.

**Apprenticeship Insulator 033
Energy Audit**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.

**Apprenticeship Insulator 034
Firestop/Fireproofing Procedures**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.

**Apprenticeship Insulator 035
Infiltration and Moisture Control**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.

**Apprenticeship Insulator 036
Loose Fill and Spray Insulation**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.

**Apprenticeship Insulator 037
Rigid Foam and Cellular Glass Insulation Installations**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.

**Apprenticeship Insulator 041
Supervisory Training**

Unit(s): 2.5
Class Hours: 40 Lecture total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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 efficient and effective management of construction projects. Open Entry/Open Exit.

**Apprenticeship Insulator 043
Tool/Equipment Applications**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Insulator apprentice.
Apprenticeship Insulator 021 and 022.

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.



APPRENTICESHIP MAINTENANCE ELECTRICIAN (AME)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Associate of Science Maintenance Electrician (11982)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker maintenance mechanic.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Maintenance Electrician 021, Period 1	4.5
Apprenticeship Maintenance Electrician 052, Period 2	4.5
Apprenticeship Maintenance Electrician 053, Period 3	4.5
Apprenticeship Maintenance Electrician 054, Period 4	4.5
Apprenticeship Maintenance Electrician 055, Period 5	4.5
Apprenticeship Maintenance Electrician 056, Period 6	4.5
Apprenticeship Maintenance Electrician 057, Period 7	4.5
Apprenticeship Maintenance Electrician 058, Period 8	4.5
TOTAL	36

Certificate of Achievement Maintenance Electrician (21653)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker maintenance mechanic.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Maintenance Electrician 021, Period 1	4.5
Apprenticeship Maintenance Electrician 052, Period 2	4.5
Apprenticeship Maintenance Electrician 053, Period 3	4.5
Apprenticeship Maintenance Electrician 054, Period 4	4.5
Apprenticeship Maintenance Electrician 055, Period 5	4.5
Apprenticeship Maintenance Electrician 056, Period 6	4.5
Apprenticeship Maintenance Electrician 057, Period 7	4.5
Apprenticeship Maintenance Electrician 058, Period 8	4.5
TOTAL	36

Courses

Apprenticeship Maintenance Electrician 021

Period 1

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Electrician 052

Period 2

Unit(s): 4.5

Class Hours: 64 Lecture total, 40 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Electrician 053

Period 3

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Electrician 054

Period 4

Unit(s): 4.5

Class Hours: 64 Lecture total, 40 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Electrician 055

Period 5

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Electrician 056

Period 6

Unit(s): 4.5

Class Hours: 64 Lecture total, 40 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



**Apprenticeship Maintenance Electrician 057
Period 7**

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Maintenance Electrician 058
Period 8**

Unit(s): 4.5

Class Hours: 64 Lecture total, 40 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**APPRENTICESHIP MAINTENANCE MECHANIC
(AMM)**

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

**Associate of Science
Maintenance Mechanic (16839)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker maintenance mechanic.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Maintenance Mechanic 021, Period 1	4.5
Apprenticeship Maintenance Mechanic 022, Period 2	4.5
Apprenticeship Maintenance Mechanic 023, Period 3	4.5
Apprenticeship Maintenance Mechanic 024, Period 4	4.5
Apprenticeship Maintenance Mechanic 025, Period 5	4.5
Apprenticeship Maintenance Mechanic 026, Period 6	4.5
Apprenticeship Maintenance Mechanic 027, Period 7	4.5
Apprenticeship Maintenance Mechanic 028, Period 8	4.5
TOTAL	36

**Certificate of Achievement
Maintenance Mechanic (21651)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker maintenance mechanic.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Maintenance Mechanic 021, Period 1	4.5
Apprenticeship Maintenance Mechanic 022, Period 2	4.5
Apprenticeship Maintenance Mechanic 023, Period 3	4.5
Apprenticeship Maintenance Mechanic 024, Period 4	4.5
Apprenticeship Maintenance Mechanic 025, Period 5	4.5
Apprenticeship Maintenance Mechanic 026, Period 6	4.5
Apprenticeship Maintenance Mechanic 027, Period 7	4.5
Apprenticeship Maintenance Mechanic 028, Period 8	4.5
TOTAL	36

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Courses

Apprenticeship Maintenance Mechanic 021

Period 1

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 022

Period 2

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 023

Period 3

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 024

Period 4

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 025

Period 5

Unit(s): 4.5

Class Hours: 64 Lecture total, 32 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 026

Period 6

Unit(s): 4.5

Class Hours: 64 Lecture total, 32 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 027

Period 7

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Maintenance Mechanic 028

Period 8

Unit(s): 4.5

Class Hours: 64 Lecture total, 24 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



APPRENTICESHIP MILLWRIGHT (AMW)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Carpentry-Millwrighting

The Associate of Science degree and 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.

Associate of Science Millwrighting (11986)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible to work as a Millwright journeyworker.
- Continue their college education, using the units earned.

Major requirements*	Units
Apprenticeship Millwright 021, Orientation	2
Apprenticeship Millwright 022, Safety and Health Certifications	2
Apprenticeship Millwright 023A, Millwright General Skills - A	1.5
Apprenticeship Millwright 023B, Millwright General Skills - B	1.5
Apprenticeship Millwright 024, Printreading	2
Apprenticeship Millwright 025, Welding Fabrication	1.5
Apprenticeship Millwright 026, Cutting and Burning	1.5
Apprenticeship Millwright 027, Optics and Machinery Alignment	1.5
Apprenticeship Millwright 028, Machinery Shaft Alignment	1.5
Apprenticeship Millwright 029A, Structural Welding - AWS A	1.5
Apprenticeship Millwright 029B, Structural Welding - AWS B	1.5
Apprenticeship Millwright 030, Rigging Hardware and Procedures	1.5
Apprenticeship Millwright 031, Turbine Familiarization	1.5
Apprenticeship Millwright 032, Pumps	1.5
Apprenticeship Millwright 036A, Machinery Installation and Erection - A	1.5
Apprenticeship Millwright 043, Tool/Equipment Applications	1.5
Select four (4) courses from the following:	6
Apprenticeship Millwright 033, Conveyor Systems (1.5)	
Apprenticeship Millwright 034, Drives, Pulleys and Belts (1.5)	
Apprenticeship Millwright 036B, Machinery Installation and Erection - B (1.5)	
Apprenticeship Millwright 037, Turbine Maintenance (1.5)	
Apprenticeship Millwright 038, Concentrated Photovoltaic Installations (1.5)	
Apprenticeship Millwright 039, Compressor Theory and Maintenance (1.5)	
Apprenticeship Millwright 040, Wind Turbine Installations (1.5)	
Apprenticeship Millwright 051, Solar Installer Level 1 (1.5)	
TOTAL	31.5

Certificate of Achievement Millwrighting (21662)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible to work as a Millwright journeyworker.
- Continue their college education, using the units earned.

Certificate requirements	Units
Apprenticeship Millwright 021, Orientation	2
Apprenticeship Millwright 022, Safety and Health Certifications	2
Apprenticeship Millwright 023A, Millwright General Skills - A	1.5
Apprenticeship Millwright 023B, Millwright General Skills - B	1.5
Apprenticeship Millwright 024, Printreading	2
Apprenticeship Millwright 025, Welding Fabrication	1.5
Apprenticeship Millwright 026, Cutting and Burning	1.5
Apprenticeship Millwright 027, Optics and Machinery Alignment	1.5
Apprenticeship Millwright 028, Machinery Shaft Alignment	1.5
Apprenticeship Millwright 029A, Structural Welding - AWS A	1.5
Apprenticeship Millwright 029B, Structural Welding - AWS B	1.5
Apprenticeship Millwright 030, Rigging Hardware and Procedures	1.5
Apprenticeship Millwright 031, Turbine Familiarization	1.5
Apprenticeship Millwright 032, Pumps	1.5
Apprenticeship Millwright 036A, Machinery Installation and Erection - A	1.5
Apprenticeship Millwright 043, Tool/Equipment Applications	1.5
Select four (4) courses from the following:	6
Apprenticeship Millwright 033, Conveyor Systems (1.5)	
Apprenticeship Millwright 034, Drives, Pulleys and Belts (1.5)	
Apprenticeship Millwright 036B, Machinery Installation and Erection - B (1.5)	
Apprenticeship Millwright 037, Turbine Maintenance (1.5)	
Apprenticeship Millwright 038, Concentrated Photovoltaic Installations (1.5)	
Apprenticeship Millwright 039, Compressor Theory and Maintenance (1.5)	
Apprenticeship Millwright 040, Wind Turbine Installations (1.5)	
Apprenticeship Millwright 051, Solar Installer Level 1 (1.5)	
TOTAL	31.5

Courses

Apprenticeship Millwright 021 Orientation

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

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.

Apprenticeship Millwright 022 Safety and Health Certifications

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021.

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.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Millwright 023A Millwright General Skills - A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 023B Millwright General Skills - B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 024

Printreading

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

This course introduces 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.

Apprenticeship Millwright 025

Welding Fabrication

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 026

Cutting and Burning

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 027

Optics and Machinery Alignment

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 028 Machinery Shaft Alignment

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 029A

Structural Welding - AWS A

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 029B

Structural Welding - AWS B

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 030

Rigging Hardware and Procedures

Unit(s): 1.5

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 031

Turbine Familiarization

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.

Apprenticeship Millwright 032

Pumps

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured Millwright apprentice.

Apprenticeship Millwright 021 and 022.

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.



**Apprenticeship Millwright 033
Conveyor Systems**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 034
Drives, Pulleys and Belts**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 036A
Machinery Installation and Erection - A**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 036B
Machinery Installation and Erection - B**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 037
Turbine Maintenance**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 038
Concentrated Photovoltaic Installations**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

This course covers the design, function and grid parity of typical concentrated photovoltaic system. The history, technology, types, challenges and costs associated with this renewable energy source installation will be presented. Open Entry/Open Exit.

**Apprenticeship Millwright 039
Compressor Theory and Maintenance**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 040
Wind Turbine Installations**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

This course covers the design and function and installation of wind turbine equipment. The methods, sequences and procedures for housings, bolting, power, drive assembly and other components will be presented. Open Entry/Open Exit.

**Apprenticeship Millwright 043
Tool/Equipment Applications**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.

**Apprenticeship Millwright 051
Solar Installer Level 1**

Unit(s): 1.5
Class Hours: 20 Lecture total, 20 Laboratory total.
Prerequisite: Must be a state-indentured Millwright apprentice.
Apprenticeship Millwright 021 and 022.

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.



APPRENTICESHIP MODULAR FURNISHINGS INSTALLATION (AMF)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Courses

Apprenticeship Modular Furnishings Installation 021 Orientation

Unit(s): 2.0

Class Hours: 30 Lecture total, 10 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 022 Safety and Health Certifications

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 023 Modular Cabinets, Doors and Drawers

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 023C Tool/Equipment Applications

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Modular Furnishings Installation 021 and 022.

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.

Apprenticeship Modular Furnishings Installation 024 Introduction to Modular Furnishing

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 025 Educational and Seismic Installations

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 026 Hospital Modular Installations

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 029 Wall and Overhead Attachments

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 030 Crew Lead Customer Service Training

Unit(s): 2.5

Class Hours: 40 Lecture total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 031 Modular Glass: Handling and Installation

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Modular Furnishings Installation 032 Basic Framing and Retro-Fits

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.



**Apprenticeship Modular Furnishings Installation 034
Solid Surface and Stone Countertops**

Unit(s): 1.5

Class Hours: 20 Lecture total, 20 Laboratory total.

Prerequisite: Must be a state-indentured apprentice. Apprenticeship Modular Furnishings Installation 021 and 022.

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.

APPRENTICESHIP OPERATING ENGINEERS (AOE)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

**Apprenticeship Operating Engineers-
Construction Safety Inspector**

The Associate of Science degree and Certificate of Achievement in Apprenticeship Operating Engineers Construction Safety Inspector provide 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.

**Associate of Science
Construction Safety Inspector (31503)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Meet the related and supplemental instruction requirements for operating engineer apprentices to become journeyworkers.
- Have a foundation for furthering their college education.

Major requirements*	Units
Apprenticeship Operating Engineers 011, Construction Safety Inspector Apprentice 1	4
Apprenticeship Operating Engineers 012, Construction Safety Inspector Apprentice 2	4
Apprenticeship Operating Engineers 013, Construction Safety Inspector Apprentice 3	4
Apprenticeship Operating Engineers 014, Construction Safety Inspector Apprentice 4	4
Apprenticeship Operating Engineers 015, Construction Safety Inspector Apprentice 5	4
Apprenticeship Operating Engineers 016, Construction Safety Inspector Apprentice 6	4
TOTAL	24

**Certificate of Achievement
Construction Safety Inspector (31574)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Meet the related and supplemental instruction requirements for operating engineer apprentices to become journeyworkers.
- Have a foundation for furthering their college education.

Certificate requirements	Units
Apprenticeship Operating Engineers 011, Construction Safety Inspector Apprentice 1	4
Apprenticeship Operating Engineers 012, Construction Safety Inspector Apprentice 2	4
Apprenticeship Operating Engineers 013, Construction Safety Inspector Apprentice 3	4
Apprenticeship Operating Engineers 014, Construction Safety Inspector Apprentice 4	4
Apprenticeship Operating Engineers 015, Construction Safety Inspector Apprentice 5	4
Apprenticeship Operating Engineers 016, Construction Safety Inspector Apprentice 6	4
TOTAL	24

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Operating Engineers- Heavy Duty Repairer

The Associate of Science degree and Certificate of Achievement in Apprenticeship Operating Engineers Heavy Duty Repairer provide 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.

Associate of Science Heavy Duty Repairer (17687)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Operating Engineers 031, Heavy Duty Repairer 1	3
Apprenticeship Operating Engineers 032, Heavy Duty Repairer 2	3
Apprenticeship Operating Engineers 033, Hydraulics	3
Apprenticeship Operating Engineers 034, Advanced Hydraulics	3
Apprenticeship Operating Engineers 035, Heavy Duty Repairer 5	3
Apprenticeship Operating Engineers 036, Disassembly and Assembly	3
TOTAL	18

Certificate of Achievement Heavy Duty Repairer (21654)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Operating Engineers 031, Heavy Duty Repairer 1	3
Apprenticeship Operating Engineers 032, Heavy Duty Repairer 2	3
Apprenticeship Operating Engineers 033, Hydraulics	3
Apprenticeship Operating Engineers 034, Advanced Hydraulics	3
Apprenticeship Operating Engineers 035, Heavy Duty Repairer 5	3
Apprenticeship Operating Engineers 036, Disassembly and Assembly	3
TOTAL	18

Apprenticeship Operating Engineers- Heavy Equipment/Landscape Operator Engineer

The Associate of Science degree and Certificate of Achievement in Apprenticeship Operating Engineers Heavy Equipment/Landscape Operator Engineer provide 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.

Associate of Science Heavy Equipment/Landscape Operator Engineer (11983)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Operating Engineers 041, Introduction to Apprenticeship	3
Apprenticeship Operating Engineers 042, Grade Checking	3
Apprenticeship Operating Engineers 043, Equipment Operator 3	3
Apprenticeship Operating Engineers 044, Plan Reading	3
Apprenticeship Operating Engineers 045, Equipment Operator 5	3
Apprenticeship Operating Engineers 046, Hazmat 6	3
TOTAL	18

Certificate of Achievement Heavy Equipment/Landscape Operator Engineer (21655)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Operating Engineers 041, Introduction to Apprenticeship	3
Apprenticeship Operating Engineers 042, Grade Checking	3
Apprenticeship Operating Engineers 043, Equipment Operator 3	3
Apprenticeship Operating Engineers 044, Plan Reading	3
Apprenticeship Operating Engineers 045, Equipment Operator 5	3
Apprenticeship Operating Engineers 046, Hazmat 6	3
TOTAL	18



Apprenticeship Operating Engineers-Plant Equipment/Rock, Sand and Gravel

The Associate of Science degree and Certificate of Achievement in Apprenticeship Operating Engineers Plant Equipment/Rock, Sand and Gravel provide 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.

Associate of Science Plant Equipment/Rock, Sand and Gravel (17686)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Operating Engineers 021, Plant Equipment Operator 1	4
Apprenticeship Operating Engineers 022, Plant Equipment Operator 2	4
Apprenticeship Operating Engineers 023, Plant Equipment Operator 3	4
Apprenticeship Operating Engineers 024, Plant Equipment Operator 4	4
Apprenticeship Operating Engineers 025, Plant Equipment Operator 5	4
Apprenticeship Operating Engineers 026, Plant Equipment Operator 6	4
TOTAL	24

Certificate of Achievement Plant Equipment/Rock, Sand and Gravel (21656)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Operating Engineers 021, Plant Equipment Operator 1	4
Apprenticeship Operating Engineers 022, Plant Equipment Operator 2	4
Apprenticeship Operating Engineers 023, Plant Equipment Operator 3	4
Apprenticeship Operating Engineers 024, Plant Equipment Operator 4	4
Apprenticeship Operating Engineers 025, Plant Equipment Operator 5	4
Apprenticeship Operating Engineers 026, Plant Equipment Operator 6	4
TOTAL	24

Apprenticeship Operating Engineers-Special Inspector

The Associate of Science degree and Certificate of Achievement in Apprenticeship Operating Engineers Special Inspector provide 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.

Associate of Science Special Inspector (17688)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Operating Engineers 075A, Soils Inspection and Testing	4
Apprenticeship Operating Engineers 076A, Structural Plan Reading for Inspectors	4
Select four (4) courses from the following:	16
Apprenticeship Operating Engineers 071A, Reinforced Concrete (4)	
Apprenticeship Operating Engineers 072A, Prestressed Concrete (4)	
Apprenticeship Operating Engineers 073A, Structural Steel/Welding (4)	
Apprenticeship Operating Engineers 074A, Structural Masonry (4)	
Apprenticeship Operating Engineers 077A, ICC Soils Special Inspector (4)	
TOTAL	24

Certificate of Achievement Special Inspector (21665)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker operating engineer.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Operating Engineers 075A, Soils Inspection and Testing	4
Apprenticeship Operating Engineers 076A, Structural Plan Reading for Inspectors	4
Select four (4) courses from the following:	16
Apprenticeship Operating Engineers 071A, Reinforced Concrete (4)	
Apprenticeship Operating Engineers 072A, Prestressed Concrete (4)	
Apprenticeship Operating Engineers 073A, Structural Steel/Welding (4)	
Apprenticeship Operating Engineers 074A, Structural Masonry (4)	
Apprenticeship Operating Engineers 077A, ICC Soils Special Inspector (4)	
TOTAL	24

Courses

Apprenticeship Operating Engineers 011 Construction Safety Inspector Apprentice 1

Unit(s): 4.0

Class Hours: 48 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction required for operating engineer apprentices in CPR, first aid, safety and safety forms. Open Entry/Open Exit.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



**Apprenticeship Operating Engineers 012
Construction Safety Inspector Apprentice 2**

Unit(s): 4.0

Class Hours: 48 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction required for operating engineer apprentices in OSHA, Hazwoper, confined space, and lockout tagout procedures. Open Entry/Open Exit.

**Apprenticeship Operating Engineers 013
Construction Safety Inspector Apprentice 3**

Unit(s): 4.0

Class Hours: 48 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction required for operating engineer apprentices in asbestos, fall protection, heat stress and cold stress. Open Entry/Open Exit.

**Apprenticeship Operating Engineers 014
Construction Safety Inspector Apprentice 4**

Unit(s): 4.0

Class Hours: 48 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction required for operating engineer apprentices in respiratory competency training, trenching, shoring and excavation, crane regulations, wire rope and rigging, and man lift safety. Open Entry/Open Exit.

**Apprenticeship Operating Engineers 015
Construction Safety Inspector Apprentice 5**

Unit(s): 4.0

Class Hours: 48 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction required for operating engineer apprentices in the MSHA (Mine Safety and Health Administration), equipment safety inspection, and homeland security. Open Entry/Open Exit.

**Apprenticeship Operating Engineers 016
Construction Safety Inspector Apprentice 6**

Unit(s): 4.0

Class Hours: 48 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction for operating engineer apprentices in safety program protocol, emergency response protocol, and the duties and responsibilities of the safety inspector. Open Entry/Open Exit.

**Apprenticeship Operating Engineers 021
Plant Equipment Operator 1**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 021J
Plant Equipment Operator 1 - Journeyworker**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Active Union Member.

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. Grade: Pass/No Pass.

**Apprenticeship Operating Engineers 022
Plant Equipment Operator 2**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 022J
Plant Equipment Operator 2 - Journeyworker**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Active Union Member.

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. Grade: Pass/No Pass.

**Apprenticeship Operating Engineers 023
Plant Equipment Operator 3**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 023J
Plant Equipment Operator 3 - Journeyworker**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Active Union Member.

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. Grade: Pass/No Pass.

**Apprenticeship Operating Engineers 024
Plant Equipment Operator 4**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 024J
Plant Equipment Operator 4 - Journeyworker**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Active Union Member.

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. Grade: Pass/No Pass.



**Apprenticeship Operating Engineers 025
Plant Equipment Operator 5**

Unit(s): 4.0
Class Hours: 40 Lecture total, 72 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 025J
Plant Equipment Operator 5 - Journeyworker**

Unit(s): 4.0
Class Hours: 40 Lecture total, 72 Laboratory total.
Prerequisite: Active Union Member.
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. Grade: Pass/No Pass.

**Apprenticeship Operating Engineers 026
Plant Equipment Operator 6**

Unit(s): 4.0
Class Hours: 40 Lecture total, 72 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 026J
Plant Equipment Operator 6 - Journeyworker**

Unit(s): 4.0
Class Hours: 40 Lecture total, 72 Laboratory total.
Prerequisite: Active Union Member.
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. Grade: Pass/No Pass.

**Apprenticeship Operating Engineers 031
Heavy Duty Repairer 1**

Unit(s): 3.0
Class Hours: 36 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 032
Heavy Duty Repairer 2**

Unit(s): 3.0
Class Hours: 36 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 033
Hydraulics**

Unit(s): 3.0
Class Hours: 36 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 034
Advanced Hydraulics**

Unit(s): 3.0
Class Hours: 36 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 035
Heavy Duty Repairer 5**

Unit(s): 3.0
Class Hours: 36 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 036
Disassembly and Assembly**

Unit(s): 3.0
Class Hours: 36 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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.

**Apprenticeship Operating Engineers 041
Introduction to Apprenticeship**

Unit(s): 4.0
Class Hours: 52 Lecture total, 52 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers trade. Covers basic safety procedures when working around heavy equipment; proper attitudes and ethics; procedures for setting a stringline; work practices for cranes; proper maintenance procedures on heavy equipment; history of organized labor; inner workings and benefits of being a member of a local union. Open Entry/Open Exit.



Apprenticeship Operating Engineers 042 Grade Checking

Unit(s): 4.0

Class Hours: 52 Lecture total, 52 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers field. Covers information found on typical grading stakes; using colored ribbons 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; basic GPS set-up. Open Entry/Open Exit.

Apprenticeship Operating Engineers 043 Equipment Operator 3

Unit(s): 4.0

Class Hours: 52 Lecture total, 52 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers field. Covers preventive maintenance and operation of heavy equipment. Open Entry/Open Exit.

Apprenticeship Operating Engineers 044 Plan Reading

Unit(s): 4.0

Class Hours: 52 Lecture total, 52 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineers field. Covers reading and interpreting grading plans for highways, streets and subdivisions. Open Entry/Open Exit.

Apprenticeship Operating Engineers 045 Equipment Operator 5

Unit(s): 4.0

Class Hours: 52 Lecture total, 52 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction for state-indentured apprentices employed full-time in the operating engineer field. Covers preventive maintenance and operation of heavy equipment. Open Entry/Open Exit.

Apprenticeship Operating Engineers 046 Hazmat 6

Unit(s): 4.0

Class Hours: 52 Lecture total, 52 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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, OSHA safety topics. Apprentices successfully completing this course will receive three certifications: HAZWOPER, Red Cross First Aid/CPR and Occupational Safety and Health Administration (OSHA). Open Entry/Open Exit.

Apprenticeship Operating Engineers 047 Operating Engineers Hazmat 40

Unit(s): 2.0

Class Hours: 28 Lecture total, 12 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Safety regulations, safe work practices for hazardous waste site operations as specified by 29th code of Federal Regulations, 1910.120 as approved by National Institute of Environmental Safety and Health for the International Union of Operating Engineers, for required certification. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Operating Engineers 048 Disaster Site Worker

Unit(s): 0.5

Class Hours: 8 Lecture total, 4 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Recognizing safety hazards, health hazards, chemical, biological, radiological and nuclear defense (CBRNE) agents. Management techniques of traumatic incident stress awareness. Proper respiratory protection, personal protective equipment, decontamination procedure. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Operating Engineers 054 Tower Crane

Unit(s): 1.0

Class Hours: 16 Lecture total, 16 Laboratory total.

Prerequisite: Must be a state-indentured apprentice or journeyworker.

Provides instruction and training for operating engineers in tower cranes. Covers terminology, basic principles, regulatory agencies, and safety involved with tower crane operation. Grade: Pass/No Pass. Open Entry/Open Exit.

Apprenticeship Operating Engineers 061 Concrete Transportation Construction Inspector

Unit(s): 4.0

Class Hours: 40 Lecture total, 74 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Operating Engineers 062 Asphalt Inspection

Unit(s): 4.0

Class Hours: 40 Lecture total, 74 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

Apprenticeship Operating Engineers 063A ACI Laboratory Testing Technician I

Unit(s): 4.0

Class Hours: 40 Lecture total, 74 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the required related and supplemental instruction for operating engineer apprentices in laboratory testing on aggregates used for structural concrete. Open Entry/Open Exit.

Apprenticeship Operating Engineers 064A ACI Laboratory Testing Technician II

Unit(s): 4.0

Class Hours: 40 Lecture total, 74 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the required related and supplemental instruction for operating engineer apprentices in design parameters for batching structural concrete. Open Entry/Open Exit.



**Apprenticeship Operating Engineers 071A
Reinforced Concrete**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 072A
Prestressed Concrete**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 073A
Structural Steel/Welding**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 074A
Structural Masonry**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 075A
Soils Inspection and Testing**

Unit(s): 4.0

Class Hours: 40 Lecture total, 74 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 076A
Structural Plan Reading for Inspectors**

Unit(s): 4.0

Class Hours: 40 Lecture total, 74 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 077A
ICC Soils Special Inspector**

Unit(s): 4.0

Class Hours: 40 Lecture total, 72 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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.

**Apprenticeship Operating Engineers 079
Certified Welding Inspector**

Unit(s): 3.0

Class Hours: 36 Lecture total, 36 Laboratory total.

Prerequisite: Must be a state-indentured apprentice or journeyworker.

Provides the 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.

**Apprenticeship Operating Engineers 080
Structural Concrete Plan Reading**

Unit(s): 3.0

Class Hours: 36 Lecture total, 36 Laboratory total.

Prerequisite: Must be a state-indentured apprentice or journeyworker.

Provides instruction for operating engineers in the design and engineering requirements of structural buildings and the fundamentals of structural concrete. Open Entry/Open Exit.

**Apprenticeship Operating Engineers 081
Structural Reinforced Concrete for Inspectors**

Unit(s): 3.0

Class Hours: 36 Lecture total, 36 Laboratory total.

Prerequisite: Must be a state-indentured apprentice or journeyworker.

Provides instruction for operating engineers in reinforced concrete inspection, structural plans and structural code. Prepares students for the 3 1/2 hour International Code Council reinforced concrete certification exams. Open Entry/Open Exit.



APPRENTICESHIP POWER LINEMAN (APL)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship-Power Lineman

The Associate of Science degree and Certificate of Achievement in Apprenticeship for Power Lineman provide 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.

Associate of Science Power Lineman (11981)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker power lineman.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Power Lineman 020, Orientation	3
Apprenticeship Power Lineman 021, Power Lineman Apprentice 1	3
Apprenticeship Power Lineman 022, Power Lineman Apprentice 2	3
Apprenticeship Power Lineman 023, Power Lineman Apprentice 3	3
Apprenticeship Power Lineman 024, Power Lineman Apprentice 4	3
Apprenticeship Power Lineman 025, Power Lineman Apprentice 5	3
Apprenticeship Power Lineman 026, Power Lineman Apprentice 6	3
Apprenticeship Power Lineman 041, Work Methods Training	1
Apprenticeship Power Lineman 042, Rubber Gloves Training	1
Apprenticeship Power Lineman 043, Hot Sticks Training	1
TOTAL	24

Certificate of Achievement Power Lineman (21652)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker power lineman.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Power Lineman 020, Orientation	3
Apprenticeship Power Lineman 021, Power Lineman Apprentice 1	3
Apprenticeship Power Lineman 022, Power Lineman Apprentice 2	3
Apprenticeship Power Lineman 023, Power Lineman Apprentice 3	3
Apprenticeship Power Lineman 024, Power Lineman Apprentice 4	3
Apprenticeship Power Lineman 025, Power Lineman Apprentice 5	3
Apprenticeship Power Lineman 026, Power Lineman Apprentice 6	3
Apprenticeship Power Lineman 041, Work Methods Training	1
Apprenticeship Power Lineman 042, Rubber Gloves Training	1
Apprenticeship Power Lineman 043, Hot Sticks Training	1
TOTAL	24

Courses

Apprenticeship Power Lineman 020

Orientation

Unit(s): 3.0

Class Hours: 32 Lecture total, 56 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides related and supplemental instruction required for entry-level apprentice power linemen. Grade: Pass/No Pass.

Apprenticeship Power Lineman 021

Power Lineman Apprentice 1

Unit(s): 3.0

Class Hours: 32 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

Apprenticeship Power Lineman 022

Power Lineman Apprentice 2

Unit(s): 3.0

Class Hours: 32 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the related and supplemental instruction in the theory, math, construction methods, and safety required for the second-level power lineman apprentice. Grade: Pass/No Pass.

Apprenticeship Power Lineman 023

Power Lineman Apprentice 3

Unit(s): 3.0

Class Hours: 32 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

Apprenticeship Power Lineman 024

Power Lineman Apprentice 4

Unit(s): 3.0

Class Hours: 32 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

Apprenticeship Power Lineman 025

Power Lineman Apprentice 5

Unit(s): 3.0

Class Hours: 32 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

Apprenticeship Power Lineman 026

Power Lineman Apprentice 6

Unit(s): 3.0

Class Hours: 32 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.



**Apprenticeship Power Lineman 041
Work Methods Training**

Unit(s): 1.0

Class Hours: 8 Lecture total, 32 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

**Apprenticeship Power Lineman 042
Rubber Gloves Training**

Unit(s): 1.0

Class Hours: 8 Lecture total, 32 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the required related and supplemental instruction for apprentice power linemen in tools, accident prevention rules, rubber glove guidelines and rules. Grade: Pass/No Pass.

**Apprenticeship Power Lineman 043
Hot Sticks Training**

Unit(s): 1.0

Class Hours: 8 Lecture total, 32 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

Provides the required related and supplemental instruction for apprentice power linemen in history, development, manufacture and care of hot line tools. Grade: Pass/No Pass.

APPRENTICESHIP SURVEYING (ASV)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Apprenticeship Surveying-Chainman

The Associate of Science degree and Certificate of Achievement in Apprenticeship Surveying Chainman prepare students for a career in surveying and provide 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.

**Associate of Science
Chainman (13230)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker chainman surveyor.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Surveying 030, Labor Relations	0.5
Apprenticeship Surveying 040, Standard First Aid	0.1
Apprenticeship Surveying 101, Chainman Apprentice 1	5
Apprenticeship Surveying 102, Chainman Apprentice 2	5
Apprenticeship Surveying 103, Chainman Apprentice 3	5
Apprenticeship Surveying 104, Chainman Apprentice 4	5
Apprenticeship Surveying 105, Chainman Apprentice 5	5
TOTAL	25.6

**Certificate of Achievement
Chainman (21667)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker chainman surveyor.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Surveying 030, Labor Relations	0.5
Apprenticeship Surveying 040, Standard First Aid	0.1
Apprenticeship Surveying 101, Chainman Apprentice 1	5
Apprenticeship Surveying 102, Chainman Apprentice 2	5
Apprenticeship Surveying 103, Chainman Apprentice 3	5
Apprenticeship Surveying 104, Chainman Apprentice 4	5
Apprenticeship Surveying 105, Chainman Apprentice 5	5
TOTAL	25.6

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Apprenticeship Surveying-Chief of Party

The Associate of Science degree and Certificate of Achievement in Apprenticeship Surveying Chief of Party prepare 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.

Associate of Science Chief of Party (11990)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Begin a career as a journeyworker party chief surveyor.
- Have a basis for further college education.

Major requirements*	Units
Apprenticeship Surveying 121, Plane Surveying and Coordinate Geometry	3
Apprenticeship Surveying 122, Advanced Coordinate Geometry	3
Apprenticeship Surveying 123, Laptop Surveying/Aerial Photogrammetry	3
Apprenticeship Surveying 124, Plan Reading and Subdivision Surveying	3
Apprenticeship Surveying 125, Major Project Plans and Survey Layout	3
Apprenticeship Surveying 126, Control and Geodetic Surveying	3
Apprenticeship Surveying 127, U.S. Public Land Surveys	3
Apprenticeship Surveying 128, Property Surveys and Legal Descriptions	3
TOTAL	24

Certificate of Achievement Chief of Party (21666)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Begin a career as a journeyworker party chief surveyor.
- Have a basis for further college education.

Certificate requirements	Units
Apprenticeship Surveying 121, Plane Surveying and Coordinate Geometry	3
Apprenticeship Surveying 122, Advanced Coordinate Geometry	3
Apprenticeship Surveying 123, Laptop Surveying/Aerial Photogrammetry	3
Apprenticeship Surveying 124, Plan Reading and Subdivision Surveying	3
Apprenticeship Surveying 125, Major Project Plans and Survey Layout	3
Apprenticeship Surveying 126, Control and Geodetic Surveying	3
Apprenticeship Surveying 127, U.S. Public Land Surveys	3
Apprenticeship Surveying 128, Property Surveys and Legal Descriptions	3
TOTAL	24

Courses

Apprenticeship Surveying 030 Labor Relations

Unit(s): 0.5

Class Hours: 12 Lecture total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

Apprenticeship Surveying 031 Supplemental Math for Chainman Apprentices

Unit(s): 1.0

Class Hours: 18 Lecture total.

Prerequisite: Must be a state-indentured apprentice.

Review of basic mathematics, algebra and geometry related to surveying; review angles, azimuths, and bearings; stationing and offsets. Grade: Pass/No Pass.

Apprenticeship Surveying 040 Standard First Aid

Unit(s): 0.1

Class Hours: 6 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. Grade: Pass/No Pass.

Apprenticeship Surveying 101 Chainman Apprentice 1

Unit(s): 5.0

Class Hours: 66 Lecture total, 48 Laboratory total.

Prerequisite: Must be a state-indentured apprentice.

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. **CSU**



**Apprenticeship Surveying 102
Chainman Apprentice 2**

Unit(s): 5.0
Class Hours: 72 Lecture total, 36 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 103
Chainman Apprentice 3**

Unit(s): 5.0
Class Hours: 69 Lecture total, 30 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 104
Chainman Apprentice 4**

Unit(s): 5.0
Class Hours: 72 Lecture total, 30 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
Provides the required related and supplemental instruction for apprentice surveyors in coordinate geometry; horizontal and vertical curves; traverse surveys. Open Entry/Open Exit. **CSU**

**Apprenticeship Surveying 105
Chainman Apprentice 5**

Unit(s): 5.0
Class Hours: 72 Lecture total, 18 Laboratory total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 121
Plane Surveying and Coordinate Geometry**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 122
Advanced Coordinate Geometry**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 123
Laptop Surveying/Aerial Photogrammetry**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
Advanced field surveying methods and principles involving laptop surveying, photogrammetry, and topographic surveying. Open Entry/Open Exit. **CSU**

**Apprenticeship Surveying 124
Plan Reading and Subdivision Surveying**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 125
Major Project Plans and Survey Layout**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
Basic principles of construction plan reading, survey control, major project layout. Interpreting construction and survey plans of reinforced concrete multi-story buildings. In-depth analysis of structural/architectural plans. Plans/survey layout for major construction projects. Open Entry/Open Exit. **CSU**

**Apprenticeship Surveying 126
Control and Geodetic Surveying**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**

**Apprenticeship Surveying 127
U.S. Public Land Surveys**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
A study of the principles, procedures and methods of performing U.S. public land surveys. Subdivision of townships and sections. Retracement of original surveys and restoration of corners. Reading and interpreting property descriptions. Open Entry/Open Exit. **CSU**

**Apprenticeship Surveying 128
Property Surveys and Legal Descriptions**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: Must be a state-indentured apprentice.
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. **CSU**



ART (ART)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Fine Arts: Robert Miller

Associate in Arts

Studio Arts for Transfer (31715)

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 the California State University system to pursue a baccalaureate degree in studio arts or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate critical analysis of works of art in historical and cultural context.
- Demonstrate the ability to create works of art using a variety of materials and techniques, visual elements and principles of design.

Major requirements*

	Units
Art 101/101H, Survey of Western Art History I: Prehistory Through the Middle Ages	3
Art 102/102H, Survey of Western Art History II: Renaissance Through the Twentieth Century	3
Art 110, Two-Dimensional Design	3
Art 111, Three-Dimensional Design	3
Art 130, Introduction to Drawing	3
Art 141, Beginning Painting	3
Select two (2) courses from the following (List B):	6
Art 128, Introduction to Illustration (3)	
Art 131, Beginning Life Drawing (3)	
Art 149, Introduction to Digital Photography (3)	
Art 195, Introduction to Digital Media Arts (3)	
Art 230, Intermediate Drawing (3)	
Art 231, Intermediate Life Drawing (3)	
Art 232, Advanced Life Drawing (3)	
Art 233, Advanced Drawing (3)	
Art 241, Intermediate Painting (3)	
Art 242, Advanced Painting (3)	
TOTAL	24

Associate of Arts Art (11911)

The Associate of Arts degree in Art provides students with an opportunity for individual creative stimulus and development. Completion of the associate of 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Art 100/100H, Introduction to Art Concepts	3
Art 101/101H, Survey of Western Art History I: Prehistory Through the Middle Ages	3
Art 102/102H, Survey of Western Art History II: Renaissance Through the Twentieth Century	3
Art 110, Two-Dimensional Design	3
Art 111, Three-Dimensional Design	3
Art 130, Introduction to Drawing	3
Art 131, Beginning Life Drawing	3
Art 141, Beginning Painting	3
Select six (6) units from the following:	6
Art 128, Introduction to Illustration (3)	
Art 149, Introduction to Digital Photography (3)	
Art 159, Introduction to Mobile Application Development and Design (3)	
Art 195, Introduction to Digital Media Arts (3)	
Art 228, Intermediate Illustration (3)	
Art 230, Intermediate Drawing (3)	
Art 231, Intermediate Life Drawing (3)	
Art 232, Advanced Life Drawing (3)	
Art 233, Advanced Drawing (3)	
Art 241, Intermediate Painting (3)	
Art 242, Advanced Painting (3)	
Art 249, Intermediate Digital Photography (3)	
Art 250, Advanced Studio Concepts (3)	
Art 259, Advanced Mobile Application Development and Design (3)	
TOTAL	30

Associate of Science Graphic Design (11921)

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.



Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Art 100/100H, Introduction to Art Concepts	3
Art 110, Two-Dimensional Design	3
Art 111, Three-Dimensional Design	3
Art 122, Graphic Design I	3
Art 129, Introduction to Web Design	3
Art 130, Introduction to Drawing	3
Art 131, Beginning Life Drawing	3
Art 195, Introduction to Digital Media Arts	3
Marketing 112, Principles of Advertising	3

Select one (1) course from the following:

Art 101/101H, Survey of Western Art History I: Prehistory Through the Middle Ages (3)	3
Art 102/102H, Survey of Western Art History II: Renaissance Through the Twentieth Century (3)	3
Art 128, Introduction to Illustration (3)	3
Art 149, Introduction to Digital Photography (3)	3
Art 159, Introduction to Mobile Application Development and Design (3)	3
Art 221, Graphic Design II (3)	3
Art 228, Intermediate Illustration (3)	3
Art 229, Multimedia Applications for the Web (3)	3
Art 230, Intermediate Drawing (3)	3
Art 231, Intermediate Life Drawing (3)	3
Art 232, Advanced Life Drawing (3)	3
Art 233, Advanced Drawing (3)	3
Art 241, Intermediate Painting (3)	3
Art 242, Advanced Painting (3)	3
Art 249, Intermediate Digital Photography (3)	3
Art 250, Advanced Studio Concepts (3)	3
Art 259, Advanced Mobile Application Development and Design (3)	3
Computer Science 105, Visual BASIC Programming (3)	3
TOTAL	30

Digital Media Arts Certificates

The certificate programs in Digital Media Arts reflect the industry standard in the field of advertising/graphic design for printed media, mobile devices, the web, and digital imaging. The programs are 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 these programs 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.

**Certificate of Achievement
Digital Media Arts: Graphic Design (21670)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate the ability to create graphic design images using visual elements and principles of design.
- Demonstrate the use of a variety of digital media tools and techniques to create graphic design images.

Certificate requirements

	Units
Art 100/100H, Introduction to Art Concepts	3
Art 110, Two-Dimensional Design	3
Art 122, Graphic Design I	3
Art 129, Introduction to Web Design	3
Art 130, Introduction to Drawing	3
Art 195, Introduction to Digital Media Arts	3

Select one (1) course from the following:

Art 101/101H, Survey of Western Art History I: Prehistory Through the Middle Ages (3)	3
Art 111, Three-Dimensional Design (3)	3
Art 128, Introduction to Illustration (3)	3
Art 131, Beginning Life Drawing (3)	3
Art 141, Beginning Painting (3)	3
Art 149, Introduction to Digital Photography (3)	3
Art 221, Graphic Design II (3)	3
Art 228, Intermediate Illustration (3)	3
Art 230, Intermediate Drawing (3)	3
Art 231, Intermediate Life Drawing (3)	3
Art 232, Advanced Life Drawing (3)	3
Art 250, Advanced Studio Concepts (3)	3
Computer Science 105, Visual BASIC Programming (3)	3
Marketing 112, Principles of Advertising (3)	3
TOTAL	21

**Certificate of Achievement
Digital Media Arts: Mobile Application Development and Design (35016)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements

	Units
Art 159, Introduction to Mobile Application Development and Design	3
Computer Information Systems 159, Introduction to iOS/iPhone Mobile App Development	3

If emphasis is Digital Media Art and Design, select courses from List A. If emphasis is Programming, select courses from List B.

Select four (4) courses from List A (Digital Media Art and Design): 12

Art 122, Graphic Design I (3)	3
Art 129, Introduction to Web Design (3)	3
Art 149, Introduction to Digital Photography (3)	3
Art 195, Introduction to Digital Media Arts (3)	3
Art 221, Graphic Design II (3)	3
Art 229, Multimedia Applications for the Web (3)	3
Art 259, Advanced Mobile Application Development and Design (3)	3

Select four (4) courses from List B (Programming): 12

Computer Information Systems 259, Advanced iOS/iPhone Mobile App Development (3)	3
Computer Science 112, Java Programming (3)	3
Computer Science 120, Introduction to Programming (3)	3
Computer Science 213, C# Programming (3)	3
Marketing 112, Principles of Advertising (3)	3
TOTAL	18

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Courses

Art 100

Introduction to Art Concepts

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID ARTH 100)**

Art 100H

Honors Introduction to Art Concepts

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID ARTH 100)**

Art 101

Survey of Western Art History I: Prehistory Through the Middle Ages

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H or concurrent enrollment.

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. **CSU/UC (C-ID ARTH 110)** 1/13/2020

Art 101H

Honors Survey of Western Art History I: Prehistory Through the Middle Ages

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H or concurrent enrollment.

Prerequisite: A high school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID ARTH 110)** 1/13/2020

Art 102

Survey of Western Art History II: Renaissance Through the Twentieth Century

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H.

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. **CSU/UC** 1/13/2020

Art 102H

Honors Survey of Western Art History II: Renaissance Through the Twentieth Century

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H

Prerequisite: A high school or college GPA of 3.0 or above.

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. **CSU/UC** 1/13/2020

Art 110

Two-Dimensional Design

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

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. **CSU/UC (C-ID ARTS 100)** 1/13/2020

Art 111

Three-Dimensional Design

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

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. **CSU/UC (C-ID ARTS 101)** 1/13/2020

Art 122

Graphic Design I

Unit(s): 3.0

Class Hours: 36 Lecture total, 64 Laboratory total.

Recommended Preparation: Art 110 or 195 or an understanding of Photoshop and Illustrator software.

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. **CSU**

Art 128

Introduction to Illustration

Unit(s): 3.0

Class Hours: 36 Lecture total, 64 Laboratory total.

Prerequisite: Art 130.

An introductory course to book illustration, concept art, animation, descriptive rendering, editorial illustration and fashion drawing. Focus is on developing technical and conceptual expertise. Course examines master works by contemporary and historic artists. **CSU**

Art 129

Introduction to Web Design

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

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. **CSU**



Art 130

Introduction to Drawing

Unit(s): 3.0

Class Hours: 36 Lecture total, 64 Laboratory total.

Introductory course in expressive drawing, exploring line, form, composition, and a variety of media. Drawing from man-made objects and natural forms. Required for art majors. **CSU/UC (C-ID ARTS 110)**

Art 131

Beginning Life Drawing

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Recommended Preparation: Art 130.

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. **CSU/UC (C-ID ARTS 200)**

1/13/2020

Art 141

Beginning Painting

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Recommended Preparation: Art 110 and 130.

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. **CSU/UC (C-ID ARTS 210)**

1/13/2020

Art 149

Introduction to Digital Photography

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

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. **CSU/UC**

Art 159

Introduction to Mobile Application Development and Design

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Introduction to the development of mobile applications for smart phones 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. **CSU**

Art 195

Introduction to Digital Media Arts

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

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. **CSU/UC (C-ID ARTS 250)**

Art 221

Graphic Design II

Unit(s): 3.0

Class Hours: 36 Lecture total, 64 Laboratory total.

Prerequisite: Art 122.

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. **CSU**

Art 228

Intermediate Illustration

Unit(s): 3.0

Class Hours: 36 Lecture total, 64 Laboratory total.

Prerequisite: Art 128.

Further development of conceptual and technical expertise in book illustration, concept art, animation, descriptive rendering, editorial illustration and fashion drawing. Course examines master works by contemporary and historic artists. Emphasis on developing individual creative style. **CSU**

Art 229

Multimedia Applications for the Web

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Prerequisite: Art 129.

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. **CSU**

Art 230

Intermediate Drawing

Unit(s): 3.0

Class Hours: 36 Lecture total, 64 Laboratory total.

Prerequisite: Art 130.

Continued study in drawing with additional opportunities in graphic expression. Further exploration of media, including colored pencils, oil pastel, charcoal, ink, and mixed media. Continuation of composition concepts with emphasis on individual expression. Field trip for en plein air style of drawing may be required. **CSU/UC (C-ID ARTS 205)**

Art 231

Intermediate Life Drawing

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Prerequisite: Art 131.

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. **CSU/UC**

1/13/2020

Art 232

Advanced Life Drawing

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Prerequisite: Art 231.

Intensive study of the figure with further development of drawing skills, composition, technique and media utilizing the live model. Projects vary each semester. **CSU/UC**

1/13/2020

**Art 233****Advanced Drawing**

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Prerequisite: Art 230 **or portfolio review.**

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. **CSU/UC**

1/13/2020

Art 241**Intermediate Painting**

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Prerequisite: Art 141.

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. **CSU/UC**

1/13/2020

Art 242**Advanced Painting**

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

Prerequisite: Art 241.

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. **CSU/UC**

1/13/2020

Art 249**Intermediate Digital Photography**

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Prerequisite: Art 149.

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. **CSU**

Art 250**Advanced Studio Concepts**

Unit(s): 3.0

Class Hours: 36 Lecture total, 72 Laboratory total.

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. **CSU**

1/13/2020

Art 259**Advanced Mobile Application Development and Design**

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Prerequisite: Art 159.

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. **CSU**

ASTRONOMY (ASTR)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Co-Chairs, Astronomy: Danielle Martino

Faculty: Morrie Barembaum, Danielle Martino

Associate of Science**Astronomy (33223)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Major requirements***Units**

Astronomy 100L, Astronomy Laboratory	1
Astronomy 102, Introduction to Stars and Galaxies	3
OR Astronomy 103, Introduction to the Solar System	3
OR Astronomy 112, Introduction to Cosmology	3
Computer Science 120, Introduction to Programming	3
Physics 250A, Physics for Scientists and Engineers I	5
Physics 250B, Physics for Scientists and Engineers II	5
Physics 250C, Physics for Scientists and Engineers III	5
TOTAL	25

Some colleges, including San Diego State University, also recommend taking Chemistry 209.

Courses**Astronomy 100L****Astronomy Laboratory**

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Astronomy 102 or 103 or 112 or concurrent enrollment.

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. **CSU/UC**

Astronomy 102**Introduction to Stars and Galaxies**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Astronomy 103**Introduction to the Solar System**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**



**Astronomy 112
Introduction to Cosmology**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Concurrent enrollment in Astronomy 140.

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. *CSU/UC*

BIOLOGY (BIOL)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Co-Chairs, Life Science:

Denise Foley, Mark Smith

Faculty: Navanjot Batth, Denise Foley, Kimberly Johnson, Anson Lui, Sandra Sanchez, Mark Smith, Michael Taylor

**Associate of Science
Biology (11856)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of the basic theories of biology.
- Demonstrate a knowledge of and an ability to apply and effectively communicate the scientific method.

Major requirements*	Units
Biology 211, Cellular and Molecular Biology	5
OR Biology 212, Animal Diversity and Ecology	
Biology 221, Animal Diversity and Evolution	5
OR Biology 214, Plant Diversity and Evolution	
Biology 231, Plant Diversity and Ecology	5
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
1/13/20	TOTAL 25

**Associate in Science
Biology for Transfer (35110)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of the basic theories of biology.
- Demonstrate a knowledge of and an ability to apply and effectively communicate the scientific method.

Major requirements*	Units
Biology 211, Cellular and Molecular Biology	5
Biology 221, Animal Diversity and Evolution	5
Biology 231, Plant Diversity and Ecology	5
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
Mathematics 180/180H, Single Variable Calculus I	4
Physics 150A, Introductory Physics I	4
Physics 150B, Introductory Physics II	4
TOTAL	37

NOTE: Only the CSU GE Breadth for STEM or IGETC for STEM patterns will be accepted towards the completion of the general education portion of this degree. Unlike other Associate Degrees for Transfer, traditional CSU GE Breadth (Plan B) and traditional IGETC for the UC and CSU (Plan C) will not be accepted.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Associate of Science Biotechnology (32599)

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 will transfer to the Biomanufacturing B.S. degree at Mira Costa or Solano Community Colleges. 1/13/20

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. 1/13/20

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Biology 190, Introduction to Biotechnology	3
Biology 190L, Introduction to Biotechnology Lab	1
Biology 191, Biotechnology A: Basic Lab Skills	4
Biology 192, Biotechnology B: Proteins	4
Biology 193, Biotechnology C: Nucleic Acids	4
Biology 194, Quality and Regulatory Compliance in Biosciences	2
Biology 202, Cell Culture Techniques	2
OR Biology 211, Cellular and Molecular Biology (5)	5
OR Biology 229, General Microbiology(5)	5
Chemistry 200A/200AH, General Chemistry A	5
OR Mathematics 219/219H, Statistics and Probability (4)	4
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
TOTAL	31 34

*If planning to transfer to the Biomanufacturing B.S. programs, students must take BIOL 211 instead of BIOL 229. 1/13/20

Certificate of Achievement Biotechnology Biomanufacturing Technician (32598)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Biology 190, Introduction to Biotechnology	3
Biology 190L, Introduction to Biotechnology Lab	1
Biology 191, Biotechnology A: Basic Lab Skills	4
Biology 192, Biotechnology B: Proteins	4
Biology 194, Quality and Regulatory Compliance in Biosciences	2
Chemistry 200A/200AH, General Chemistry A	5
TOTAL	19

Certificate of Achievement Biotechnology Laboratory Technician: Food Safety (32648)

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, biomanufacturing technicians, or research and development technicians. 1/13/20

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. 1/13/20

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate an understanding of and follow workplace safety guidelines.
- Demonstrate proficiency in following standard operating procedures (SOPs) as it pertains to food safety.
- Properly maintain a laboratory notebook.
- Understand and correctly operate laboratory equipment. 1/13/20
- Demonstrate an understanding of and follow workplace safety guidelines. 100
- Demonstrate proficiency operating within a regulated environment as it pertains to food safety. 1/13/20

Certificate requirements	Units
Biology 190, Introduction to Biotechnology	3
Biology 190L, Introduction to Biotechnology Lab	1
Biology 191, Biotechnology A: Basic Lab Skills	4
Biology 192, Biotechnology B: Proteins	4
Biology 193, Biotechnology C: Nucleic Acids	4
Biology 194, Quality and Regulatory Compliance in Biosciences	2
Biology 196, Food Safety and Microbiology	2
Biology 202, Cell Culture Techniques	2
Biology 211, Cellular and Molecular Biology	5
Chemistry 200A/200AH, General Chemistry A	5

Select a minimum of five (5) units from the following: 5-9

- OR Biology 139, Health Microbiology (4)
- OR Biology 229, General Microbiology (5)
- ~~Biology 197, Science, Technology, Engineering & Mathematics (STEM) Internship (1-4)~~

1/13/20 **TOTAL 10-11**



**Certificate of Achievement
General Biotechnology Technician (32602)**

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

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Biology 191, Biotechnology A: Basic Lab Skills	4
Biology 192, Biotechnology B: Proteins	4
Biology 193, Biotechnology C: Nucleic Acids	4
Biology 194, Quality and Regulatory Compliance in Biosciences	2
Biology 202, Cell Culture Techniques	2
Biology 190, Introduction to Biotechnology	3
OR AND Biology 190L, Introduction to Biotechnology Lab	1
Biology 211, Cellular and Molecular Biology	5
Chemistry 200A/200AH, General Chemistry A	5
Select a minimum of seven (7) units from the following: 7-10	
OR Biology 139, Health Microbiology (4)	
OR Biology 229, General Microbiology (5)	
Biology 177, Human Genetics (3)	
Biology 197, Science, Technology, Engineering & Mathematics (STEM) Internship (1-4)	
Biology 290, Biochemistry and Molecular Biology (5)	
Chemistry 200B, General Chemistry B (5)	
1/13/20	TOTAL 32-35 31

**Certificate of Proficiency Achievement
Biotechnology Lab Assistant** 1/13/20

~~The Certificate of Proficiency 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.~~ 1/13/20

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. 1/13/20

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Develop knowledge necessary to select and develop Science, Technology, Engineering & Mathematics (STEM) careers.

Certificate requirements	Units
Biology 191, Biotechnology A: Basic Lab Skills	4
OR AND Biology 190, Introduction to Biotechnology	3
Biology 190L, Introduction to Biotechnology Lab	1
Biology 211, Cellular and Molecular Biology	5
Chemistry 100, Introductory Chemistry	4
1/13/20	TOTAL 12 12-13

Courses

**Biology 097
Introduction to Work Experience**

Unit(s): 0.5-3.0

Class Hours: 30-180 Laboratory total.

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. May be repeated. Grade: Pass/No Pass. Open Entry/Open Exit.

**Biology 109
Fundamentals of Biology**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Concurrent enrollment in Biology 109L.

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. **CSU/UC**

**Biology 109H
Honors Fundamentals of Biology**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above

Recommended Preparation: Concurrent enrollment in Biology 109L/109HL.

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. **CSU/UC**

**Biology 109HL
Honors Fundamentals of Biology Laboratory**

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Biology 109/109H or concurrent enrollment and a high school or college GPA of 3.0 or above.

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. **CSU/UC**

**Biology 109L
Fundamentals of Biology Laboratory**

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Biology 109/109H or concurrent enrollment.

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. **CSU/UC**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Biology 115 Concepts in Biology for Educators

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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. **CSU/UC**

Biology 139 Health Microbiology

Unit(s): 4.0

Class Hours: 54 Lecture total, 64 Laboratory total.

Recommended Preparation: Biology 109 or 149.

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. **CSU/UC**

Biology 149 Human Anatomy and Physiology

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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. **CSU/UC**

Biology 177 Human Genetics

Unit(s): 3.0

Class Hours: 54 Lecture total.

~~Introductory course in genetics. Topics include the principles of Mendelian genetics, mechanisms of mitosis and meiosis, process of transcription, translation and protein synthesis, non-Mendelian patterns of inheritance, the cell cycle, and cell structure. Discussions relevant to current social concerns about genetics covering topics such as cloning, DNA profiling, genetic engineering, prenatal diagnosis, gene therapy, and genomics. CSU/UC~~ 1/13/2020

Biology 190 Introduction to Biotechnology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Mathematics 080 or 085.

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. **CSU/UC** 1/13/2020

Biology 190L Introduction to Biotechnology Lab

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Corequisite: Biology 190.

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. **CSU/UC**

Biology 191 Biotech A: Basic Lab Skills

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Recommended Preparation: Mathematics 080 or 085.

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. **CSU** 1/13/2020

Biology 192 Biotech B: Proteins

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Biology 191.

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. **CSU**

Biology 193 Biotech C: Nucleic Acids

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Biology 191.

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. **CSU**



Biology 194

Quality and Regulatory Compliance in Biosciences

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. **CSU**

Biology 196

Food Safety and Microbiology

Unit(s): 2.0

Class Hours: 36 Lecture total.

Prerequisite: Biology 139 or 229.

Recommended Preparation: Biology 139 or 229 and 194.

This course covers the regulatory agencies that oversee and the methodologies prescribed to ensure a safe food supply. The Food Safety Modernization Act, hazard analysis critical control points (HACCP), product traceability, food allergens, and food contaminants including microorganisms are presented. Discussion of illnesses known to result from ingestion of contaminated foods occurs. Laboratory exercises stress aseptic technique, microscopy, and identification of microbial contaminants in foods using media, PCR, and immunological methods. **CSU**

1/13/2020

Biology 197

Science, Technology, Engineering and Mathematics (STEM) Internship

Unit(s): 1.0-4.0

Class Hours: 60-240 Laboratory total.

Prerequisite: Successful completion of 10 units within the Biotechnology Program.

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. May be repeated. Grade: Pass/No Pass. Open Entry/Open Exit. **CSU**

Biology 200

Environment of Man

Unit(s): 3.0

Class Hours: 54 Lecture total.

A biological and physical science introduction to environmental problems such as energy, resources, pollution, land use, population and food, including economic and political factors. A natural science elective. **CSU/UC**

1/13/2020

Biology 202

Cell Culture Techniques

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Biology 191.

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. **CSU**

Biology 211

Cellular and Molecular Biology

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Mathematics 080 or 085 or equivalent course from qualifying profile from the math placement process and Chemistry 200A/200AH.

Recommended Preparation: Eligible for English 100 or 101/101H.

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. **CSU/UC (C-ID BIOL 190)**

1/13/2020

Biology 212

Animal Diversity and Ecology

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Biology 211.

A study of ecological principles, and relationships between animal diversity and ecosystems. Habitat, populations, ecological interactions, and environmental influences are stressed while surveying animal diversity and addressing structure, function, behavior, and adaptation of major taxonomic groups. Required of majors in biology, medicine, forestry and agriculture. Field trips required. **CSU/UC**

1/13/2020

Biology 214

Plant Diversity and Evolution

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Biology 211.

Principles and processes of evolution leading to biodiversity. Survey of the Bacteria, Archaea, and the Eukarya domains, emphasizing the kingdoms Protista, Fungi, and Plantae with a detailed view of the evolutionary adaptations of the anatomy, physiology, and life cycles of these organisms. Field trips required. **CSU/UC**

1/13/2020

Biology 221

Animal Diversity and Evolution

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Mathematics 080 or 085 or equivalent course from qualifying profile from the math placement process.

Recommended Preparation: Biology 211.

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. **CSU/UC (C-ID BIOL 1305) (BIOL 221 + BIOL 231)**

1/13/2020

Biology 229

General Microbiology

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Biology 109/109H and 109L or 139 or 149 or 211 or 239 or 249 or Chemistry 100.

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. **CSU/UC**



Biology 231 Plant Diversity and Ecology

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Mathematics 080 or 085 or equivalent course from qualifying profile from the math placement process.

Recommended Preparation: Biology 211.

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. **CSU/UC (C-ID BIOL 130S) (BIOL 221 + BIOL 231)** 1/13/2020

Biology 239 General Human Anatomy

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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 prosected cadaver as available. **CSU/UC (C-ID BIOL 110B)**

Biology 249 Human Physiology

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Biology 239.

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. **CSU/UC (C-ID BIOL 120B)**

Biology 259 Environmental Biology

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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. **CSU/UC**

Biology 290 Biochemistry and Molecular Biology

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Biology 211 and Chemistry 100.

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. **CSU/UC**

BUSINESS (BUS)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga**Department Co-Chairs, Business:** Steven Deeley, Stewart Myers**Faculty:** Lynda Armbruster, Steven Deeley, Stewart Myers,

Andy Salcido

Associate in Science Business Administration for Transfer (31365)

~~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 in Business for Transfer may transfer to a four-year institution to complete a Bachelor's Degree. Successful completion of the transfer degree in business administration guarantees the student acceptance to the California State University system to pursue a baccalaureate degree in the field of business, industry or government.~~

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Accounting 101, Financial Accounting	4
Accounting 102, Managerial Accounting	4
Business 105, Legal Environment of Business	3
Economics 101, Principles/Micro	3
Economics 102, Principles/Macro	3

Select one (1) course from the following (List A): 4-5

Mathematics 150, Calculus for Biological, Management and Social Sciences (5)

Mathematics 219/219H, Statistics and Probability (4)

Mathematics 220, Statistics and Probability with Integrated Review (4)

Select two (2) courses from the following (List B): 6-8

Any list A course not already used. (4-5)

Business 100, Fundamentals of Business (3)

Business 222, Business Writing (3)

Business 150, Introduction to Information Systems and

Applications (3)

Computer Science 100, The Computer and Society (3)

TOTAL 27-29

California State University campuses have preferences on which courses should be chosen.

California State University, Fullerton prefers students take Math 150, Business 150 and Business 222.

California State University, Long Beach prefers students take both Math 150 and 219 and either Business 150 or Computer Science 100.

California Polytechnic University, Pomona prefers students take both Math 150 and 219 and Computer Science 100.



Students are advised to check with their college of choice for any other specific course information.

**Associate of Science
Business Administration (11857)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Prepare students for entry-level business occupations.
- Transfer to a four-year institution.

Major requirements*	Units
Accounting 101, Financial Accounting	4
Accounting 102, Managerial Accounting	4
Business 105, Legal Environment of Business	3
Business 150, Introduction to Information Systems and Applications	3
Business 222, Business Writing	3
Economics 101, Principles/Micro	3
Economics 102, Principles/Macro	3
Select one (1) course from the following:	3-5
Accounting 100, Accounting for Small Business (3)	
Business 100, Fundamentals of Business (3)	
Business 120/Management 120, Principles of Management (3)	
Marketing 113, Principles of Marketing (3)	
Mathematics 150, Calculus for Biological, Management and Social Sciences (5)	
TOTAL	26-28

**Associate of Science
Business Management (11859)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Prepare for a job or transfer to a four-year institution.

Major requirements*	Units
OR Accounting 100, Accounting for Small Business (3)	3-4
OR Accounting 101, Financial Accounting (4)	
Business 100, Fundamentals of Business	3
Business 120/Management 120, Principles of Management	3
Business 222, Business Writing	3
Marketing 113, Principles of Marketing	3
Select two (2) courses from the following:	6
Business 105, Legal Environment of Business (3)	
Business 121/Management 121, Human Relations and Organizational Behavior (3)	
Business 127, Introduction to E-Commerce (3)	
Business 150, Introduction to Information Systems and Applications (3)	

Management 135, Human Resource Management (3)

TOTAL 21-22

Students intending to obtain a bachelors degree in Business Management should consult the major requirements for upper-division standing listed under the Business Administration major. For other related majors, look under Management.

**Certificate of Proficiency
Business Management**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Secure entry-level job skills.

Certificate requirements	Units
OR Accounting 100, Accounting for Small Business (3)	3-4
OR Accounting 101, Financial Accounting (4)	
Business 150, Introduction to Information Systems and Applications	3
OR Computer Science 100, The Computer and Society	3
OR Business 222, Business Writing	
OR Management 122, Business Communications	3
Select one (1) course from the following:	3
Business 100, Fundamentals of Business (3)	
Business 120/Management 120, Principles of Management (3)	
TOTAL	13

**Certificate of Proficiency
Business Information Worker**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Perform basic computer application skills including beginning Excel, Word and Outlook while exhibiting basic oral and written communication skills for basic office employment.

Certificate requirements	Units
OR Business 150, Introduction to Information Systems and Applications	3
OR Computer Science 100, The Computer and Society	
OR Business 121, Human Relations and Organizational Behavior	3
OR Management 121, Human Relations and Organizational Behavior	
OR Business 222, Business Writing	3
OR Management 122, Business Communications	
Computer Information Systems 101, Introduction to Microsoft Office	3
TOTAL	12

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Business Management-Entrepreneurship

The Associate of Science degree and Certificate of Achievement in Entrepreneurship are 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.

Associate of Science Entrepreneurship (11860)

Career Opportunities in Business

Self employment, employment in small businesses.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Launch a small business or determine that the potential business would not be successful.

Major requirements*	Units
OR Accounting 100, Accounting for Small Business (3)	3-4
Accounting 101, Financial Accounting (4)	
Business 170, Principles of Small Business Management	3
Business 171, Business Plan for Small Business	3
Business 175, Online Entrepreneurship	3
Marketing 172, Small Business Marketing and Advertising	3
Select one (1) course from the following:	2-3
Accounting 035, QuickBooks (2)	
Business 127, Introduction to E-Commerce (3)	
TOTAL	17-19

Certificate of Achievement Entrepreneurship (21635)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Create a small business.

Certificate requirements	Units
OR Accounting 100, Accounting for Small Business (3)	3-4
Accounting 101, Financial Accounting (4)	
Business 170, Principles of Small Business Management	3
Business 171, Business Plan for Small Business	3
Business 175, Online Entrepreneurship	3
Marketing 172, Small Business Marketing and Advertising	3
Select one (1) course from the following:	2-3
Accounting 035, QuickBooks (2)	
Business 127, Introduction to E-Commerce (3)	
TOTAL	17-19

Courses

Business 090 Principles of Project Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Business 100 Fundamentals of Business

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID BUS 110)**

Business 105 Legal Environment of Business

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID BUS 120)**

Business 120 Principles of Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. (Same as Management 120.) **CSU**

Business 121 Human Relations and Organizational Behavior

Unit(s): 3.0

Class Hours: 54 Lecture total.

The role of the manager and management's relationship to employees. Includes the application of motivational theories, communications, leadership, and organizational structure. (Same as Management 121.) **CSU**

Business 127 Introduction to E-Commerce

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Business 130 Personal Finance

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Business 150 Introduction to Information Systems and Applications

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction to computer concepts and management information systems. Application software used to solve business problems. **CSU (C-ID BUS 140)**



Business 170

Principles of Small Business Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Business 171

Business Plan for Small Business

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Concurrent enrollment in Business 170. Business planning for the opening or continued successful operation of a small business through the preparation of a written business plan. **CSU**

Business 175

Online Entrepreneurship

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Business 222

Business Writing

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: English 100 or 101/101H.

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. **CSU (C-ID BUS 115)** 1/13/2020

CHEMISTRY (CHEM)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Chair, Chemistry: Denise Bailey, Jeffrey Wada

Faculty: Denise Bailey, Nahla El-Said, Nicole Torneo, Jeffrey Wada

Associate of Science

Chemistry (11933)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
Chemistry 280A, Organic Chemistry A	5
Chemistry 280B, Organic Chemistry B	5
Mathematics 180/180H, Single Variable Calculus I	4
TOTAL	24

Courses

Chemistry 100

Introductory Chemistry

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Mathematics 080.

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. **CSU/UC (C-ID CHEM 101)**

Chemistry 200A

General Chemistry A

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

~~Prerequisite: Chemistry 100 or Chemistry 209 or a passing score on current chemistry placement test and Mathematics 080.~~

Prerequisite: Chemistry 100 or passing score from the Chemistry placement exam, and Mathematics 080 or qualifying profile from Mathematics placement process.

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. **CSU/UC (C-ID CHEM 110), (CHEM 120S), (CHEM 200A+200B)**

1/13/2020

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Chemistry 200AH Honors General Chemistry A

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Chemistry 100 or Chemistry 209 or a passing score on current chemistry placement test and Mathematics 080 and a high school or college GPA of 3.0 or above.

Prerequisite: Chemistry 100 or passing score from the Chemistry placement exam, and Mathematics 080 or qualifying profile from Mathematics placement process. Entrance skill: High school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID CHEM 120S), (CHEM 200AH+200B), (CHEM 110)**

1/13/2020

Chemistry 200B General Chemistry B

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Chemistry 200A/200AH or Chemistry 219.

Continuation of Chemistry 200A, including but not limited to ionic equilibrium, acid and base equilibrium, thermodynamics, electrochemistry, nuclear chemistry, organic chemistry and descriptive chemistry. **CSU/UC (C-ID CHEM 120S), (CHEM 200A+200B)**

Chemistry 280A Organic Chemistry A

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Chemistry 200B or Chemistry 229.

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. **CSU/UC (C-ID CHEM 150), (CHEM 160S), (CHEM 280A+280B)**

Chemistry 280B Organic Chemistry B

Unit(s): 5.0

Class Hours: 54 Lecture total, 108 Laboratory total.

Prerequisite: Chemistry 280A.

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. **CSU/UC (C-ID CHEM 160S), (CHEM 280A+280B)**

CHICANO STUDIES (CHST)

See ETHNIC STUDIES (ETHN)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Chicano Studies: Tiffany Gause

Faculty: Erika Gutierrez

Courses

Chicano Studies 101

Introduction to Chicano Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

~~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. **CSU/UC**~~

New department and course name:

Ethnic Studies 130, Introduction to Chicano Studies

1/13/2020



CHILD DEVELOPMENT (CDEV)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Department Chair, Child Development: Regina Lamourelle

The early childhood certificates offer students fundamental knowledge about the young child from conception through the early elementary years, providing developmentally appropriate learning opportunities to meet the social, emotional, physical, cognitive, and education needs of the child. The early childhood certificates emphasize infant/toddler, preschool, and school-age courses necessary for employment in state-licensed Title 22, publicly funded Title 5 programs and religious affiliated programs. These certificates are also recommended courses for those who work as licensed family child care providers, nannies, or recreation child care workers (cruise, exercise, or retail child care establishments).

The Infant/Toddler and Preschool certificates prepare students for extended study in infant/toddler development or early learning to obtain an associate or a baccalaureate degree in child development or employment as an infant-toddler or preschool program director, teacher, or other specialist working with young children and families. The school age certificate of proficiency prepares students who are seeking to work with elementary age children in an afterschool, camp, cruise, or family day care setting. All three certificates lead to child development permits and require that students show negative TB test results.

Associate in Arts

Child and Adolescent Development for Transfer (35593)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate skill and knowledge in child observation, documentation, and effective assessment strategies that positively influence the development of children.

Major requirements

Major requirements	Units
Child Development 107, Child Growth and Development (DS1)	3
Child Development 110, Child, Family and Community (DS2)	3
Psychology 100/100H, Introduction to Psychology	3
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
Select two (2) courses from the following (List A)	6
Child Development 108, Observation and Assessment for Early Learning and Development (DS3) (3)	
Child Development 112, Health, Safety, and Nutrition for Children (3)	
Child Development 116A, Infant/Toddler Growth and Development (DS4) (3)	
Child Development 221, Living and Teaching in a Diverse Society (3)	

1/13/2020

TOTAL 19

Associate in Science

Early Childhood Education for Transfer (35614)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate a knowledge of early childhood curriculum, program practices, and the development of young children.
- Apply for and receive a Child Development Center permit

Major requirements

Major requirements	Units
Child Development 107, Child Growth and Development (DS1)	3
Child Development 108, Observation and Assessment for Early Learning and Development (DS3)	3
Child Development 110, Child, Family and Community (DS2)	3
Child Development 111A, Principles and Practices of Teaching Young Children	3
Child Development 111B, Introduction to Curriculum for Young Children	3
Child Development 112, Health, Safety, and Nutrition for Children	3
Child Development 221, Living and Teaching in a Diverse Society	3
Child Development 298A, Practicum in Early Childhood Programs	3.5

TOTAL 24.5

Certificate of Proficiency

Early Childhood Leadership and Administration

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Certificate requirements Units

Child Development 215, Administration I: Programs in Early Childhood Education (DS6)	3
Child Development 216, Administration II: Personnel and Leadership in Early Childhood Education (DS6)	3
Child Development 250, Adult Supervision and Mentoring in Early Care and Education	2
Communication 100/100H, Introduction to Interpersonal Communication	3
OR Communication 101/101H, Group Dynamics	3
OR Marketing 113, Principles of Marketing	3
OR Marketing 172, Small Business Marketing and Advertising	3

Select one (1) course from the following 2-3
 An additional course not used above
(may not be a course used to satisfy the requirements from above)

Child Development 221, Living and Teaching in a Diverse Society (3)	
Child Development 230, Child Guidance and Classroom Management (2)	
Communication 100/100H, Introduction to Interpersonal Communication (3)	
Communication 101 Group Dynamics (3)	
Marketing 113 Principles of Marketing (3)	
Marketing 172 Small Business Marketing and Advertising (3)	
TOTAL	16-17

A NEGATIVE TB TEST RESULT AND STATE-MANDATED IMMUNIZATIONS ARE REQUIRED FOR CERTIFICATE COMPLETION.

Certificate of Proficiency Infant/Toddler

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 publically funded (Title 5) programs serving infants and toddlers. This certificate is also recommended for licensed Family Day Care Providers or Nannies.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements Units

Child Development 107, Child Growth and Development (DS1)	3
Child Development 108, Observation and Assessment for Early Learning and Development (DS3)	3
Child Development 110, Child, Family and Community (DS2)	3
Child Development 116A, Infant/Toddler Growth and Development (DS4)	3
Child Development 116B, Care and Education for Infants and Toddlers (DS3)	3
TOTAL	15

A NEGATIVE TB TEST RESULT AND STATE-MANDATED IMMUNIZATIONS ARE REQUIRED FOR CERTIFICATE COMPLETION.

Certificate of Proficiency Preschool

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements Units

Child Development 107, Child Growth and Development (DS1)	3
Child Development 108, Observation and Assessment for Early Learning and Development (DS3)	3
Child Development 110, Child, Family and Community (DS2)	3
Child Development 111A, Principles and Practices of Teaching Young Children	3
Child Development 111B, Introduction to Curriculum for Young Children	3
TOTAL	15

A NEGATIVE TB TEST RESULT AND STATE-MANDATED IMMUNIZATIONS ARE REQUIRED FOR CERTIFICATE COMPLETION.

Certificate of Proficiency The School-Age Child

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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, psychosocial, and biosocial domains.

Certificate requirements Units

Child Development 110, Child, Family and Community (DS2)	3
Child Development 112, Health, Safety, and Nutrition for Children	3
Child Development 120A, Development of the School-Age Child (DS5)	3
Child Development 120B, School-Age Child Care and Recreation Activities (DS5)	3
Child Development 221, Living and Teaching in a Diverse Society	3
TOTAL	15

A NEGATIVE TB TEST RESULT AND STATE-MANDATED IMMUNIZATIONS ARE REQUIRED FOR CERTIFICATE COMPLETION.



**Certificate of Proficiency
Level I - Early Childhood Exceptional Needs**

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.2) 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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Child Development 205, Introduction to Children with Special Needs	3
Child Development 299, Cooperative Work Experience Education 1-4	3
Child Development 107, Child Growth and Development (DS1)	3
TOTAL	7-10

**Certificate of Proficiency
Level II - Early Childhood Exceptional Needs**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Child Development 107, Child Growth and Development (DS1)	3
Child Development 205, Introduction to Children with Special Needs	3
Child Development 206, Curriculum and Intervention Strategies for Children with Special Needs	3
Child Development 299, Cooperative Work Experience Education 1-4	3
TOTAL	10-13

Courses

**Child Development 107
Child Growth and Development (DS1)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID CDEV 100)**

**Child Development 108
Observation and Assessment for Early Learning and Development (DS3)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 107 or concurrent enrollment.

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. **CSU (C-ID ECE 200)**

**Child Development 110
Child, Family and Community (DS2)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID CDEV 110)**

**Child Development 111A
Principles and Practices of Teaching Young Children**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 107 and 108.

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. **CSU (C-ID ECE 120)**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.

**Child Development 111B****Introduction to Curriculum for Young Children**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 107 and 108 and 111A (CDEV 111A may be previously or concurrently enrolled).

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. **CSU (C-IDECE 130)**

Child Development 112**Health, Safety and Nutrition for Children**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Six (6) units of Child Development classes.

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. **CSU (C-ID ECE 220)**

Child Development 116A**Infant/Toddler Growth and Development (DS4)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 107 and 108.

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. **CSU/UC**

Child Development 116B**Care and Education for Infants and Toddlers (DS3)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 107 and 108 and 116A (CDEV 116A may be previously or concurrently enrolled).

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. **CSU**

Child Development 120A**Development of the School-Age Child (DS5)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Child Development 120B**School-Age Child Care and Recreation Activities (DS5)**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 120A (CDEV 120A may be previously or concurrently enrolled).

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. **CSU**

Child Development 200**Introduction to Technology in Early Childhood Education**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Child Development 205**Introduction to Children with Special Needs**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Child Development 206**Curriculum and Intervention Strategies for Children with Special Needs**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 205 205.

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. **CSU**



Child Development 207
Supporting and Empowering Families of Children with Special Needs

Unit(s): 3.0

Class Hours: 54 Lecture total.

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 statutes are required. Grade: Pass/No Pass. **CSU**

Child Development 215
Administration I: Programs in Early Childhood Education (DS6)

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Twelve (12) units in early childhood education.

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. **CSU**

Child Development 216
Administration II: Personnel and Leadership in Early Childhood Education (DS6)

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Child Development 215 and twelve (12) units in early childhood education.

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. **CSU**

Child Development 217
Creative Music and Performing Arts for Early Learners

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Child Development 218
Visual Art Experiences for Early Learning Environments

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Child Development 220
The Child As Victim

Unit(s): 3.0

Class Hours: 54 Lecture total.

Exploration of battered, molested, and neglected children from five vantage points: child, law, parents, social services and education. **CSU**

Child Development 221
Living and Teaching in a Diverse Society

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID ECE 230)**

Child Development 229
Brain Development and Learning

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. **CSU**

Child Development 230
Child Guidance and Classroom Management

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. **CSU**



Child Development 234 Brain Compatible Guidance and Classroom Management for Early Learning Settings

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. **CSU**

Child Development 236 Engineering, Math and Science Strategies for Early Learning Environments

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Child Development 250 Adult Supervision and Mentoring in Early Care and Education

Unit(s): 2.0

Class Hours: 36 Lecture total.

Prerequisite: Child Development 111B or 116B or 120B.

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. **CSU**

Child Development 297 Analyzing and Applying Teacher Strategies in the Classroom

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Child Development 111B or 116B or 120B.

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. **CSU**

Child Development 298A Practicum in Early Childhood Programs

Unit(s): 3.5

Class Hours: 36 Lecture total, 81 Laboratory total.

Prerequisite: Child Development 110 and 111B and 112 and 205 and 221.

Under guided supervision in a Rancho Santiago Community College District (RSCCD) Child Development Center or approved mentor site, students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Reflective practice will be emphasized as student teachers design, implement and evaluate approaches and strategies, and techniques that promote development and learning. Field trips and field-based assignments required. A negative TB test result and state-mandated immunizations are required for certificate completion. **CSU (C-ID ECE 210)**

Child Development 298B Practicum in Infant/Toddler Programs

Unit(s): 3.5

Class Hours: 36 Lecture total, 81 Laboratory total.

Prerequisite: Child Development 110 and 112 and 116B and 205 and 221.

Under guided supervision in a Rancho Santiago Community College District (RSCCD) Child Development Center or approved mentor site, students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Reflective practice will be emphasized as student teachers design, implement and evaluate approaches and strategies, and techniques that promote development and learning for infants and toddlers. Field trips and field-based assignments required. A negative TB test result and state-mandated immunizations are required for certificate completion. **CSU**

Child Development 299 Cooperative Work Experience Education

Unit(s): 1.0-4.0

Class Hours: 60-300 Laboratory total.

This work experience course of supervised employment is designed to assist students to acquire career awareness and work habits in early childhood, K-12, and afterschool programs. 75 hours of paid work or 60 hours of unpaid work equals one unit of course credit. Course may be repeated up to the maximum unit allowed per Title 5, Section 55253. Field trips may be required. Grade: Pass/No Pass. Open Entry/Open Exit. **CSU**



CHINESE (CHNS)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Modern Languages: Lourdes Fajardo

Chinese 101

Elementary Chinese I

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

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. *CSU/UC*

Chinese 102

Elementary Chinese II

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Chinese 101 or two years of high school Chinese with a grade of C or better.

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. *CSU/UC*

CINEMA STUDIES (CINE)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Facilitator: David Echols

Courses

Cinema Studies 103

History of Film to 1945

Unit(s): 3.0

Class Hours: 54 Lecture total.

A survey course exploring film as an art form and developing an appreciation of historical, artistic and technical advances from the 1890s to 1945. *CSU/UC*

Cinema Studies 104

History of Film From 1945 to Present

Unit(s): 3.0

Class Hours: 54 Lecture total.

A lecture/visual aids course exploring film as an art form and developing appreciation of historical, artistic and technical advances. *CSU/UC*

Cinema Studies 105

Mass Media and Society

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID JOUR 100)*

Cinema Studies 107

Great Directors

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Cinema Studies 108

Film Genres

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Cinema Studies 122

Screenwriting for Digital Media

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU*

**Cinema Studies 124****Introduction to Digital Media Production**

Unit(s): 3.0

Class Hours: 36 Lecture total, 54 Laboratory total.

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. **CSU**

Cinema Studies 130**Film Appreciation**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Cinema Studies 150A**Film/TV Producing I**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Cinema Studies 150B**Film/TV Producing II**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Cinema Studies 150A.

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. **CSU**

COMMUNICATION (COMM)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil**Department Chair, Communication:** Tara Kubicka-Miller**Faculty:** Ralph Castellanos, Michael DeCarbo, Jared Kubicka-Miller, Tara Kubicka-Miller, Melinda Womack**Associate in Arts****Communication Studies for Transfer (30558)**

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 the California State University system to pursue a baccalaureate degree, 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Better manage apprehension in communication settings.
- Present the self appropriately and effectively through verbal and nonverbal communication.

Major requirements*	Units
Communication 110, Public Speaking	3
Select two (2) courses from the following (List A):	6
Communication 100/100H, Introduction to Interpersonal Communication (3)	
Communication 101, Group Dynamics (3)	
Communication 111, Argumentation and Debate (3)	
Select two (2) courses from the following (List B):	6
Any list A course not already used. (3)	
Communication 120/120H, Introduction to Intercultural Communication (3)	
Communication 134, Oral Interpretation (3)	
Select one (1) course from the following (List C):	3-4
Any list A or B course not already used. (3)	
Communication 135, Reader's Theatre (3)	
Communication 225/225H, Gender Communication (3)	
English 102/102H, Literature and Composition (4)	
English 103/103H, Critical Thinking and Writing (4)	
TOTAL	18-19

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



**Associate of Arts
Communication (11929)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Better manage apprehension in communication settings.
- Present the self appropriately and effectively through verbal and nonverbal communication.

Major requirements	Units
Relationship Emphasis, 3 units Communication 100/100H, Introduction to Interpersonal Communication (3) Communication 101, Group Dynamics (3)	3
Delivery Emphasis, 3 units Communication 110, Public Speaking (3) Communication 111, Argumentation and Debate (3)	3
Diversity Emphasis, 3 units Communication 120/120H, Introduction to Intercultural Communication (3) Communication 225/225H, Gender Communication (3)	3
Performance Emphasis, 3 units Communication 130, Forensics Team (4-6) Communication 134, Oral Interpretation (3) Communication 135, Reader's Theatre(3) Communication 230, Advanced Forensics Team (4-6)	3
Required Electives, 6 units: Any of the above courses not already completed, but no more than 2 additional units of Communication 130, or Communication 230 (3.5-6) Library & Information Studies 103, Advanced Internet Research (1)	6
TOTAL	18

Courses

Communication 100
Introduction to Interpersonal Communication
Unit(s): 3.0
Class Hours: 54 Lecture total.
Recommended Preparation: Concurrent enrollment in English 100 or 101/101H.
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. **CSU/UC (C-ID COMM 130)**
1/13/2020

Communication 100H
Honors Introduction to Interpersonal Communication
Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above
Recommended Preparation: Concurrent enrollment in English 100 or 101/101H.
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. **CSU/UC (C-ID COMM 130)**
1/13/2020

Communication 101
Group Dynamics
Unit(s): 3.0
Class Hours: 54 Lecture total.
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. **CSU/UC (C-ID COMM 140)**

Communication 110
Public Speaking
Unit(s): 3.0
Class Hours: 54 Lecture total.
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. **CSU/UC (C-ID COMM 110)**

Communication 111
Argumentation and Debate
Unit(s): 3.0
Class Hours: 54 Lecture total.
Recommended Preparation: English 101/101H or concurrent enrollment.
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. **CSU/UC (C-ID COMM 120)**

Communication 120
Intercultural Communication
Unit(s): 3.0
Class Hours: 54 Lecture total.
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. **CSU/UC (C-ID COMM 150)**

Communication 120H
Honors Introduction to Intercultural Communication
Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
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. **CSU/UC (C-ID COMM 150)**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.

**Communication 130****Forensics Team**

Unit(s): 4.0-6.0

Class Hours: 54 Lecture total, 54-162 Laboratory total.

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. May be repeated. **CSU**

Communication 134**Oral Interpretation**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Performance of prose, poetry, and drama; practice in speaking, interpretation, and analysis of literature, with training in the principles of effective delivery. **CSU/UC (C-ID COMM 170)**

Communication 135**Readers' Theatre**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Research, construct, rehearse, and perform interpretation of literature in an ensemble theatrical setting. Learn basic elements of choral reading, singing, and movement. **CSU/UC**

Communication 225**Gender Communication**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Communication 100, 100H, 101, 110 or 111.

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. **CSU/UC**

Communication 225H**Honors Gender Communication**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above

Recommended Preparation: Communication 100, 100H, 101, 110 or 111.

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. **CSU/UC**

Communication 230**Advanced Forensics Team**

Unit(s): 4.0-6.0

Class Hours: 54 Lecture total, 54-162 Laboratory total.

Recommended Preparation: Communication 130.

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. May be repeated. **CSU**

COMPUTER INFORMATION SYSTEMS (CIS)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga**Department Co-Chairs, Business:** Steven Deeley, Stewart Myers**Faculty:** Ronald Kessler, Stewart Myers, Andy Salcido

The Associate of Science degree and Certificate of Achievement in Computer Information Systems are 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.

Associate of Science**Computer Information Systems (11902)****Learning Outcome(s)**

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate knowledge and practice of CIS systems and computer science.
- Demonstrate knowledge of software applications.

Major requirements***Units**

Accounting 101, Financial Accounting	4
Business 150, Introduction to Information Systems and Applications	3
Computer Information Systems 106, Microsoft Excel	3
Computer Science 105, Visual BASIC Programming	3
Computer Science 112, Java Programming	3
Computer Science 120, Introduction to Programming	3

Select one (1) course from the following:

3-4

Accounting 100, Accounting for Small Business (3)

Accounting 102, Managerial Accounting (4)

Computer Information Systems 103, Microsoft Word (3)

Computer Information Systems 108, Microsoft Access (3)

Computer Information Systems 110, Introduction to Microsoft

OR Project (3)

Public Works 110, Introduction to Microsoft Project (3)

Computer Science 121, Programming Concepts (3)

Computer Science 213, C# Programming (3)

TOTAL 22-23



**Certificate of Achievement
Computer Information Systems (21647)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate knowledge and practice of CIS systems and computer science.
- Demonstrate knowledge of software applications.

Certificate requirements	Units
Accounting 101, Financial Accounting	4
Business 150, Introduction to Information Systems and Applications	3
Computer Information Systems 106, Microsoft Excel	3
Computer Science 105, Visual BASIC Programming	3
Computer Science 112, Java Programming	3
Computer Science 120, Introduction to Programming	3
Select one (1) course from the following:	3-4
Accounting 100, Accounting for Small Business (3)	
Accounting 102, Managerial Accounting (4)	
Computer Information Systems 103, Microsoft Word (3)	
Computer Information Systems 108, Microsoft Access (3)	
OR Computer Information Systems 110, Introduction to Microsoft Project (3)	
Public Works 110, Introduction to Microsoft Project (3)	
Computer Science 121, Programming Concepts (3)	
Computer Science 213, C# Programming (3)	
TOTAL	22-23

Courses

**Computer Information Systems 101
Introduction to Microsoft Office**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

**Computer Information Systems 103
Microsoft Word**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Step-by-step procedures are taught for creating, editing, and printing business documents with Microsoft Word. **CSU**

**Computer Information Systems 105
Introduction to Microsoft Excel**

Unit(s): 1.5

Class Hours: 27 Lecture total.

Introduction to Excel spreadsheets including formatting, graphics, and formulas common to business applications. Prepares student for MS Excel Certification. **CSU**

**Computer Information Systems 106
Microsoft Excel**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction to Microsoft Excel and how it facilitates solving business problems. Covers data management and reporting using spreadsheets, charts, database tools and macros. **CSU**

**Computer Information Systems 108
Microsoft Access**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

**Computer Information Systems 110
Introduction to Microsoft Project**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. (Same as Public Works 110.) **CSU**

**Computer Information Systems 111
Python Programming**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

**Computer Information Systems 159
Introduction to iOS/iPhone Mobile App Development**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction to mobile application development for iPhones and other iOS devices using beginning programming concepts and skills. **CSU**

**Computer Information Systems 259
Advanced iOS/iPhone Mobile App Development**

Unit(s): 3.0

Class Hours: 159 or similar programming experience.

Recommended Preparation: Computer Information Systems 159 or similar programming experience.

Advanced techniques for mobile application development for iPhones and other iOS devices using Objective-C programming. **CSU**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



COMPUTER SCIENCE (CMPR)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Department Co-Chairs, Business: Steven Deeley, Stewart Myers

Faculty: Ronald Kessler, Stewart Myers

Computer science courses are designed to meet the varying goals of students interested in employment or education in the computer field. There are courses on specific languages for professionals who want to supplement their skills with the knowledge of a current programming language (PC assembler, C++, Visual BASIC, Java). A certificate in computer science can be earned by those students desiring to enter the workplace at entry-level positions. Also, an associate degree can be earned by those students desiring to transfer to a four-year institution with a major in Computer Science.

The computer science courses provide instruction in low level and high level languages, intermediate and advanced techniques in programming, and hardware organization.

Associate in Science

Computer Science for Transfer (33379)

The Associate in Science in Computer Science for Transfer degree 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 the California State University system to pursue a baccalaureate degree in Computer Science or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Apply knowledge of mathematics, science, and computer science to identify, formulate, and solve computer science problems.

Major requirements	Units
Computer Science 122, Programming Concepts and Methodology I	3
Computer Science 132, Programming Concepts and Methodology II	3
Computer Science 149, Discrete Structures for Computer Science	3
Computer Science 154, Computer Architecture and Organization	3
Mathematics 180/180H, Single Variable Calculus I	4
Mathematics 185, Single Variable Calculus II	4
Physics 250A, Physics for Scientists and Engineers I	5
Physics 250B, Physics for Scientists and Engineers II	5
TOTAL	30

NOTE: Only IGETC for the UC and CSU (Plan C) will be accepted towards completion of the general education portion of this degree. Unlike other Associate Degrees for Transfer, CSU GE Breadth (Plan B) completion will not be accepted.

An Oral Communication course, IGETC Area 1C, must be completed in order to meet CSU admission requirements.

Associate of Science

Computer Science (11903)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate knowledge and practice of computer information systems and computer science.

Major requirements*	Units
Computer Science 100, The Computer and Society	3
Computer Science 105, Visual BASIC Programming	3
Computer Science 112, Java Programming	3
Computer Science 120, Introduction to Programming	3
Computer Science 121, Programming Concepts	3
Computer Information Systems 111, Python Programming	3
6/17/2019 TOTAL	18

Certificate of Achievement

Computer Science (21649)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate knowledge and practice of computer science.

Certificate requirements	Units
Computer Science 100, The Computer and Society	3
Computer Science 105, Visual BASIC Programming	3
Computer Science 112, Java Programming	3
Computer Science 120, Introduction to Programming	3
Computer Science 121, Programming Concepts	3
Computer Science 213, C# Programming	3
TOTAL	18

Certificate of Achievement

Computer Retail Sales and Support (36304)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Qualify for entry level IT positions such as Retail Salespersons, Customer Service Representatives, Retail Sales Workers, and Sales Representatives.

Certificate requirements	Units
Business 100, Fundamentals of Business	3
OR Business 121, Human Relations and Organizational Behavior	3
OR Management 121, Human Relations and Organizational Behavior	3
Business 150, Introduction to Information Systems and Applications	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
Computer Science 120, Introduction to Programming	3
TOTAL	18



Certificate of Proficiency Applied Robotics and Embedded Programming

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate and apply knowledge of common microprocessors and design software applications which can be used in industry-standard embedded devices.

Certificate requirements	Units
Computer Science 112, Java Programming	3
Computer Science 157, Introduction to Robotics Programming	3
Computer Science 205, Advanced Visual Basic	3
Computer Science 213, C# Programming	3
Computer Science 257, Applied Robotics and Embedded Programming	3
1/30/2020	TOTAL 15 9

Courses

Computer Science 100

The Computer and Society

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Computer Science 105

Visual BASIC Programming

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction to programming and Visual BASIC. Emphasis on programming fundamentals and the creation of applications with Visual BASIC. No previous programming experience required. *CSU/UC*

Computer Science 112

Java Programming

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction to object-oriented program design. Overview of the Java programming language, including developing applications for web pages and stand-alone applications. *CSU/UC*

Computer Science 120

Introduction to Programming

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Prerequisite: Mathematics 080.

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. *CSU/UC*

Computer Science 121

Programming Concepts

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Prerequisite: Computer Science 120.

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. *CSU/UC*

Computer Science 122

Programming Concepts and Methodology I

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Computer Science 120.

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). *CSU (C-ID COMP 122)*

Computer Science 129

Introduction to Computer Organization

Unit(s): 4.0

Class Hours: 72 Lecture total.

Recommended Preparation: Computer Science 120 or equivalent.

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. *CSU/UC*

Computer Science 131

Data Structures Concepts

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Computer Science 121.

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. *CSU/UC*

Computer Science 132

Programming Concepts and Methodology II

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Computer Science 122.

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). *CSU (C-ID COMP 132)*

Computer Science 149

Discrete Structures for Computer Science

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Computer Science 122

Recommended Preparation: Mathematics 105 or 140 or 219/219H or 220.

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). *CSU (C-ID COMP 152)*

1/13/2020



Computer Science 154 Computer Architecture and Organization

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Computer Science 122.

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). *CSU/UC (C-ID COMP 142)*

Computer Science 157 Introduction to Robotics

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU*

Computer Science 213 C# Programming

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Computer Science 121.

Study of C# programming. Topics covered include the .NET environment, object-oriented programming, relational databases, and creation of graphical user interfaces. *CSU/UC*

Computer Science 257

Applied Robotics and Embedded Programming

Unit(s): 3.0

Class Hours: 54 Lecture total.

~~Introduction to microprocessors for devices used in robotics, telephones, tablet PC's, the automotive industry, and home automation. The Basic Stamp and Propeller microprocessors and Single-Board Computers (SBC) will be used to design and implement robotic systems using PBasic and RobotC programming languages.~~ *CSU*

1/13/2020

COSMETOLOGY (COSM)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

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.

If you are enrolled in the Cosmetology program and have been awarded Federal Financial Aid, your payments will be calculated at the federal formula conversion rate according to the current Federal Student Aid Handbook. This formula is used to calculate the timing of financial aid award disbursements. The Esthetician program is not eligible for federal financial aid. If you have questions, please contact the SCC Financial Aid Office at 714-628-4876.

Associate of Science Cosmetology (11948)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate and apply knowledge of principles, procedures and practices of cosmetology according to the California Board of Barbering and Cosmetology.

Requirements*	Units
Cosmetology 005, Health and Safety	7
Cosmetology 040, Cosmetology	35.5
TOTAL	42.5

Certificate of Achievement Cosmetology (21674)

Learning Outcome(s)

- Demonstrate and apply knowledge of principles, procedures and practices of cosmetology according to the California Board of Barbering and Cosmetology.

Requirements*	Units
Cosmetology 005, Health and Safety	7
Cosmetology 040, Cosmetology	35.5
TOTAL	42.5



**Certificate of Achievement
Esthetician (36520)**

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.

Learning Outcome(s)

- Demonstrate and apply knowledge of principles, procedures and practices of skin care according to the California Board of Barbering and Cosmetology.

Certificate requirements	Units
Cosmetology 005, Health and Safety	7
Cosmetology 080, Esthetician	9
TOTAL	16

**Cosmetology 005
Health and Safety**

Unit(s): 0.5-7.0

Class Hours: 4-100 Lecture total, 12-100 Laboratory total.

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.

Cosmetology 040

Cosmetology

Unit(s): 0.5-35.5

Class Hours: 4-270 Lecture total, 12-1130 Laboratory total.

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.

Cosmetology 050

Manicuring

Unit(s): 0.5-13.5

Class Hours: 4-125 Lecture total, 12-275 Laboratory total.

Complete instruction of nail care as required by State Board of Barbering and Cosmetology for licensure preparation. Open Entry/Open Exit.

Cosmetology 070

Barbering

Unit(s): 0.5-48.0

Class Hours: 4-385 Lecture total, 12-1115 Laboratory total.

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.

Cosmetology 080

Esthetician

Unit(s): 0.5-9.0

Class Hours: 4-120 Lecture total, 12-280 Laboratory total.

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.

COUNSELING (CNSL)

Division of Counseling and Student Support Services

Dean: Ruth Babeshoff

Department Co-Chairs, Counseling: Phillip Crabill, Lacy Hedenberg

Faculty: Leonor Aguilera, Nena Baldizon-Rios, Rudy Carrion, Maria Chaidez, Phillip Crabill, Dora Escobar, Juana Galvan, Song Graham, Lacy Hedenberg, Janis Perry, Barry Resnick

The Counseling Department offers counseling classes that provide students an opportunity to discover their interests, values, personality and skills. These courses allow students to learn more about themselves as they explore careers and majors and to develop comprehensive student education plans to help them reach their educational goals.

Associate in Arts

Social Work and Human Services for Transfer (37164)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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. Demonstrate familiarity with gender theories, concepts, findings, assessments, problems, institutions, history, and trends within the field of Social Justice and Gender Studies.

Major requirements*

	Units
AND Biology 109/109H, Fundamentals of Biology (3)	
AND Biology 109L/109HL, Fundamentals of Biology Laboratory (1)	
OR Biology 149, Human Anatomy and Physiology (4)	4
OR Biology 239, General Human Anatomy (4)	
OR Biology 249, Human Physiology (4)	
Counseling 150, Introduction to Human Services	3
Counseling 160, Fieldwork Experience for the Helping Professions	3
OR Economics 101, Principles/Micro (3)	
OR Economics 102, Principles/Macro (3)	3
OR Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
Psychology 100/100H, Introduction to Psychology	3
Sociology 100/100H, Introduction to Sociology	3

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Select (2) two courses from the following (List A): 6-7

Anthropology 100/100H, Introduction to Cultural Anthropology (3)
 Child Development 107, Child Growth and Development (DS1) (3)
 Psychology 157, Introduction to Child Psychology (3)
 Child Development 110, Child, Family and Community (DS2) (3)
 Criminal Justice 101, Introduction to Criminal Justice (3)
 Communication 120/120H, Intercultural Communication (3)
 ENGL 103/103H, Critical Thinking and Writing (4)
 HIST 120/120H, The United States to 1877 (3)
 HIST 121/121H, The United States Since 1877 (3)
 Psychology 160, Introduction to Lifespan Psychology (3)
 Psychology 230, Psychology and Effective Behavior (3)
 Psychology 250, Introduction to Abnormal Psychology (3)
 Sociology 116, Social Problems (3)

1/13/2020 **TOTAL 29-30**

Courses

Counseling 101

Educational, Personal, Cultural, and Career Exploration

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Counseling 106

Inquiries Into Higher Education

Unit(s): 1.0

Class Hours: 18 Lecture total.

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. Grade: Pass/No Pass. **CSU/UC**

Counseling 110

University Transfer Research

Unit(s): 0.5-2.0

Class Hours: 9-36 Lecture total.

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. **CSU**

Counseling 111

Learning Skills Development

Unit(s): 1.0

Class Hours: 18 Lecture total.

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. **CSU/UC**

Counseling 113

Learning Strategies for College Success

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Counseling 116

Career/Life Planning and Personal Exploration

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Counseling 118

Self Exploration and the Teaching Profession

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. **CSU**

Counseling 150

Introduction to Human Services

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Counseling 160

Fieldwork Experience for the Helping Professions

Unit(s): 3.0

Class Hours: 18 Lecture total, 108 Laboratory total.

Prerequisite: Counseling 150.

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. **CSU**



CRIMINAL JUSTICE (CJ)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Courses

Criminal Justice 101

Introduction to Criminal Justice

Unit(s): 3.0

Class Hours: 54 Lecture total.

A survey of the philosophy and history of the criminal justice system (law enforcement, courts, corrections); processes of justice from detection of crime to parole; evaluation of modern criminal justice delivery systems. *CSU/UC (C-ID AJ 110)*

DANCE (DNCE)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Performing Arts: Binh Vu

Courses

Dance 100

Dance History and Appreciation

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Dance 106A

Modern Dance Fundamentals

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

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. *CSU/UC*

Dance 106B

Intermediate Modern Dance

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Recommended Preparation: Dance 106A.

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. *CSU/UC*

Dance 108A

Ballet Fundamentals

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

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. *CSU/UC*

Dance 108B

Intermediate Ballet

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Prerequisite: Dance 108A.

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. *CSU/UC*



DANCE

Dance 115A
Tap Dance Fundamentals

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

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. *CSU/UC*

Dance 115B
Intermediate Tap Dance

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Recommended Preparation: Dance 115A.

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. *CSU/UC*

Dance 119A
Jazz Dance Fundamentals

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

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. *CSU/UC*

Dance 119B
Intermediate Jazz Dance

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

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. *CSU/UC*

Dance 204A
Dance Production

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

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. *CSU/UC*

Dance 204B
Dance Production

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Dance 204A.

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. *CSU/UC*

Dance 205
Performance Ensemble

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Pre-professional ensemble to provide performance experience for advanced students. Concert tour/performance field trips may be required. Repertoire and casting vary each semester. *CSU/UC*

Dance 250A
Hip Hop Dance I

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

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. *CSU/UC*

Dance 250B
Hip-Hop Dance II

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Recommended Preparation: Dance 250A Successfully complete DNCE 250A with a minimum grade of C.

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. *CSU/UC*

Dance 251
Hip Hop Dance III

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Recommended Preparation: Dance 250B Successfully complete DNCE 250B with a minimum grade of C.

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. *CSU/UC*



EARTH SCIENCES (ERTH)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Chair, Earth Sciences: Debra Brooks

Faculty: Debra Brooks

Associate of Science Earth Sciences (11934)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of geoscience processes based upon observation of Earth materials and features.
- Demonstrate an understanding of the basic principles of the geosciences.

Major requirements*	Units
Earth Sciences 100, Physical Geology	3
Earth Sciences 100L, Physical Geology Laboratory	1
Earth Sciences 111, Historical Geology	4
Earth Sciences 130, Environmental Geology	3
OR Earth Sciences 160, Oceanography	
Geography 130, Introduction to Weather and Climate	

Select a minimum of six (6) units from the following: 6-7
An additional course from above (3)

(may not be a course used to satisfy the requirements in above list)

Astronomy 103, Introduction to the Solar System (3)

~~Biology 200, Environment of Man (3)~~

- OR Earth Sciences 120, Earth Sciences (3)
- OR Earth Sciences 121, Earth Sciences for Educators (4)
- Geography 150, Exploring Maps and Geographic Technologies (3)
- Geography 155, Introduction to Geographic Information Systems (3)
- OR Survey/Mapping Sciences 155, Introduction to Geographic Information Systems (3)

Library & Information Studies 100, Library Research Fundamentals (1)
Library & Information Studies 103, Advanced Internet Research (1)

Select a minimum of one (1) unit from the following: 1-3

- Earth Sciences 200, Geology of California (3)
- Earth Sciences 212, San Andreas Fault System Geology Field Study (1)
- Earth Sciences 214, Orange County Geology Field Study (1)

1/13/2020 **TOTAL 18-21**

Associate in Science Geology for Transfer (32044)

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 the California State University system 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of geological processes based upon observation of Earth materials and features.
- Demonstrate an understanding of the basic principles of geology.

Major requirements*	Units
Earth Sciences 100, Physical Geology	3
Earth Sciences 100L, Physical Geology Laboratory	1
Earth Sciences 111, Historical Geology	4
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
Mathematics 180/180H, Single Variable Calculus I	4
Mathematics 185, Single Variable Calculus II	4
TOTAL	26

Students are encouraged to take additional articulated major preparation courses prior to transfer such as, Physics 250A and 250B and Biology 211. While these additional courses are not required for this degree, completion of these courses will better prepare students for upper-division Geology courses at a CSU or a UC. It is highly recommended that students meet with an SCC counselor to discuss possible courses for major preparation for either the CSU system or the UC system, because CSU campuses do not all have identical requirements, and CSU requirements are also not identical to UC requirements.

Courses

Earth Sciences 100 Physical Geology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Concurrent enrollment in Earth Sciences 100L.

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.
CSU/UC (C-ID GEOL 100)

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Earth Sciences 100L Physical Geology Laboratory

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Earth Sciences 100 or concurrent enrollment.

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. **CSU/UC (C-ID GEOL 100L)**

Earth Sciences 111 Historical Geology

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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. **CSU/UC (C-ID GEOL 111)**

Earth Sciences 120 Earth Sciences

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID GEOL 120)**

Earth Sciences 121 Earth Sciences for Educators

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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. **CSU/UC**

Earth Sciences 130 Environmental Geology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID GEOL 130)**

Earth Sciences 160 Oceanography

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Earth Sciences 200 Geology of California

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Earth Sciences 100 or 120 or 121 or Geography 101H.

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. **CSU/UC (C-ID GEOL 200)**

Earth Sciences 212 San Andreas Fault System Geology Field Study

Unit(s): 1.0

Class Hours: 18 Lecture total.

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. **CSU**

Earth Sciences 214 Orange County Geology Field Study

Unit(s): 1.0

Class Hours: 18 Lecture total.

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. **CSU**



ECONOMICS (ECON)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Co-Chairs, Economics: Vanessa Engstrom, Alexander Taber

Faculty: Alexander Taber

Associate in Arts Economics for Transfer (32968)

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 four-year institution 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Economics 101, Principles/Micro	3
Economics 102, Principles/Macro	3
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
Mathematics 150, Calculus for Biological, Management and Social Sciences (5)	4-5
OR Mathematics 180/180H, Single Variable Calculus I (4)	
Select one (1) course from the following (List A):	4
Accounting 101, Financial Accounting (4)	
Mathematics 185, Single Variable Calculus II (4)	
Select one (1) course from the following (List B):	3-5
An additional course from List A (may not be a course used to satisfy the requirements in List A)	
Accounting 102, Managerial Accounting (4)	
Business 150, Introduction to Information Systems and Applications (3)	
Business 222, Business Writing (3)	
Mathematics 280, Intermediate Calculus (4)	
Mathematics 287, Introduction to Linear Algebra and Differential Equations (5)	
Mathematics 290, Linear Algebra (3)	
1/13/2020	TOTAL 21-24

Associate of Arts Economics (11943)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Economics 101, Principles/Micro	3
Economics 102, Principles/Macro	3
Accounting 101, Financial Accounting	4
Accounting 102, Managerial Accounting	4
Business 150, Introduction to Information Systems and Applications (3)	
OR Mathematics 150, Calculus for Biological, Management and Social Sciences (5)	3-5
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
1/13/2020	TOTAL 21-23

Mathematics course chosen should be determined by the requirements of the intended upper division school of the student's choice.

Courses

Economics 101 Principles/Micro

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 080 or 085 or qualifying profile from the Mathematics placement process.

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.
CSU/UC (C-ID ECON 201)

1/13/2020

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Economics 102 Principles/Macro

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 080 or 085 or qualifying profile from the Mathematics placement process.

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.

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. *CSU/UC (C-ID ECON 202)* 1/13/202

EDUCATION (EDUC)

Division of Counseling and Student Support Services

Dean: Ruth Babeshoff

Department Chair, Education: Janis Perry

Education/Teaching

Students planning to teach in the elementary and secondary schools may begin preparation at Santiago Canyon College. The college offers programs of study which fulfill lower-division requirements for most university teacher credential programs.

Suggested Elementary Teaching Emphasis

Liberal Studies and Child Development are the two most common university majors of students who are planning to enter teacher preparation programs for an elementary teaching credential. However, any transfer major leading to a bachelor's degree will fulfill admission requirements for teacher credential programs. Students should work with an SCC Pathways to Teaching counselor to assist them in choosing general education courses that will support their subject matter competency. Some universities offer students the option of obtaining a bachelor's degree and a credential simultaneously. These types of programs are called "integrated" teaching programs and are best for students who have decided early to pursue a teaching credential. Planning for this type of program involves specific courses for the major and general education. Students are advised to work with an SCC Pathways to Teaching counselor to plan this course of study.

Santiago Canyon College offers two elementary education degrees, the Associate of Arts Degree in Elementary Teacher Education for Transfer, that has been designed to assist students in meeting the course requirements for transfer with a guarantee to CSU elementary teaching programs and prepares them for California multiple subject matter requirements. SCC also offers an Associate of Arts Degree in Elementary Education which incorporates courses such as, Counseling 118 - Self-Exploration and the Teaching Profession, Education 110 - The Teaching Experience: Exploration and Education 113 - Tutoring that have been developed to assist students in making career decisions related to teaching, inform students about the process of entering the profession and/or to investigate alternate career choices. This degree also offers more flexibility in general education choices for students.

Associate in Arts

Elementary Teacher Education for Transfer (31735)

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 Commission for Teacher Credentialing. 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 and other educational programs.

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.

1/13/2020



Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Identify elements of diversity and diverse learning styles in student populations and discover how teachand schools can promote learning for all students.
- Demonstrate proficiency in 14 content areas required for subject matter competency for elementary teachers.

Major Requirements*

Education 200, Introduction to Elementary Classroom Teaching	3
Biology 115, Concepts in Biology for Educators	4
Child Development 107, Child Growth and Development (DS1)	3
Communication 110, Public Speaking	3
English 101/101H, Freshman Composition	4
English 102/102H, Literature and Composition	4
Earth Sciences 121, Earth Sciences for Educators	4
Geography 100/100H, World Regional Geography	3
History 101/101H, World Civilizations to the 16th Century	3
History 120/120H, The United States to 1877	3
Mathematics 203, Fundamental Concepts of Elementary Mathematics	4
Political Science 101/101H, American Government and Politics	3
Physical Science 100, Survey of Chemistry and Physics	4
Select one (1) course from the following (List A):	4
English 103/103H, Critical Thinking and Writing (4)	
Philosophy 110, Critical Thinking (4)	
Select one (1) course from the following (List B):	3
Art 100/100H, Introduction to Art Concepts (3)	
Dance 100, Dance History and Appreciation (3)	
Music 101/101H, Music Appreciation (3)	
Theatre Arts 100, Introduction to Theatre (3)	
Up to eight (8) units from the following (List C):	0-8
Education 101, American Schools and Society (3)	
Education 110, The Teaching Experience: Exploration (3)	
Education 204, Proficiency in Educational Technologies for Secondary Teachers (3)	
Anthropology 104, Language and Culture (3)	
English 231, Survey of English Literature I (3)	
English 232, Survey of English Literature II (3)	
English 241, Survey of American Literature, 1600-1865 (3)	
English 242, Survey of American Literature, 1865-Present (3)	
English 270, Children's Literature (3)	
English 271, Survey of World Literature I (3)	
English 272, Survey of World Literature II (3)	
Ethnic Studies 101, Introduction to Ethnic Studies (3)	
French 102, Elementary French II (5)	
History 133, History of California (3)	
Mathematics 105, Mathematics for Liberal Arts Students (3)	
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	
Philosophy 106/106H, Introduction to Philosophy (3)	
Philosophy 108, Ethics (3)	
Philosophy 112, World Religions (3)	
Spanish 102, Elementary Spanish II (5)	

1/13/2020 TOTAL 52-60

California State University campuses have preferences on which List C courses should be chosen.

- California State University Fullerton prefers one of the following: Anthropology 104 or English 270 or English 231, 232, 241, or 242
- California State University Long Beach prefers these courses: Ethnic Studies 101, Education 204, and Philosophy 106 or 108 or 112.

At SCC Mathematics 105 is a prerequisite to Mathematics 203 and may reduce the number of elective units in List C to 5 units.

**Associate of Arts
Elementary Education (17759)**

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 Commission for Teacher Credentialing. The degree program requirements and the recommended general education 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 and other educational programs.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Counseling 118, Self-Exploration and the Teaching Profession (2)	2-3
Education 110 The Teaching Experience: Exploration (3)	
Education 101, American Schools and Society	3
Education 200, Introduction to Elementary Classroom Teaching	3
Biology 115, Concepts in Biology for Educators	4
English 270, Children's Literature	3
Child Development 107, Child Growth and Development (DS1)	3
OR Earth Sciences 121, Earth Sciences for Educators	
OR Physical Science 100, Survey of Chemistry and Physics	4
OR Mathematics 105 Mathematics for Liberal Arts Students (3)	
OR Mathematics 203, Fundamental Concepts of Elementary Mathematics (4)	3-4
TOTAL	25-27

For those students following transfer patterns for elementary education programs the following general education electives are recommended to meet content area knowledge for the CSET. They may also be used to meet certain categories of the general education requirements for students not transferring and completing Plan A for the associate's degree: Communication 110, English 103, Mathematics 105, History 101, History 120, Political Science 101, Geography 100, History 133, Anthropology 104; and Art 100 or Dance 100 or Music 101 or Theatre 100; and English 231, 232, 241, 242, 271 or 272.

Suggested Secondary Teaching Emphasis

Teaching at the secondary level (high school and middle school) requires a single subject credential. Students major in the subject they plan to teach and pass a subject matter competency exam or complete a state approved list of courses in the discipline. Students are advised to work with an SCC counselor to plan this course of study. Education 204 and Education 210, offered at SCC, are recommended prerequisites for secondary credential programs.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Certificate of Achievement in After School Program Assistant (38157)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Counseling 118, Self-Exploration and the Teaching Profession (2)	2-3
OR Education 110 The Teaching Experience: Exploration (3)	
Education 113, Tutoring Reading in Elementary Schools	1
Education 113, Educational Strategies for Tutors and Instructional Aides	1
Child Development 120A, Development of the School-Age Child (DS5)	3
Child Development 120B, School-Age Child Care and Recreation Activities	3
Successful completion of courses listed below or test score indicating higher course placement:	
Introduction to Composition	0-3
Mathematics N60, Elementary Algebra	0-4
TOTAL	9-17 9-10

6/17/2019, 1/13/2020

Certificate of Achievement After School Program Associate Teacher (37911)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Communication 110, Public Speaking	3
Counseling 118, Self-Exploration and the Teaching Profession (2)	2-3
OR Education 110, The Teaching Experience: Exploration (3)	
Education 113, Tutoring Reading in Elementary Schools	1
Education 113, Educational Strategies for Tutors and Instructional Aides	1
OR Child Development 107, Child Growth and Development (DS1)	3
OR Psychology 157, Introduction to Child Psychology	3
Child Development 110, Child, Family and Community (DS2)	3
Child Development 120B, School-Age Child Care and Recreation Activities	3
Education 211, Classroom Practices for Diverse Learners	3
TOTAL	15-16

6/17/2019, 1/13/2020

Certificate of Achievement in Special Education Paraprofessional (38158)

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 I 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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate analysis and knowledge of the personal and team roles and responsibilities of the Special Education Paraprofessional in the public school which includes diagnosis and implementation strategies for students with special needs.

Certificate requirements	Units
Counseling 118, Self-Exploration and the Teaching Profession (2)	2-3
OR Education 110 The Teaching Experience: Exploration (3)	
Education 209, Roles and Responsibilities of the Special Education Paraprofessional	3
Education 211, Classroom Practices for Diverse Learners	3
OR Child Development 107, Child Growth and Development (DS1)	3
OR Psychology 157, Introduction to Child Psychology	3
Child Development 205, Introduction to Children with Special Needs	3
Child Development 206, Curriculum and Intervention Strategies for Children with Special Needs	3
TOTAL	17 14-15

6/17/2019

Students planning to transfer to CSU Fullerton's Human Services major—Person's with Disabilities Track will receive up to 17 units of credit toward the major if they have satisfactorily completed the requirements for this certificate.

Certificate of Achievement Bilingual Instructional Aide: Spanish (37913)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate knowledge of the practical skills and knowledge required to work in an educational setting requiring bilingual abilities.

Certificate requirements	Units
Education 110, The Teaching Experience: Exploration	3
Education 113, Tutoring Reading in Elementary Schools	1
OR Spanish 102, Elementary Spanish II (5)	5
OR Spanish 111, Spanish for Spanish Speakers 2 (5)	5
Seal of Bilingualism in Spanish Language*	
Spanish 115, Practical Communication in Spanish for Teachers	2

*as verified by high school transcripts



TOTAL 6-11

Courses

Education 101

American Schools and Society

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H.

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. **CSU/UC** 1/13/2020

Education 110

The Teaching Experience: Exploration

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Education 113

Tutoring Reading in Elementary Schools

Educational Strategies for Tutors and Instructional Aides

Unit(s): 1.0

Class Hours: 18 Lecture total.

An examination of effective tutoring strategies with a focus on the reading skills of elementary age children. Students are placed in local K-8 classrooms, tutoring centers, and/or after school programs to gain experience tutoring and working with school-age children. 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. **CSU** 1/13/2020

Education 200

Introduction to Elementary Classroom Teaching

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H and Education 101.

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. **CSU/UC (C-ID EDUC 200)** 1/13/2020

Education 204

Proficiency in Educational Technologies for Teachers

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Education 209

Roles and Responsibilities of the Special Education Paraprofessional

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Education 210

The Teaching Experience: Secondary Education

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Education 211

Classroom Practices for Diverse Learners

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



ELECTRICIAN (ELCT)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

General Electrician

The Associate of Science degree and Certificate of Achievement in General Electrician provide instruction for those seeking a career as an electrician. This meets the state requirements as an electrician trainee program.

Associate of Science General Electrician (18791)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Recertify health and safety, first aid and legally mandated electrical training required to maintain journeyworker status.

Major requirements*	Units
Electrician 041, General Electrician 1	3
Electrician 042, General Electrician 2	3
Electrician 043, General Electrician 3	3
Electrician 044, General Electrician 4	3
Electrician 045, General Electrician 5	3
Electrician 046, General Electrician 6	3
Electrician 047, General Electrician 7	3
Electrician 048, General Electrician 8	3
Electrician 049, General Electrician 9	3
Electrician 050, General Electrician 10	3
Electrician 051, Quality Safety Program and First Aid	1.5
TOTAL	31.5

Certificate of Achievement General Electrician (18790)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Recertify health and safety, first aid and legally mandated electrical training required to maintain journeyworker status.

Certificate requirements	Units
Electrician 041, General Electrician 1	3
Electrician 042, General Electrician 2	3
Electrician 043, General Electrician 3	3
Electrician 044, General Electrician 4	3
Electrician 045, General Electrician 5	3
Electrician 046, General Electrician 6	3
Electrician 047, General Electrician 7	3
Electrician 048, General Electrician 8	3
Electrician 049, General Electrician 9	3
Electrician 050, General Electrician 10	3
Electrician 051, Quality Safety Program and First Aid	1.5
TOTAL	31.5

Courses

Electrician 041 General Electrician 1

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

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.

Electrician 042 General Electrician 2

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 041.

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.

Electrician 043 General Electrician 3

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 042.

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.

Electrician 044 General Electrician 4

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 043.

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.

Electrician 045 General Electrician 5

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 044.

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.

Electrician 046 General Electrician 6

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 045.

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.

Electrician 047 General Electrician 7

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 046.

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.

Electrician 048 General Electrician 8

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 047.

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.



Electrician 049

General Electrician 9

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 048.

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.

Electrician 050

General Electrician 10

Unit(s): 3.0

Class Hours: 35 Lecture total, 45 Laboratory total.

Prerequisite: Electrician 049.

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.

Electrician 051

Quality Safety Program and First Aid

Unit(s): 1.5

Class Hours: 20 Lecture total, 10 Laboratory total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Electrician 080

Electrical Safety and First Aid

Unit(s): 1.5

Class Hours: 26 Lecture total.

Meets the needs of electricians already working in the trade. Covers Occupational Safety and Health Administration (OSHA), Quality Safety Program (QSP) and Red Cross first aid and CPR training. Upon successful completion, students will earn American Red Cross First Aid CPR certification. Grade: Pass/No Pass. Open Entry/Open Exit.

Electrician 081

Codeology

Unit(s): 2.0

Class Hours: 32 Lecture total.

Meets the needs of electricians already working in the trade. Covers the National Electrical Code (NEC), definitions and interpretations, using the NEC for calculations, mandatory and fine print rules. Grade: Pass/No Pass. Open Entry/Open Exit.

Electrician 082

NEC Study Level 1

Unit(s): 2.0

Class Hours: 32 Lecture total.

Meets the needs of electricians already working in the trade. Offers a complete study of the National Electrical Code Book from Article 90 through Article 450. Grade: Pass/No Pass. Open Entry/Open Exit.

Electrician 083

Code Calculations

Unit(s): 2.0

Class Hours: 32 Lecture total.

Meets the needs of electricians already working in the trade. Takes the student through all the calculations an electrician may use when referencing the National Electrical Code. Grade: Pass/No Pass. Open Entry/Open Exit.

Electrician 084

Math Skills for the Electrician

Unit(s): 2.0

Class Hours: 32 Lecture total.

Meets the needs of electricians already working in the trade. Covers fractions/decimals and basic algebra. Grade: Pass/No Pass. Open Entry/Open Exit.

ENGINEERING (ENGR)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Chair, Physics and Engineering: Cynthia Swift

Faculty: Craig Rutan

The engineering program offers a comprehensive set of courses designed to prepare students for transfer into one of many different engineering majors at a four year university. Students will be exposed to the many aspects of engineering including discovery, creation of new technologies, and service to society.

Courses

Engineering 220

Statics

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 185 and Physics 250A.

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. **CSU/UC**

Engineering 225

Dynamics

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Engineering 220.

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. **CSU/UC**

Engineering 230

Network Analysis

Unit(s): 5.0

Class Hours: 72 Lecture total, 54 Laboratory total.

Prerequisite: Physics 250B

Corequisite: Mathematics 287 or 295

Recommended Preparation: Prior completion of Mathematics 287 or 295.

An introductory course on the modeling and analysis of electrical networks. Topics include basic network theorems, steady state analysis, Laplace and Fourier transforms. **CSU/UC (C-ID ENGR 260, ENGR 260L)**



ENGLISH (ENGL)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, English: Elizabeth Elchlepp

Faculty: Rick Adams, Lynnette Beers-McCormick, Lisa Dela Cusack, Elizabeth Elchlepp, Corinna Evett, Sara Gonzalez, Kathy Hall, Kathryn Kosuth-Wood, William Lennertz, Ryan Murphy, Nidzara Pecenkovic, Maureen Roe, Roberta Tragarz

Associate in Arts

English for Transfer (31366)

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 the California State University system to pursue a baccalaureate degree in English or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major Requirements*

	Units
English 102/102H, Literature and Composition	4
English 103/103H, Critical Thinking and Writing	4

Select two (2) courses from the following (List A):

English 231, Survey of English Literature I (3)	6
English 232, Survey of English Literature II (3)	
English 241, Survey of American Literature, 1600-1865 (3)	
, Survey of American Literature, 1865-Present (3)	
English 271, Survey of World Literature I (3)	
English 272, Survey of World Literature II (3)	

Select one (1) course from the following (List B):

An additional course from List A (may not be a course used to satisfy the requirements of List A)	3
English 213, Creative Writing (3)	

Select one (1) course from the following (List C):

An additional course from List A or B (may not be a course used to satisfy the requirements of List A or B)	3
English 220, Survey of the Bible As Literature (3)	
English 233A, Shakespeare's Comedies and Romances (3)	
English 233B, Shakespeare's Tragedies and History Plays (3)	
English 246, Survey of Chicano Literature (3)	
English 270, Children's Literature (3)	
English 278, Survey of Literature by Women (3)	

TOTAL 20

Associate of Arts

English (11928)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.
- Analyze and evaluate texts, written, visual, and oral, for structure, soundness, and creativity.

Major requirements*

	Units
English 101/101H, Freshman Composition	4
English 102/102H, Literature and Composition	4
English 103/103H, Critical Thinking and Writing	4

Select one (1) sequence from the following:

English 231, 232, Survey of English Literature (3, 3)	6
English 241, 242, Survey of American Literature (3, 3)	
English 271, 272, Survey of World Literature (3, 3)	

Select four (4) courses from the following:

No more than 3 units in either English 211, 212, 214, or 215 may be used for the required 12 units of electives.	12
English 213, Creative Writing (3)	
English 220, Survey of the Bible As Literature (3)	
English 231, Survey of English Literature I (3)	
English 232, Survey of English Literature II (3)	
English 233A, Shakespeare's Comedies and Romances (3)	
English 233B, Shakespeare's Tragedies and History Plays (3)	
English 241, Survey of American Literature, 1600-1865 (3)	
, Survey of American Literature, 1865-Present (3)	
English 246, Survey of Chicano Literature (3)	
English 270, Children's Literature (3)	
English 271, Survey of World Literature I (3)	
English 272, Survey of World Literature II (3)	
English 278, Survey of Literature by Women (3)	

TOTAL 30

Students planning to transfer to 4-year schools should consult with English departments at those institutions regarding specific lower-division requirements and unit limits.

Courses

English N59

Fundamentals of Reasoning and Writing

Unit(s): 4.0

Class Hours: 72 Lecture total, 18 Laboratory total.

Corequisite: English N58.

Prepares students for academic reading, critical reasoning, and the expository and argumentative writing expected in transfer and associate degree classes. Additional hours in Writing Center required for extended practice in refining drafts with an emphasis on sentence skills and grammar.

English 061

Introduction to Composition

Unit(s): 4.0

Class Hours: 72 Lecture total, 18 Laboratory total.

Prerequisite: English N60 or [recommendation from the qualifying profile from the English placement process](#).

Expository paragraph and essay writing emphasizing various methods including argumentation. Practice in refining sentence skills and grammar. 16 additional hours in Writing Center required (one hour per week for 16-week semester sections). 6/17/2019



English 099
Introduction to Composition with Integrated Support
 Unit(s): 4.5
 Class Hours: 72 Lecture total, 36 Laboratory total.
 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.

English 100
Freshman Composition with Integrated Support
 Unit(s): 4.5
 Class Hours: 72 Lecture total, 36 Laboratory total.
 Prerequisite: American College English 116 or English N59 or qualifying profile from English placement process.
 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. *CSU/UC*

English 101
Freshman Composition
 Unit(s): 4.0
 Class Hours: 72 Lecture total.
 Prerequisite: American College English 116 or 099 or qualifying profile from the English placement process.
 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. *CSU/UC (C-ID ENGL 100)* 1/13/2020

English 101H
Honors Freshman Composition
 Unit(s): 4.0
 Class Hours: 72 Lecture total.
 Prerequisite: American College English 116 or 099 or qualifying profile from English placement process and a high school or college GPA of 3.0 or above.
 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. *CSU/UC (C-ID ENGL 100)* 1/13/2020

English 102
Literature and Composition
 Unit(s): 4.0
 Class Hours: 72 Lecture total.
 Prerequisite: English 100 or 101/101H.
 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. *CSU/UC (C-ID ENGL 110), (ENGL 120)* 1/13/2020

English 102H
Honors Literature and Composition
 Unit(s): 4.0
 Class Hours: 72 Lecture total.
 Prerequisite: English 100 or 101/101H and a high school or college GPA of 3.0 or above.
 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. *CSU/UC (C-ID ENGL 110, ENGL 120 - Introduction To Literature (02/24/2017))* 1/13/2020

English 103
Critical Thinking and Writing
 Unit(s): 4.0
 Class Hours: 72 Lecture total.
 Prerequisite: English 100 or 101/101H.
 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. *CSU/UC (C-ID ENGL 105)* 1/13/2020

English 103H
Honors Critical Thinking and Writing
 Unit(s): 4.0
 Class Hours: 72 Lecture total.
 Prerequisite: English 100 or 101/101H and A high school or college GPA of 3.0 or above.
 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. *CSU/UC (C-ID ENGL 105)* 1/13/2020

English 213
Creative Writing
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.
 This course offers an introduction to writing techniques focusing on the four literary genres: poetry, drama, short story, and novel. Class will be conducted in a workshop format with an emphasis on writing and critiquing. *CSU/UC (C-ID ENGL 200)* 1/13/2020

English 220
Survey of the Bible As Literature
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.
 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. *CSU/UC* 1/13/2020

English 231
Survey of English Literature I
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.
 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. *CSU/UC (C-ID ENGL 160)* 1/13/2020

English 232
Survey of English Literature II
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.
 Introductory study of representative selections from the English Romantic Movement to the present. Emphasis on those authors best exemplifying their period, such as Joyce, Austen, Wordsworth, Coleridge, Byron, the Shelleys, Keats, Tennyson, Newman, Carlyle, the Brownings, Dickens, the war poets, Houseman, Yeats, Wilde and Woolf.



English 233A
Shakespeare's Comedies and Romances
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.

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. **CSU/UC**

1/13/2020

English 233B
Shakespeare's Tragedies and History Plays
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.

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. **CSU/UC**

1/13/2020

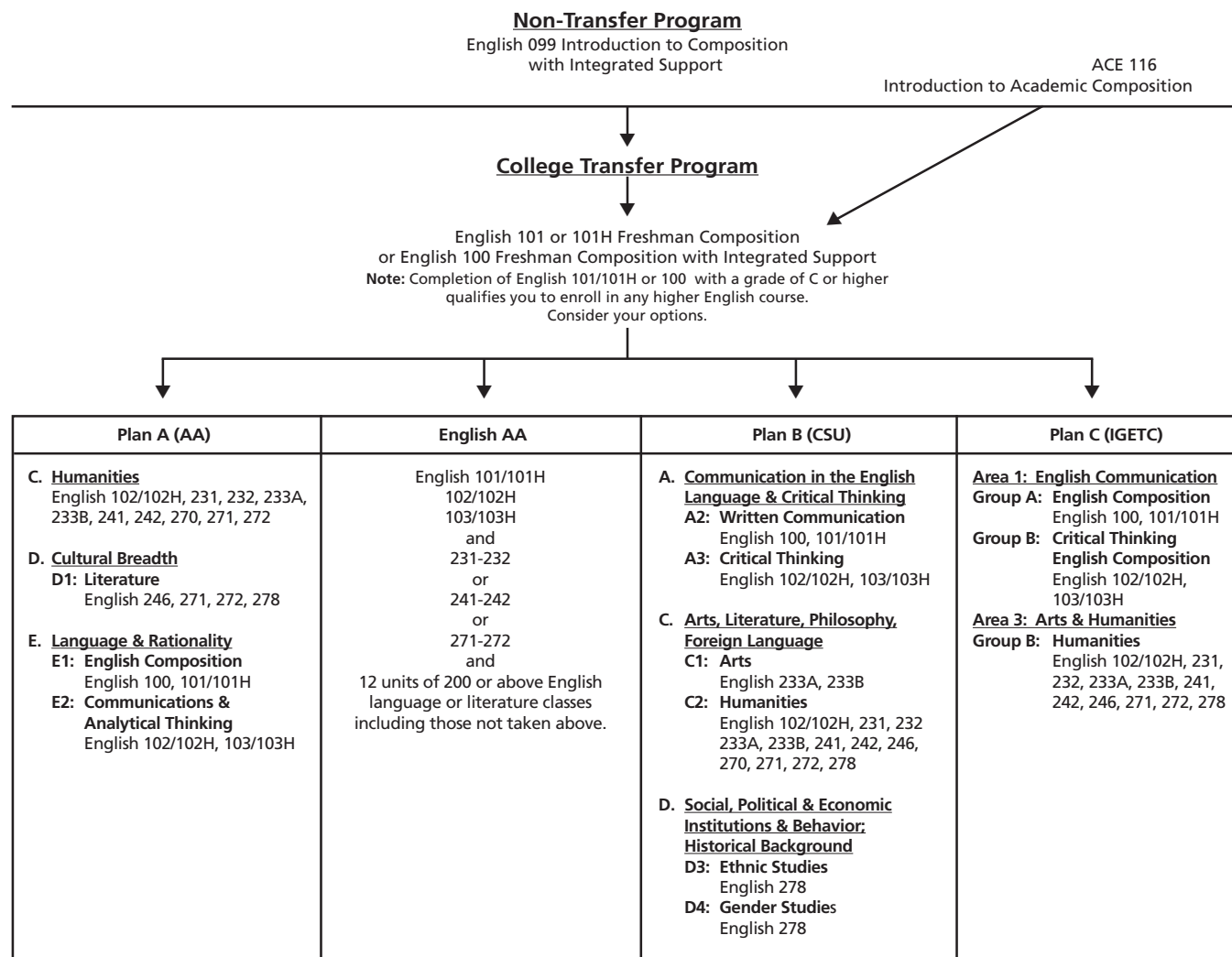
English 241
Survey of American Literature, 1600-1865
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 101/101H.

~~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.~~

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. **CSU/UC (C-ID ENGL 130)**

1/13/2020

ENGLISH PROGRAM AND SEQUENCE OF COURSES



*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



English 242
Survey of American Literature, 1865-Present

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 101/101H.

~~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.~~

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. **CSU/UC (C-ID ENGL 135)** 1/13/2020

English 243
The Modern American Novel

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 101/101H.

~~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.~~

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. **CSU** 1/13/2020

English 246
Survey of Chicano Literature

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.

Examines American literature by and about Chicanos. Emphasizes the relationships between various works and the Chicanos' place in American society/culture. **CSU/UC** 1/13/2020

English 270
Children's Literature

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 100 or 101/101H.

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. **CSU (C-ID ENGL 180)** 1/13/2020

English 271
Survey of World Literature I

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 101/101H.

~~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.~~

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. **CSU/UC (C-ID ENGL 140)** 1/13/2020

English 272
Survey of World Literature II

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 101/101H.

~~Survey of world literary masterworks since the Renaissance studied for artistic form, cultural influence, and contributions to modern and contemporary thought.~~

Survey of world literary masterworks since the Renaissance studied for artistic form, cultural influence, and contributions to modern and contemporary thought. **CSU/UC (C-ID ENGL 145)** 1/13/2020

English 278
Survey of Literature by Women

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: English 101/101H.

An historical survey of literature by women, including short stories, novels, plays, poetry, and non-fiction. **CSU/UC**



ETHNIC STUDIES (ETHN)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Ethnic Studies: Tiffany Gause

Faculty: Erika Gutierrez

Courses

Ethnic Studies 101

Introduction to Ethnic Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Ethnic Studies 110

Introduction to Asian Pacific American Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Ethnic Studies 120

Introduction to African American Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Ethnic Studies 130 (Formerly Chicano Studies 101)

Introduction to Chicano Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC** 1/13/2020

Ethnic Studies 140

Introduction to Native American Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. 1/13/2020



FRENCH (FREN)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Modern Languages: Lourdes Fajardo

Courses

French 101

Elementary French 1

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

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. **CSU/UC**

French 102

Elementary French II

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: French 101 or two years of high school French with a grade of C or better.

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. Sixteen additional hours in the Modern Language Lab required. **CSU/UC**

French 194

Conversation and Composition I

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: French 101 or two years of high school French with a grade of C or better.

Course emphasizes extensive practice in oral expression and listening comprehension in the context of French culture, daily life, and topics of current interest. **CSU**

French 201

Intermediate French I

Unit(s): 5.0

Class Hours: 90 Lecture total.

Prerequisite: French 102 or three years of high school French with a grade of C or better.

A college-level French class focusing on expansive review of usage and grammar, discussion in French of interpretive reading material, and conversation and composition. **CSU/UC**

French 202

Intermediate French II

Unit(s): 5.0

Class Hours: 90 Lecture total.

Prerequisite: French 201 or four years of high school French with a grade of C or better.

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. **CSU/UC**

GEMOLOGY (GEM)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Facilitator: Diana Sanders Cinamon

The Associate of Science degree and Certificate of Achievement in Gemology provide 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.

Associate of Science Gemology (11874)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate the theory and practice of gemology.
- Demonstrate knowledge of the business of gem stones.

Major requirements*	Units
Gemology 011, Introductory Colored Stones	4
Gemology 012, Advanced Colored Stones	4
Gemology 020, Diamonds	4
Gemology 030, Antique and Period Jewelry	3
Gemology 050, Pearls	3
TOTAL	18

Certificate of Achievement Gemology (21644)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate the theory and practice of gemology.
- Demonstrate knowledge of the business of gem stones.

Certificate requirements	Units
Gemology 011, Introductory Colored Stones	4
Gemology 012, Advanced Colored Stones	4
Gemology 020, Diamonds	4
Gemology 030, Antique and Period Jewelry	3
Gemology 050, Pearls	3
TOTAL	18

Courses

Gemology 011

Introductory Colored Stones

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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.

Gemology 012

Advanced Colored Stones

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.

**Gemology 015****Colored Stones and Diamond Lab**

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Recommended Preparation: Previous or concurrent enrollment in another Gemology course.

Laboratory experience in testing and identification of colored gemstones and/or full grading of diamonds for clarity, color, cut and carat weight. Grade: Pass/No Pass.

Gemology 020**Diamonds**

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

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.

Gemology 030**Antique and Period Jewelry**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Gemology 050**Pearls**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

GENDER, SEXUALITY AND WOMEN'S STUDIES (GSWS)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Gender, Sexuality, and Women's Studies: Tiffany Gause

Faculty: Melissa Govea-Von Velasco, Shereen Siddiqui

Associate of Arts**Gender, Sexuality, and Women's Studies (11938)**

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements***Units**

Gender, Sexuality, and Women's Studies 101, Introduction to Women's Studies	3
Gender, Sexuality, and Women's Studies 102, Money, Sex, and Power	3
History 127, Women in U.S. History	3
Interdisciplinary Studies 155, Human Sexuality	3
Sociology 220, Introduction to Gender and Sexualities	3

Select three (3) to four (4) units from the following: 3-4

Communication 225/225H, Gender Communication (3)	
Counseling 116, Career/Life Planning and Personal Exploration (3)	
English 278, Survey of Literature by Women (3)	
Kinesiology 110, Women's Health Issues (3)	
Library & Information Studies 103, Advanced Internet Research (1)	
Philosophy 108, Ethics (3)	
Political Science 221, Women in American Politics (3)	
Psychology 180, Psychology of Gender (3)	
Sociology 130, Relationships, Marriages, and Family Dynamics (3)	

TOTAL 18-19**Courses****Gender, Sexuality and Women's Studies 101****Introduction to Women's Studies**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID SJS 120)*

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



**Gender, Sexuality and Women’s Studies 102
Money, Sex, and Power**

Unit(s): 3.0

Class Hours: 54 Lecture total.

This interdisciplinary course analyzes the sexual division of labor and domestic work. An intersectional perspective is used to examine the historical and contemporary experiences of work and family, as shaped by gender, sexuality, race, class, and different dimensions of difference. *CSU/UC*

**Gender, Sexuality and Women’s Studies 103
Men and Masculinities**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

**GENERAL EDUCATION CERTIFICATES
CSU/IGETC**

Division of Counseling and Student Support Services

Interim Dean: Jennifer Coto

Articulation Officer: Leonor Aguilera

**California State University (CSU) General Education
Breadth Certificate of Achievement (18117)**

Complete all CSU General Education Breadth Requirements (Plan B) to a minimum of 39 units as outlined on page 47.

**Intersegmental General Education Transfer Curriculum
(IGETC) Certificate of Achievement (18118)**

Complete all Intersegmental General Education Transfer Curriculum Requirements (Plan C) to a minimum of 37 units as outlined on page 48.

**Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.*



GEOGRAPHY AND THE ENVIRONMENT (GEOG)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Co-Chairs, Geography: Vanessa Engstrom

Faculty: Vanessa Engstrom

Associate in Arts

Geography for Transfer (32364)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Geography 101/101H, Physical Geography	3
Geography 101L, Physical Geography Laboratory	1
Geography 102/102H, Cultural Geography	3

Select two (2) courses from the following (List A): 4-6

- Geography 100/100H, World Regional Geography (3)
- Geography 130/130H, Introduction to Weather and Climate (3)
- Geography 140, California Geography (3)
- Geography 150, Exploring Maps and Geographic Technologies (3)
- Geography 155, Introduction to Geographic Information Systems (3)
- OR
- Survey/Mapping Sciences 155, Introduction to Geographic Information Systems (3)
- Geography 160, Regional Field Studies (3)(1)

Select two (2) courses from the following (List B): 6

- Any list A course not already used.
- Anthropology 100/100H, Introduction to Cultural Anthropology (3)
- Biology 109/109H, Fundamentals of Biology (3)
- Earth Sciences 100, Physical Geology (3)
- Earth Sciences 160, Oceanography (3)
- Political Science 220, International Politics (3)
- Sociology 150, Introduction to Race and Ethnicity (3)

6/17/2019

TOTAL 17-19

Courses

Geography 100

World Regional Geography

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID GEOG 125)**

Geography 100H

Honors World Regional Geography

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: .

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. **CSU/UC (C-ID GEOG 125)**

Geography 101

Physical Geography

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction to the physical elements of geography: maps, earth/sun relationships, meteorology and climatology, natural vegetation, soils, and geomorphology. **CSU/UC (C-ID GEOG 110)**

Geography 101H

Honors Physical Geography

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

Introduction to the physical elements of geography: maps, earth/sun relationships, meteorology and climatology, natural vegetation, soils, and geomorphology. **CSU/UC**

Geography 101L

Physical Geography Laboratory

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Geography 101/101H or concurrent enrollment

Recommended Preparation: Mathematics N60.

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. **CSU/UC (C-ID GEOG 111)**

Geography 102

Cultural Geography

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID GEOG 120)**



**Geography 102H
Honors Cultural Geography**

Unit(s): 3.0
Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.
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. *CSU/UC*

**Geography 130
Introduction to Weather and Climate**

Unit(s): 3.0
Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID GEOG 130)*

**Geography 130H
Honors Introduction to Weather and Climate**

Unit(s): 3.0
Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.
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. *CSU/UC*

**Geography 140
California Geography**

Unit(s): 3.0
Class Hours: 54 Lecture total.

Recommended Preparation: Geography 100/100H.
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. *CSU/UC (C-ID GEOG 140)*

**Geography 150
Exploring Maps and Geographic Technologies**

Unit(s): 3.0
Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID GEOG 150)*

**Geography 155
Introduction to Geographic Information Systems**

Unit(s): 3.0
Class Hours: 45 Lecture total, 27 Laboratory total.

Recommended Preparation: Familiarity with PC and Windows operating environment.
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. *CSU/UC (C-ID GEOG 155)*

**Geography 160
Regional Field Studies**

Unit(s): 1.0
Class Hours: 9 Lecture total, 27 Laboratory total.

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. *CSU (C-ID GEOG 160)*



GEOLOGY (GEOL)

(see *Earth Sciences*)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Chair, Earth Sciences: Debra Brooks

Faculty: Debra Brooks

Associate in Science

Geology for Transfer (32044)

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 the California State University system 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of geological processes based upon observation of Earth materials and features.
- Demonstrate an understanding of the basic principles of geology.

Major requirements*	Units
Earth Sciences 100, Physical Geology	3
Earth Sciences 100L, Physical Geology Laboratory	1
Earth Sciences 111, Historical Geology	4
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
Mathematics 180/180H, Single Variable Calculus I	4
Mathematics 185, Single Variable Calculus II	4
TOTAL	26

Students are encouraged to take additional articulated major preparation courses prior to transfer such as, Physics 250A and 250B and Biology 211. While these additional courses are not required for this degree, completion of these courses will better prepare students for upper-division Geology courses at a CSU or a UC. It is highly recommended that students meet with an SCC counselor to discuss possible courses for major preparation for either the CSU system or the UC system, because CSU campuses do not all have identical requirements, and CSU requirements are also not identical to UC requirements.

Courses

(see *Earth Sciences*)

HISTORY (HIST)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, History: Scott Howell

Faculty: Scott Howell, Rachel Petrocelli, Narges Rabii-Rakin, Stephen Reed

Associate in Arts

History for Transfer (31720)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major Requirements*

Major Requirements*	Units
History 101/101H, World Civilizations to the 16th Century	3
History 102/102H, World Civilizations Since the 16th Century	3
History 120/120H, The United States to 1877	3
History 121/121H, The United States Since 1877	3
Select one (1) course from Area 1:	3
History 118, Social and Cultural History of the United States (3)	
History 124, Mexican-American History in the United States (3)	
History 127, Women in U.S. History (3)	
History 152, Latin American History (3)	
History 162, Asian Civilizations (3)	
Select one (1) course from Area 2:	3
Economics 102, Principles/Macro (3)	
Geography 100/100H, World Regional Geography (3)	
History 126, United States since 1945 (3)	
History 133, History of California (3)	
History 240, Introduction to Peace and Conflict Studies (3)	
Philosophy 118, History of Philosophy (3)	
Political Science 101/101H, American Government and Politics (3)	
Political Science 200/200H, American Political Thought (3)	
Political Science 201, Introduction to Comparative Politics (3)	
Political Science 220, International Politics (3)	
Political Science 221, Women in American Politics (3)	
Political Science 230, Political Theory (3)	
TOTAL	18



**Certificate of Achievement
Global Studies**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Develop analytical skills by evaluating key historical decisions, testing hypotheses, and choosing among contending viewpoints.100
- Develop communication skills through writing exercises and discussions of critical historical events.100
- Act as better informed citizens and knowledgeable voters through the study of U.S. political traditions and concepts of citizenship.100
- Discuss, analyze, compare and contrast, diverse world cultural, religious, and political traditions.100

Certificate requirements	Units
History 102/102H, World Civilizations Since the 16th Century	3
Select two (2) courses from the following:	6
History 132, Modern African History (3)	
History 142, History of the Modern Middle East (3)	
History 152, Latin American History (3)	
History 162, Asian Civilizations (3)	
Select one (1) course from the following:	3
Geography 100, World Regional Geography (3)	
Geography 100H, Honors World Regional Geography (3)	
Political Science 220, International Politics (3)	
1/13/2020 TOTAL	12

Courses

**History 101
World Civilizations to the 16th Century**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Examines the development of world civilizations and their interrelationships through analysis of their basic ideas basic ideas, institutions, personalities, and artistic achievements from the earliest beginnings to the sixteenth century. *CSU/UC (C-ID HIST 150)*

**History 101H
Honors World Civilizations to the 16th Century**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
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. *CSU/UC (C-ID HIST 150)*

**History 102
World Civilizations Since the 16th Century**

Unit(s): 3.0
Class Hours: 54 Lecture total.
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. *CSU/UC (C-ID HIST 160)*

**History 102H
Honors World Civilizations Since the 16th Century**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
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. *CSU/UC (C-ID HIST 160)*

**History 118
Social and Cultural History of the United States**

Unit(s): 3.0
Class Hours: 54 Lecture total.
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. *CSU/UC*

**History 120
The United States to 1877**

Unit(s): 3.0
Class Hours: 54 Lecture total.
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. *CSU/UC (C-ID HIST 130)*

**History 120H
Honors: The United States to 1877**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
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. *CSU/UC (C-ID HIST 130)*

**History 121
The United States Since 1877**

Unit(s): 3.0
Class Hours: 54 Lecture total.
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. *CSU/UC (C-ID HIST 140)*

**History 121H
Honors the United States Since 1877**

Unit(s): 3.0
Class Hours: 54 Lecture total.
Prerequisite: A high school or college GPA of 3.0 or above.
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. *CSU/UC (C-ID HIST 140)*

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.

**History 122****American History-Dynamics of Change**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 124**Mexican-American History in the United States**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 126**United States since 1945**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: History 121.

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. **CSU/UC**

History 127**Women in U.S. History**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 132**Modern African History**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 133**History of California**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 142**History of the Modern Middle East**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**
1/13/2020

History 152**Latin American History**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 162**Asian Civilizations**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

History 240**Introduction to Peace and Conflict Studies**

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Political Science 101/101H or 220.

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. **CSU/UC**



INTERDISCIPLINARY STUDIES (IDS)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Interdisciplinary Studies: Tiffany Gause

Santiago Canyon College offers multiple interdisciplinary degrees and certificates which span the boundaries of traditional academic majors. Students are provided with opportunities to pursue areas of emphases deriving from the interaction of different disciplines. The sequences of courses lead to degrees and certificates which incorporate concepts from the humanities and arts, the natural sciences and the social sciences. The broad framework of these awards enables students to explore the range of human knowledge.

Each degree and certificate includes a focused study in at least one established interdisciplinary core. Each award specifies the requirements necessary to earn the degree or the certificate.

For the Liberal Arts degrees, the areas of inquiry are referred to as "emphasis requirements". Major requirements for the associate degrees are in addition to the general education requirements. Certificates of Achievement do not require general education.

The interdisciplinary degrees and certificates can be found on:
 Liberal Arts, pages 175-177
 Modern Languages, page 184

Courses

Interdisciplinary Studies 155

Human Sexuality

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

ITALIAN (ITAL)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Modern Languages: Lourdes Fajardo

Courses

Italian 101

Elementary Italian I

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

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. *CSU/UC*

Italian 102

Elementary Italian II

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Italian 101 or two years of high school Italian.

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. *CSU/UC*

Italian 194

Conversation and Composition

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Italian 101 or two years high school Italian with grade of C or better.

Reinforcement of conversational and composition skills. Implementation of language structure through conversation, reading and composition. Discussions of Italian culture. *CSU*

Italian 195

Advanced Conversational Italian

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Italian 102.

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. *CSU/UC*

Italian 201

Intermediate Italian I

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Italian 102 or three years of high school Italian.

A college-level Italian class focusing on expansive review of usage and grammar, discussions of interpretive readings, conversation, and composition. *CSU/UC*

Italian 202

Intermediate Italian II

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Italian 201 or four years of high school Italian.

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. *CSU/UC*



KINESIOLOGY (KIN)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Co-Chairs, Kinesiology: Lisa Camarco, Ian Woodhead

Faculty: Lisa Camarco, Shawn Cummins, Ian Woodhead

Associate in Arts

Kinesiology for Transfer (32434)

The Associate in Arts in Kinesiology for Transfer 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 degree, 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate a general understanding of human anatomy, human physiology, and the mechanics of human movement.
- Demonstrate practical application of fitness concepts.

Major requirements*	Units
Kinesiology 100, Introduction to Kinesiology	3
Biology 239, General Human Anatomy	4
Biology 249, Human Physiology	4

Select three (3) units from the following: 3
 Must select one (1) unit course from three different areas:
 Aquatics, Combatives, Dance, Fitness, or Team Sports.

Aquatics

Kinesiology 185A, Basic Swimming (1)
 Kinesiology 185B, Intermediate Swimming (1)
 Kinesiology 185C, Advanced Swimming (1)
 Kinesiology 189A, Basic Aqua Aerobics (1)

Combatives

Kinesiology 125A, Basic Cardio Kickboxing (1)
 Kinesiology 125B, Intermediate Cardio Kickboxing (1)
 Kinesiology 128A, Basic Tai Chi (1) 1/13/2020

Dance

Dance 106A, Introduction to Modern Dance (1)
 Dance 106B, Introduction to Modern Dance (1)
 Dance 108A, Introduction to Ballet (1)
 Dance 108B, Introduction to Ballet (1)
 Dance 115A, Introduction to Tap Dance (1)
 Dance 115B, Introduction to Tap Dance (1)
 Dance 119A, Introduction to Jazz Dance (1)
 Dance 119B, Introduction to Jazz Dance (1)

Fitness

Kinesiology 119, Personal Fitness Evaluation (1)
 Kinesiology 120A, Basic Aerobics (1)
 Kinesiology 120B, Intermediate Aerobics (1)
 Kinesiology 121A, Basic Step Aerobics (1)
 Kinesiology 126A, Basic Spin (1)
 Kinesiology 126B, Intermediate Spin (1)
 Kinesiology 127A, Basic Yoga (1)
 Kinesiology 127B, Intermediate Yoga (1)
 Kinesiology 127C, Advanced Yoga (1)
 Kinesiology 128A, Basic Tai Chi (1)
 Kinesiology 140A, Basic Circuit Weight Training (1)
 Kinesiology 140B, Intermediate Circuit Weight Training (1)
 Kinesiology 140C, Advanced Circuit Weight Training (1)
 Kinesiology 146A, Basic Strength Training (1)
 Kinesiology 146B, Intermediate Strength Training (1)
 Kinesiology 146C, Advanced Strength Training (1)
 Kinesiology 147, Strength Training for Women (1)
 Kinesiology 200, Conditioning for Athletes-Men (1)
 Kinesiology 201, Conditioning for Athletes-Co-Ed (1)
 Kinesiology 202, Conditioning for Athletes-Women (1)
 Kinesiology 203, Speed and Agility-Men (1)
 Kinesiology 204, Speed and Agility-Women (1)

Team Sports

Kinesiology 160A, Basic Basketball (1)
 Kinesiology 160B, Intermediate Basketball (1)
 Kinesiology 163A, Basic Indoor Soccer (1)
 Kinesiology 168A, Basic Volleyball (1)
 Kinesiology 168B, Intermediate Volleyball (1)

Select two (2) courses from the following (List A):	7-10
Kinesiology 101, First Aid and CPR (3)	
Chemistry 200A/200AH, General Chemistry A (5)	
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4 1/13/2020
Physics 150A, Introductory Physics I (4)	
Physics 250A, Physics for Scientists and Engineers I (5)	

TOTAL 21-24



Courses

Kinesiology 100

Introduction to Kinesiology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU (C-ID KIN 100)*

Kinesiology 101

First Aid and CPR

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID KIN 101)*

Kinesiology 102

Nutrition and Fitness

Unit(s): 2.0

Class Hours: 36 Lecture total.

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. *CSU/UC*

Kinesiology 104

Healthful Living

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Kinesiology 109

Sport in US Society

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU*

Kinesiology 110

Women's Health Issues

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Kinesiology 111

Sports Psychology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU*

Kinesiology 119

Personal Fitness Evaluation

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 120A

Basic Aerobics

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Aerobic exercises, strength routines and stretching activities set to music designed to improve cardiovascular endurance and enhance muscular strength and flexibility. *CSU/UC*

Kinesiology 120B

Intermediate Aerobics

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

This course provides instruction in various aerobic and stretching movements set to music. Designed to tone the body, improve cardiovascular endurance, and increase one's ability to exercise safely and effectively. *CSU/UC*

Kinesiology 121A

Basic Step Aerobics

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 123A

Basic Stretch, Flex, and Tone

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A combination of beginning stretching and toning exercises to increase strength, flexibility, and overall body fitness. *CSU/UC*

Kinesiology 123B

Intermediate Stretch, Flex, and Tone

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Intermediate level course designed to challenge and improve upon the individual's level of flexibility, muscle tone, and strength. *CSU/UC*

Kinesiology 125A

Basic Cardio Kickboxing

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A series of combative boxing and kickboxing maneuvers designed to improve muscle tone, cardiovascular endurance, and self defense. *CSU/UC*

Kinesiology 125B

Intermediate Cardio Kickboxing

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

**Kinesiology 126A****Basic Spin**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 126B**Intermediate Spin**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 127A**Basic Yoga**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 127B**Intermediate Yoga**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 127C**Advanced Yoga**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 128A**Basic Tai Chi**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 140A**Basic Circuit Weight Training**

Unit(s): 0.5-1.0

Class Hours: 24-54 Laboratory total.

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. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 140B**Intermediate Circuit Weight Training**

Unit(s): 0.5-1.0

Class Hours: 24-54 Laboratory total.

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. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 140C**Advanced Circuit Weight Training**

Unit(s): 0.5-1.0

Class Hours: 24-54 Laboratory total.

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. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 146A**Basic Strength Training**

Unit(s): 0.5-1.0

Class Hours: 27-54 Laboratory total.

This course introduces students to the basic principles of resistance training through the use of free weight barbells and dumbbells. Emphasis is placed on the development of muscular strength and muscular endurance. Instruction is provided in the areas of free weight safety and practical application of basic strength training concepts. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 146B**Intermediate Strength Training**

Unit(s): 0.5-1.0

Class Hours: 27-54 Laboratory total.

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. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 146C**Advanced Strength Training**

Unit(s): 0.5-1.0

Class Hours: 27-54 Laboratory total.

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. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 147**Strength Training for Women**

Unit(s): 0.5-1.0

Class Hours: 27-54 Laboratory total.

This course is designed to teach students the health and fitness benefits of a regular strength training program. Instruction will focus on the development of muscular strength and endurance, muscle toning, and improvement of body composition and joint stability through the use of free weight exercises and equipment. Emphasis is placed on the lifelong benefits of strength training for the female population. Grade: Pass/No Pass. *CSU/UC*

Kinesiology 160A**Basic Basketball**

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

To introduce and establish basketball fundamentals with a view to encouraging life-time fitness. *CSU/UC*



Kinesiology 160B

Intermediate Basketball

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 163A

Basic Indoor Soccer

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A basic level soccer course to develop fundamental soccer skills in an indoor facility. *CSU/UC*

Kinesiology 168A

Basic Volleyball

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 168B

Intermediate Volleyball

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. *CSU/UC*

Kinesiology 185A

Basic Swimming

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Introductory basic swimming skills, with an emphasis on water safety. *CSU/UC*

Kinesiology 185B

Intermediate Swimming

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Intermediate swim skills, emphasizing the four competitive swim strokes. Speed and endurance swimming will also be emphasized in a training environment. *CSU/UC*

Kinesiology 185C

Advanced Swimming

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Advanced swim skills developed with emphasis on the five competitive swim strokes. Advanced speed and endurance training will be emphasized in a training environment. *CSU/UC*

Kinesiology 189A

Basic Aqua Aerobics

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A class designed to improve muscle tone, flexibility and cardiovascular endurance through exercises using water as a means of resistance. *CSU/UC*

Kinesiology 200

Conditioning for Athletes-Men

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 201

Conditioning for Athletes-Co-Ed

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

An instructor supervised exercise program designed for athletes who participate in sports. Emphasis will be on the development of speed, endurance, flexibility, and strength. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 202

Conditioning for Athletes-Women

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 203

Speed and Agility-Men

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 204

Speed and Agility-Women

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 240

Basketball Team- Men

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*



Kinesiology 241
Basketball Team- Women

Unit(s): 3.0

Class Hours: 162 Laboratory total.

A high-level competitive program in Basketball 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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 242
Basketball Team Off-Season Men

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A high-level, competitive practice and skills program in basketball for male students with exceptional athletic talent. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 245
Volleyball Team- Men

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 246
Volleyball Team- Women

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 247
Volleyball Team Off-Season - Men

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A high-level, competitive practice and skills program in volleyball for male students with exceptional athletic talent. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 248
Volleyball Team Off-Season - Women

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A high-level, competitive practice and skills program in volleyball for female students with exceptional athletic talent. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 255
Cross Country Team-Men

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 256
Cross Country Team-Women

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 257
Cross Country Team-Off Season

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 265
Golf Team-Men

Unit(s): 3.0

Class Hours: 162 Laboratory total.

A high-level, competitive program for male students with exceptional golf talent. Students must meet California Community College Athletic Association (CCCAA) eligibility requirements and pass a health screening prior to participation. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 267
Golf Team-Off Season

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Application of advanced golf techniques as they relate to practice techniques and competitive play in the sport of golf. The class will focus on playing lessons on regulation golf courses. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 270
Soccer Team-Men

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*



Kinesiology 271

Soccer Team-Women

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 272

Soccer Team Off Season-Men

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A high-level, competitive practice and skills program in soccer for male students with exceptional athletic talent. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 273

Soccer Team Off Season-Women

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

A high-level, competitive practice and skills program in soccer for female students with exceptional athletic talent. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 274

Theory of Soccer

Unit(s): 2.0

Class Hours: 36 Lecture total.

A general overview of the history of the game, its rules, tactics, techniques, conditioning and overall preparation to understand, play and enjoy soccer. *CSU/UC*

Kinesiology 281

Softball Team-Women

Unit(s): 3.0

Class Hours: 162 Laboratory total.

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. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 283

Softball Team Off Season-Women

Unit(s): 0.5-1.0

Class Hours: 32-54 Laboratory total.

Basic skills and fundamentals of catching, throwing, pitching, hitting and base running will be covered. Offensive and defensive techniques and strategies will be practiced. May be repeated. Students may take a maximum of 350 hours of any team sport, team off-season course or conditioning course per academic year. *CSU/UC*

Kinesiology 284

Theory of Softball

Unit(s): 2.0

Class Hours: 36 Lecture total.

A general overview of rules, regulations, strategies, mental preparation, skill evaluation and the history of the sport of softball. *CSU/UC*

LIBERAL ARTS

Associate of Arts/Science

Liberal Arts

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. 1/13/2020

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. 1/13/2020

Emphasis requirements*	Units
Complete a minimum of 18 units selected from one of the following areas of emphasis: Arts, Humanities and Communication; Mathematics and Sciences; Multi-Cultural Studies; or Social and Behavioral Sciences.	18

Students are encouraged to select two or more courses within a single discipline in an "area of emphasis" to expand their depth of knowledge within a discipline. All courses in the area of emphasis must be completed with a letter grade of "C" or better. Students are advised to meet with a counselor to select the area of emphasis most appropriate to their educational goal.

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.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Associate of Arts in Arts, Humanities and Communication (18317)

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 with the Communications discipline.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Emphasis requirements (18 units minimum)

American Sign Language 110, 111, 116, 210; Anthropology 104; Art 100/100H, 101/101H, 102/102H; Cinema Studies 103, 104; Communication 100/100H, 101, 110, 111; Dance 100; English 101/101H, 102/102H, 103/103H, 231, 232, 233A, 233B, 241, 242, 246, 270, 271, 272, 278; French 101, 102, 194, 196, 201, 202; History 101/101H, 102/102H, 152, 162; Italian 101, 102, 194, 195, 201, 202; Music 101/101H, 102, 103, 104; Philosophy 106/106H, 108, 110, 111, 112, 115, 118, 120; Reading 150; Spanish 101/101H, 101A, 101B, 102, 110, 111, 194, 195A, 195B, 201, 202; Theatre Arts, 100 1/13/2020

Associate of Science in Mathematics and Sciences (18318):

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 the Health Sciences.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- ~~Demonstrate an ability to analyze and evaluate scientific and mathematical topics.~~ 1/13/2020
- Analyze and evaluate scientific and mathematical topics. 1/13/2020
- Clearly communicate scientific and mathematical reasoning and qualitative problem solving skills using appropriate vocabulary, methodologies and diverse technologies.

Emphasis requirements (18 units minimum)

Anthropology 101; Astronomy 100L, 102, 103, 112; Biology 109/109H, 109L/109HL, 115, 139, 149, 177-200, 211, 212-214, 221, 229, 231, 239, 249, 259; Chemistry 100, 200A/200AH, 200B, 280A, 280B; Earth Sciences 100, 100L, 111, 120, 121, 130, 160, 200; Engineering 220, 225, 230; Geography 100/100H, 101/101H, 101L; Mathematics 080, 085, 086, 105, 140, 150, 170, 171, 180/180H, 185, 219/219H, 220, 280, 287, 290, 295; Physical Science 100; Physics 100, 150A, 150AC, 150B, 150BC, 250A, 250B, 250C, Water Utility Science 107 1/13/2020

Associate of Arts in Multi-Cultural Studies (18319):

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 would include Chicano Studies, Ethnic Studies, Foreign Language, Gender, Sexuality, and Women's Studies, Global Studies, and International Development.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Appreciate the multi-cultural influences on our contemporary culture and society.
- Communicate effectively with individuals and groups from diverse populations.
- Demonstrate knowledge, skills, and attitudes to function positively and productively within a diverse society and in upper division coursework.

Emphasis requirements (18 units minimum)

American Sign Language 110, 111, 116, 210; Anthropology 100/100H, 104; Art 101/101H, 102; Chicano Studies 101; Communication 120/120H, 225/225H; Counseling 101, 116, 118, 150; Education 101; English 246, 271, 272, 278; Ethnic Studies 101; French 101, 102, 194, 196, 201, 202; Gender, Sexuality, and Women's Studies 101, 102; History 124, 127, 152, 162; Italian 101, 102, 194, 195, 201, 202; Kinesiology 110; Music 103; Philosophy 112; Political Science 221; Psychology 170; Spanish 101/101H, 101A, 101B, 102, 110, 111, 194, 195A, 195B, 201, 202



Associate of Arts in Social and Behavioral Sciences (18320):

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. 1/13/2020

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. 1/13/2020

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Emphasis requirements (18 units minimum)

Anthropology 100/100H, 103, 104; ~~Chicano Studies 101~~; Child Development 107, 110, 205, 206, 221; Cinema Studies 105; Communication 120/120H, 225/225H; Computer Science 100; Counseling 150; Criminal Justice 101; Economics 101, 102; English 278; Ethnic Studies 101, 130; Gender, Sexuality, and Women's Studies 101, 102; Geography 100/100H, 102/102H; History 101/101H, 102/102H, 118, 120/120H, 121/121H, 122, 124, 127, 133, 152, 162, 240; Interdisciplinary Studies 155; Kinesiology 109; Mathematics 219/219H, 220; Political Science 101/101H, 200/200H, 220, 221, 230; Psychology 100/100H, 157, 160, 170, 180, 190, 200, 219, 220, 230, 240, 250; Sociology 100/100H, 116/116H, 130, 240 1/13/2020

LIBRARY & INFORMATION STUDIES (LIBI)

Division of Institutional Effectiveness, Library & Learning Support Services

Dean: Aaron Voelcker

Department Co-Chairs, Library: Barbara Sproat, Lana Wong
Faculty: Seth Daugherty, Alice Ho, Linda Martin, Barbara Sproat, Lana Wong

Courses

Library & Information Studies 100

Library Research Fundamentals

Unit(s): 1.0

Class Hours: 18 Lecture total.

This course is an introduction to college-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. Students will visit a library to complete hands-on exercises. *CSU/UC*

Library & Information Studies 103

Advanced Internet Research

Unit(s): 1.0

Class Hours: 18 Lecture total.

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. *CSU/UC*

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



MANAGEMENT (MGMT)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Department Co-Chairs, Business: Steven Deeley, Stewart Myers

Faculty: Steven Deeley, Andy Salcido

The Associate of Science degree and Certificates in Management are 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.

Associate of Science

General Management (11861)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Qualify for a management position.

Major requirements*	Units
Accounting 101 Financial Accounting	4
Business 100, Fundamentals of Business	3
Business 120/Management 120, Principles of Management	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
Select two (2) courses from the following:	6-7
Accounting 100, Accounting for Small Business (3)	
Accounting 102, Managerial Accounting (4)	
Business 105, Legal Environment of Business (3)	
Business 121/Management 121, Human Relations and Organizational Behavior (3)	
Business 150, Introduction to Information Systems and Applications (3)	
Marketing 113, Principles of Marketing (3)	
TOTAL	19-20

Certificate of Proficiency

Human Resource Management

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Prepare for employment in the human resources field.

Certificate requirements	Units
Management 120/Business 120, Principles of Management	3
Management 121/Business 121, Human Relations and Organizational Behavior	3
Management 135, Human Resource Management	3
Business 105, Legal Environment of Business	3
TOTAL	12

Certificate of Proficiency Supervision

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Have the background to become a first level supervisor.

Certificate requirements	Units
Management 121/Business 121, Human Relations and Organizational Behavior	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
OR Management 120/Business 120, Principles of Management	3
OR Management 123, Supervision	3
Management 135, Human Resource Management	3
TOTAL	12

Courses

Management 120

Principles of Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. (Same as Business 120.) **CSU**

Management 121

Human Relations and Organizational Behavior

Unit(s): 3.0

Class Hours: 54 Lecture total.

The role of the manager and management's relationship to employees. Includes the application of motivational theories, communications, leadership, and organizational structure. (Same as Business 121.) **CSU**

Management 122

Business Communications

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Management 123

Supervision

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Management 135

Human Resource Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**



MARKETING (MKTG)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Department Co-Chairs, Business: Steven Deeley, Stewart Myers

Faculty: Lynda Armbruster, Andy Salcido

The Associate of Science degree and Certificates in Marketing are 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.

Associate of Science

General Marketing (11866)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Have the skills for an entry-level marketing position.

Major requirements*	Units
OR Accounting 100, Accounting for Small Business (3)	3-4
OR Accounting 101, Financial Accounting (4)	
OR Business 222, Business Writing	3
OR Management 122, Business Communications	
Marketing 112, Principles of Advertising	3
Marketing 113, Principles of Marketing	3
Marketing 115, Consumer Behavior	3
Select one (1) course from the following:	3
Business 100, Fundamentals of Business (3)	
Business 127, Introduction to E-Commerce (3)	
Marketing 114, Professional Selling (3)	
Marketing 135, Web Marketing and Promotion (3)	
TOTAL	18-19

Certificate of Proficiency

General Marketing

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Have enough knowledge of marketing for an entry-level position.

Certificate requirements	Units
Marketing 112, Principles of Advertising	3
Marketing 113, Principles of Marketing	3
Marketing 114, Professional Selling	3
Marketing 115, Consumer Behavior	3
TOTAL	12

Certificate of Proficiency

Advertising

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be employable at a first-level advertising position.

Certificate requirements	Units
Marketing 112, Principles of Advertising	3
Marketing 113, Principles of Marketing	3
Marketing 115, Consumer Behavior	3

Certificate of Proficiency

Web Marketing

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Have the knowledge for an entry-level web marketing position.

Certificate requirements	Units
Marketing 113, Principles of Marketing	3
Marketing 135, Web Marketing and Promotion	3
Business 127, Introduction to E-Commerce	3
TOTAL	9

Courses

Marketing 112

Principles of Advertising

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Marketing 113

Principles of Marketing

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Marketing 114

Professional Selling

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Marketing 115

Consumer Behavior

Unit(s): 3.0

Class Hours: 54 Lecture total.

The investigation and analysis of why consumers select, purchase, use, and dispose of goods and services to satisfy their personal and business needs. **CSU**

Marketing 135

Web Marketing and Promotion

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Marketing 172

Small Business Marketing and Advertising

Unit(s): 3.0

Class Hours: 54 Lecture total.

Techniques for small business marketing including planning, customer research, advertising, media selection, budgeting and scheduling, and the evaluation of marketing effectiveness. **CSU**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



MATHEMATICS (MATH)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Co-Chairs, Mathematics: Alicia Frost, Vanessa Jones, Scott Sakamoto

Faculty: Cher Carrera, Matthew Cotter, Veselka Danova, Darlene Diaz, Alicia Frost, Anne Hauscarriague, Vanessa Jones, Jessica Kramer, Kathleen Moore, Scott Sakamoto, Randy Scott, Joyce Wagner, Laney Wright

Associate in Science

Mathematics for Transfer (31040)

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 the California State University system to pursue a baccalaureate degree in Mathematics or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Mathematics 180/180H, Single Variable Calculus I	4
Mathematics 185, Single Variable Calculus II	4
Mathematics 280, Intermediate Calculus	4
Select one (1) course from the following (List A):	3-5
Mathematics 287, Introduction to Linear Algebra and Differential Equations (5)	
Mathematics 290, Linear Algebra (3)	
Mathematics 295, Differential Equations (3)	
Select one (1) course from the following (List B):	3-5
Computer Science 112, Java Programming (3)	
Computer Science 120, Introduction to Programming (3)	
Computer Science 213, C# Programming (3)	
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4 1/13/2020
Physics 250A, Physics for Scientists and Engineers I (5)	
TOTAL	18-22

Courses

Mathematics N40

Intermediate Algebra Support Course

Unit(s): 0.5

Class Hours: 36 Laboratory total.

Corequisite: Mathematics 080, 085 or 140.

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. Grade: Pass/No Pass. 1/13/2020

Mathematics N41

Precalculus Support Course

Unit(s): 0.5

Class Hours: 36 Laboratory total.

Corequisite: Mathematics 170 or 171 or 180/180H.

~~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 or for students who would like to supplement their learning with prerequisite skills. Grade: Pass/No Pass. 1/13/2020~~

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. Grade: Pass/No Pass. 1/13/2020

Mathematics N43

Statistics and Probability Support Course

Unit(s): 0.5

Class Hours: 36 Laboratory total.

Corequisite: Mathematics 219/219H or 220 or Sociology 125/125H.

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. Grade: Pass/No Pass. 1/13/2020

Mathematics N73L

Math Review

Unit(s): 0.2

Class Hours: 11 Laboratory total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Mathematics 080
Intermediate Algebra

Unit(s): 5.0

Class Hours: 90 Lecture total.

Prerequisite: ~~Mathematics N55 or N60 or placement into Mathematics 080 on the Mathematics level 2 placement exam and a course equivalent to Mathematics N55 or N60.~~

Prerequisite: Recommendation from qualifying profile from the Mathematics placement process.

~~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 and 160.~~

1/13/2020

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.

1/13/2020

Mathematics 085
Intermediate Algebra with Integrated Support

Unit(s): 5.5

Class Hours: 90 Lecture total, 36 Laboratory total.

Prerequisite: Mathematics N55 or N60 or placement into Mathematics 080 on the Mathematics level 2 placement exam and a course equivalent to Mathematics N55 or N60.

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.

1/13/2020

Mathematics Course Sequences By Career Path

Math/Science/Engineering/Technology (STEM)

¹Math 171
Pre-calculus



Calculus Sequence

¹Math 180: Single Variable Calculus I
¹Math 185: Single Variable Calculus II
Math 280: Intermediate Calculus



Math 290 Linear Algebra **or** Math 295 Differential Equations **or** Math 287 Linear Algebra & Differential Eqns

Business

¹Math 140
College Algebra



Math 150
Business Calculus

Social Science/Liberal Arts/Teacher Education

Math 105
Liberal Arts Math

or

Math 203
For Elementary Teachers

or

¹Math 219 or 219H
Statistics and Probability

Need help in your math class?

ENROLL IN THE MATH SUCCESS CENTER!

- Help is available for all levels of math, including Statistics
- Staffed by qualified Instructors, Instructional Assistants, and Student Tutors
- Private Study Rooms & Quiet Room
- Workshops
- Computers available for online homework and online courses
- FREE to all Students!

➔ **Enroll via WebAdvisor in MATHCE 100.** To earn a Pass, students are required to log at least 10 hours in the Math Success Center and complete one activity in Canvas.

SCC Continuing Education Mathematics Courses

All developmental Math Courses (Arithmetic through Algebra I)

HSMTH 176: College Preparation Algebra 1A
HSMTH 177: College Preparation Algebra 1B

Optional SCC Developmental Mathematics Courses (Limited Offerings)

²Math 086: Intermediate Algebra for Statistics and Liberal Arts
²Math 080: Intermediate Algebra for BSTEM

Note: Students planning to transfer to a four-year school should work carefully with a counselor and the catalog of the school of transfer.

1: Optional support course available. See your counselor and schedule of classes for more information.

2: Math 080 and Math 086 meet the minimum requirements for an AA degree.

**Mathematics 086****Intermediate Algebra for Statistics and Liberal Arts**

Unit(s): 4.0

Class Hours: 72 Lecture total.

~~Prerequisite: Mathematics N55 or N60 or placement into Mathematics 086 on the Mathematics level 2 placement exam and a course equivalent to Mathematics N55 or N60.~~

Prerequisite: Recommendation from qualifying profile from the Mathematics placement process.

~~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 for students planning to take Math 105 or Math 219. Students planning to take Math 140 or 160 should take Math 080.~~

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.

1/13/2020

Mathematics 105**Mathematics for Liberal Arts Students**

Unit(s): 3.0

Class Hours: 54 Lecture total.

~~Prerequisite: Mathematics 080 or 086 or equivalent skills as measured by the Mathematics Level 3 Exam and a course equivalent to Mathematics 080 or 086.~~

Prerequisite: Mathematics 080 or 086 or qualifying profile from the Mathematics placement process

An overview of mathematics for the liberal arts student. Topics will include problem solving, financial management, probability, statistics, and selected other topics such as set theory, geometry, logic, mathematical modeling, and the history of mathematics. **CSU/UC**

1/13/2020

Mathematics 140**College Algebra**

Unit(s): 4.0

Class Hours: 72 Lecture total.

~~Prerequisite: Mathematics 080 or equivalent skills as measured by the Mathematics Level 3 Exam and a course equivalent to Mathematics 080.~~

Prerequisite: Mathematics 080 or 085 or qualifying profile from the Mathematics placement process

Survey of advanced topics in algebra: equations, inequalities and functions involving polynomials, rationals, exponentials, and logarithms with applications and graphing; sequences and series. **CSU/UC**

1/13/2020

Mathematics 150**Calculus for Biological, Management and Social Sciences**

Unit(s): 5.0

Class Hours: 90 Lecture total.

~~Prerequisite: Mathematics 140 or placement into Mathematics 150 on the Mathematics Level 3 placement exam and a course equivalent to Mathematics 140.~~

Mathematics 140 and qualifying profile from the Mathematics placement process.

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. **CSU/UC (C-ID MATH 140)**

1/13/2020

Mathematics 170**Pre-Calculus Mathematics**

Unit(s): 4.0

Class Hours: 72 Lecture total.

~~Prerequisite: Mathematics 160.~~

Advanced algebraic topics. Study of rational, trigonometric, exponential and logarithmic functions, polar coordinates, and analytic geometry. Preparation for the Calculus sequence. **CSU/UC**

1/13/2020

Mathematics 171**Precalculus and Trigonometry**

Unit(s): 5.0

Class Hours: 90 Lecture total.

Prerequisite: Mathematics 080 or qualifying profile from Mathematics placement process.

Study of polynomial, rational, absolute value, exponential, logarithmic, and trigonometric functions, their graphs and applications. Use of trigonometric identities. Polar coordinates and complex numbers, parametric equations, and analytic geometry. An introduction to vectors, sequences, series, and limits. Preparation for the Calculus sequence. **CSU/UC**

Mathematics 180**Single Variable Calculus I**

Unit(s): 4.0

Class Hours: 72 Lecture total.

Prerequisite: Mathematics 170 or equivalent skills as measured by Mathematics Level 4 Exam and a course equivalent to Mathematics 170.

Limits and continuity, derivatives and integrals of algebraic, trigonometric, and other transcendental functions. Applications including extrema tests, related rates and areas. **CSU/UC (C-ID MATH 900S), (MATH 180+185), (MATH 210)**

Mathematics 180H**Honors Single Variable Calculus I**

Unit(s): 4.0

Class Hours: 72 Lecture total.

Prerequisite: Mathematics 170 or equivalent skills as measured by Mathematics Level 4 Exam and a course equivalent to Mathematics 170 and A high school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID MATH 210)**

Mathematics 185**Single Variable Calculus II**

Unit(s): 4.0

Class Hours: 72 Lecture total.

Prerequisite: Mathematics 180/180H.

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. **CSU/UC (C-ID MATH 220), (MATH 900S), (MATH 180 or 180H +185)**



Mathematics 199

Mathematics Independent Study

Unit(s): 1.0

Class Hours: 18 Lecture total.

~~Prerequisite: Mathematics 080~~

~~Prerequisite: Mathematics 080 or 085 or qualifying profile from the Mathematics placement process.~~

Corequisite: Enrollment in at least one other class at either Santa Ana College or Santiago Canyon College and must show evidence of competence in their academic major and the area in which they propose to do independent study.

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. Grade: Pass/No Pass. **CSU** 1/13/2020

Mathematics 203

Fundamental Concepts of Elementary Mathematics

Unit(s): 4.0

Class Hours: 72 Lecture total, 18 Laboratory total.

Prerequisite: Mathematics 080 or 085 or 086 or qualifying profile from Mathematics placement process.

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. **CSU/UC (C-ID MATH 120)** 1/13/2020

Mathematics 219

Statistics and Probability

Unit(s): 4.0

Class Hours: 72 Lecture total.

~~Prerequisite: Mathematics 080 or 086 or placement into Mathematics 219 on the Mathematics Level 3 placement exam and a course equivalent to Mathematics 080 or 086.~~

~~Prerequisite: Mathematics 080 or 085 or 086 or qualifying profile from the Mathematics placement test.~~

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. Includes the use of technology. **CSU/UC (C-ID MATH 110)** 1/13/2020

Mathematics 219H

Honors Statistics and Probability

Unit(s): 4.0

Class Hours: 72 Lecture total.

~~Prerequisite: Mathematics 080 or 086 or placement into Mathematics 219 on the Mathematics Level 3 placement exam and a course equivalent to Mathematics 080 or 086 and A high school or college GPA of 3.0 or above.~~

~~Prerequisite: Mathematics 080 or 085 or 086 or qualifying profile from the Mathematics placement test and A high school or college GPA of 3.0 or above~~

This honors course is an enhanced format for the first 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. **CSU/UC (C-ID MATH 110)** 1/13/2020

Mathematics 220

Statistics and Probability with Integrated Review

Unit(s): 4.0

Class Hours: 64 Lecture total, 36 Laboratory total.

Prerequisite: Mathematics 080 or 086 or qualifying profile from the math placement process.

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. Includes the use of technology. A review of core mathematical skills needed to be successful in Statistics. Integrated review includes concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and critical thinking skills from descriptive statistics that are needed to understand the basics of college-level statistics. 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 Statistics. **CSU/UC**

Mathematics 280

Intermediate Calculus

Unit(s): 4.0

Class Hours: 72 Lecture total.

Prerequisite: Mathematics 185.

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. **CSU/UC (C-ID MATH 230)**

Mathematics 287

Introduction to Linear Algebra and Differential Equations

Unit(s): 5.0

Class Hours: 90 Lecture total.

Prerequisite: Mathematics 280.

Topics include matrices, determinants, vector spaces, linear systems of equations, linear product spaces, first and second order differential equations, systems of differential equations, and the Laplace transform. **CSU/UC (C-ID MATH 910 S)**

Mathematics 290

Linear Algebra

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 185

Recommended Preparation: 280 or concurrent enrollment.

Systems of linear equations, matrix algebra, matrix theory, determinants, vector spaces, inner products, orthogonality, eigenvalues, eigenvectors, linear transformations, applications, and proofs of elementary properties of linear algebra. **CSU/UC (C-ID MATH 910S), (MATH 290 + MATH 295), (MATH 250)**

Mathematics 290L

Linear Algebra Math Lab

Unit(s): 0.2

Class Hours: 11 Laboratory total.

Corequisite: Mathematics 290.

Students in Mathematics 290L will receive individual and/or group instruction. The course is designed to review, enhance and/or advance the students' mathematical knowledge based on their individual need in linear algebra. Grade: Pass/No Pass. Open Entry/ Open Exit. **CSU**



Mathematics 295 Differential Equations

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 280

Recommended Preparation: Adult Basic Education 008 test.

Introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. Introduces the theoretical aspects of differential equations, including establishing when solution(s) exist, and techniques for obtaining solutions including series solutions, singular points, Laplace transforms and linear systems.

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. CSU/UC (C-ID MATH 910S), (MATH 290 + MATH 295), (MATH 240)

1/13/2020

MODERN LANGUAGES

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Modern Languages: Charlie Malone

Faculty: Lourdes Fajardo

Associate of Arts

Modern Languages (11925)

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 of 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:

- 1) Completion of a minimum of 21 units total
- 2) Completion of a minimum of 13 units in any one language including the courses numbered 201 and 202.
- 3) Completion of 5 units in a second language.
- 4) Completion of a minimum of 3 units of restricted electives

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Courses in one of the languages listed below	13
Course(s) in a second language from the list below	5
Restricted Electives	3-5

French Courses

French 101, Elementary French I (5)

French 102, Elementary French II (5)

French 194, Conversation and Composition I (3)

French 201, Intermediate French I (5)

French 202, Intermediate French II (5)

Italian Courses

Italian 101, Elementary Italian I (5)

Italian 102, Elementary Italian II (5)

Italian 194, Conversation and Composition (3)

Italian 195, Advance Conversational Italian (3)

Italian 201, Intermediate Italian I (5)

Italian 202, Intermediate Italian II (5)

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Spanish Courses

- Spanish 101/101H, Elementary Spanish I (5)
- Spanish 101A, Elementary Spanish IA (2.5)
- AND
- Spanish 101B, Elementary Spanish IB (2.5)
- Spanish 102, Elementary Spanish II (5)
- Spanish 110, Spanish for Spanish Speakers 1 (5)
- Spanish 111, Spanish for Spanish Speakers 2 (5)
- Spanish 194, Beginning Conversational Spanish (3)
- Spanish 195A, Advanced Conversational Spanish (3)
- Spanish 195B, Advanced Conversational Spanish (3)
- Spanish 201, Intermediate Spanish I (5)
- Spanish 202, Intermediate Spanish II (5)
- Spanish 213, College Spanish Composition (3)

Restricted Electives:

- Any course listed above in a third language (3-5)
- Anthropology 100/100H Introduction to Cultural Anthropology (3)
- Art 101, Survey of Western Art History I: Prehistory Through the Middle Ages (3)
- Art 102, Survey of Western Art History II: Renaissance Through the Twentieth Century (3)
- Chinese 101, Elementary Chinese I (5)
- Chinese 102, Elementary Chinese II (5)
- Communication 100/100H, Introduction to Interpersonal Communication (3)
- English 102/102H, Literature and Composition (4)
- English 271, Survey of World Literature I (3)
- English 272, Survey of World Literature II (3)
- Geography 100/100H, World Regional Geography (3)
- History 101/101H, World Civilizations to the 16th Century (3)
- History 102/102H, World Civilizations Since the 16th Century (3)
- History 124, Mexican-American History in the United States (3)
- Political Science 101/101H, American Government and Politics (3)
- Political Science 220, International Politics (3)

TOTAL 21-23

MUSIC (MUS)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Performing Arts: Binh Vu

Courses

Music 061

Basic Piano Skills

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Group instruction for beginners emphasizing note reading, basic keyboard skills, and sight reading. Practice outside of class required. Practice pianos available on campus. Grade: Pass/No Pass.

Music 101

Music Appreciation

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID MUS 100)**

Music 101H

Honors Music Appreciation

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID MUS 100)**

Music 102

World Music

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Music 103

Jazz in America

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Music 104

Rock Music History and Appreciation

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Music 121 Beginning Voice

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

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 for music majors not studying privately. Field trips are required. **CSU/UC**

Music 122 Intermediate Voice

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Prerequisite: Music 121.

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. **CSU/UC**

Music 123 Advanced Voice

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Prerequisite: Music 122.

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. **CSU/UC**

Music 124 Advanced Vocal Production and Repertoire

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Prerequisite: Music 123.

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. **CSU/UC**

Music 126 Collegiate Choir

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Recommended Preparation: Students should be able to repeat musical phrases given to him/her from musical instrument or from vocal singing.

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. May be repeated. **CSU/UC**

Music 127 Concert Chorale

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Recommended Preparation: Some music reading ability is recommended. Students should have one or two semesters of vocal technique class (Music 121, 122 or 123).

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. May be repeated. **CSU/UC**

Music 128 Masterworks Chorale

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Recommended Preparation: Some music reading ability is recommended. Students should have one or two semesters of vocal technique class (Music 121, 122 or 123).

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. May be repeated. **CSU/UC**

Music 129 Chamber Choir

Unit(s): 1.0

Class Hours: 72 Laboratory total.

Recommended Preparation: Some music reading ability is recommended. Students should have one or two semesters of vocal technique class (Music 121, 122 or 123).

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. May be repeated. **CSU/UC**

Music 161 Class Piano I

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Recommended Preparation: Students should have access to a piano or a keyboard to practice individually outside of class time.

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. **CSU/UC**

Music 162 Class Piano II

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Recommended Preparation: Music 061 or 161.

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. **CSU/UC**

Music 163 Class Piano III

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Recommended Preparation: Music 162 and Students should have access to a piano or a keyboard to practice his/her assignments outside of class.

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. **CSU/UC**

Music 164A Intermediate Piano Repertoire I

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Recommended Preparation: Music 163.

Instruction for intermediate level students. Emphasizes solo material, technique, sight-reading, interpretation, and performance. Daily practice required. Practice pianos available on campus. **CSU/UC**



Music 164B

Intermediate Piano Repertoire II

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Recommended Preparation: Music 164A and Students should have access to a piano or a keyboard to practice his/her assignments outside of class.

Continuation of instruction for advanced intermediate level students. Emphasizes solo material, technique, sight-reading, and performance. Daily practice required. Practice pianos available on campus. *CSU/UC*

Music 182

Musical Ensemble

Unit(s): 1.0

Class Hours: 54 Laboratory total.

Prerequisite: Audition.

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. May be repeated. *CSU/UC*

Music 185

Beginning Classical Guitar

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

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. *CSU/UC*

Music 186

Intermediate Classical Guitar

Unit(s): 1.0

Class Hours: 18 Lecture total, 18 Laboratory total.

Recommended Preparation: Music 185.

Intermediate instruction in solo, duo and trio repertoire. Emphasizes technique studies and performance styles of 18th century music. Student must provide nylon string guitar. *CSU/UC*

Music 187

Advanced Classical Guitar

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Recommended Preparation: Music 186.

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. *CSU/UC*

Music 188

Advanced Classical Guitar Technique and Repertoire

Unit(s): 1.0

Class Hours: 9 Lecture total, 27 Laboratory total.

Recommended Preparation: Music 187.

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. *CSU/UC*

NUTRITION & FOOD (NUTR)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Co-Chairs, Kinesiology: Lisa Camarco, Ian Woodhead

Associate in Science

Nutrition and Dietetics for Transfer (35735)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements	Units
Nutrition 115, Nutrition	3
Biology 229, General Microbiology	5
Chemistry 200A/200AH, General Chemistry A	5
Psychology 100/100H, Introduction to Psychology	3
Select two (2) courses from the following (List A):	4-5
Biology 239, General Human Anatomy (4)	
Biology 249, Human Physiology (4)	
Chemistry 200B, General Chemistry B (5)	
Chemistry 280A, Organic Chemistry A (5)	
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
Select one (1) course from the following (List B):	3-5
Any list A course not already used. (4-5)	
Nutrition 120, Food and Culture (3)	
1/13/2020	TOTAL 27-30

Courses

Nutrition & Food 115

Nutrition

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 101/101H.

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. *CSU/UC*

Nutrition & Food 120

Food and Culture

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



PHILOSOPHY (PHIL)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Philosophy: Marcelo Pimentel

Faculty: Douglas Deaver, James Granitto, Marcelo Pimentel

Associate in Arts

Philosophy for Transfer (32042)

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 the California State University system 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*

	Units
Required Core:	
OR Philosophy 106/106H, Introduction to Philosophy	3
OR Philosophy 108, Ethics	
Philosophy 111, Introductory Logic	4
Select one (1) course from the following (List A):	3-4
An additional course from Core (may not be a course used to satisfy the requirements in Core)	
Philosophy 110, Critical Thinking (4)	
Philosophy 112, World Religions (3)	
Philosophy 118, History of Philosophy (3)	
Select two (2) courses from the following (List B):	6-7
An additional course from Core or List A (3-4) (may not be a course used to satisfy the requirements in Core or List A)	
Philosophy 115, Philosophy of Religion (3)	
Select one (1) course from the following (List C):	3-4
An additional course from Core, List A or B (3-4) (may not be a course used to satisfy the requirements in Core, List A or B)	
Philosophy 120, Introduction to Social and Political Philosophy (3)	
TOTAL	19-20

Courses

Philosophy 106

Introduction to Philosophy

Unit(s): 3.0

Class Hours: 54 Lecture total.

A survey of historical and contemporary ideas on how to live the good life. *CSU/UC (C-ID PHIL 100)*

Philosophy 106H

Honors Introduction to Philosophy

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

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. *CSU/UC (C-ID PHIL 100)*

Philosophy 108

Ethics

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. Course increases awareness of values in personal and contemporary issues. *CSU/UC (C-ID PHIL 120)*

Philosophy 110

Critical Thinking

Unit(s): 4.0

Class Hours: 72 Lecture total.

Prerequisite: English 100 or 101/101H.

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. *CSU/UC*

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Philosophy 111

Introductory Logic

Unit(s): 4.0

Class Hours: 72 Lecture total.

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. *CSU/UC (C-ID PHIL 110)*

Philosophy 112

World Religions

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Philosophy 115

Philosophy of Religion

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Philosophy 118

History of Philosophy

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Philosophy 120

Introduction to Social and Political Philosophy

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*



PHYSICS (PHYS) & PHYSICAL SCIENCE (PSC)

Division of Mathematics and Sciences

Dean: Martin Stringer

Department Chair, Physics and Engineering: Cynthia Swift

Faculty: Craig Rutan, Cynthia Swift

Associate in Science Physics, AS–UCTP

The University of California Transfer Pathway (UCTP) Associate in Science Degree in Physics aligns with the expected major preparation for students planning to transfer to a University of California campus in physics. Students that complete this degree with an overall and major GPA of 3.5 are guaranteed admission to the University of California system.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Apply appropriate physical laws and mathematical techniques to analyze various physical situations.
- Perform various scientific experiments and to analyze data to check agreement with theoretical predictions.

Major requirements*	Units
Mathematics 180/180H, Single Variable Calculus I	4
Mathematics 185, Single Variable Calculus II	4
Mathematics 280, Intermediate Calculus	4
Mathematics 290, Linear Algebra	3
Mathematics 295, Differential Equations	3
Physics 250A, Physics for Scientists and Engineers I	5
Physics 250B, Physics for Scientists and Engineers II	5
Physics 250C, Physics for Scientists and Engineers III	5

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TOTAL 27

Associate in Science Physics for Transfer (31039)

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 the California State University system to pursue a baccalaureate degree in Physics or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

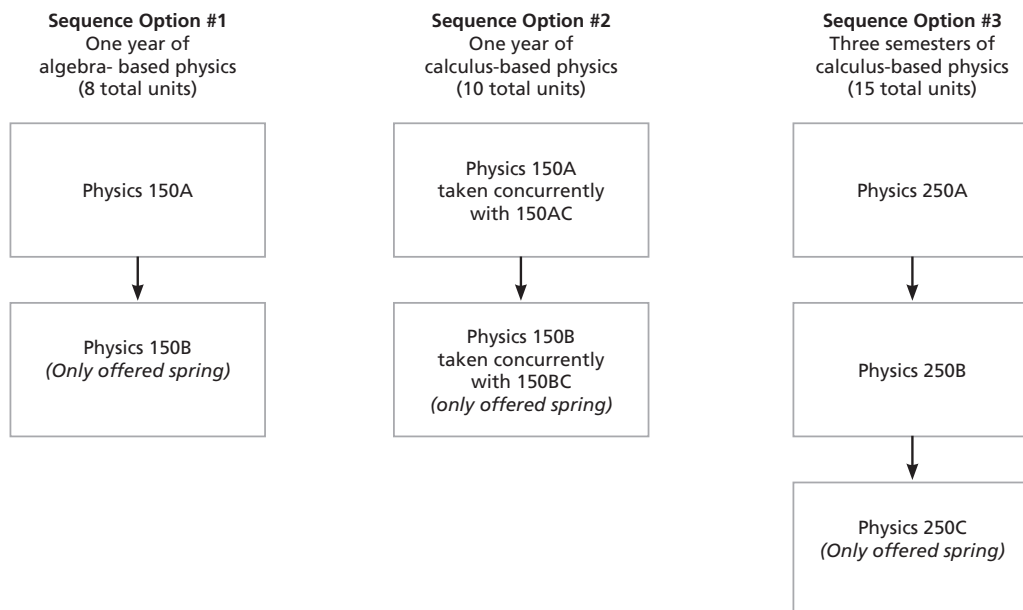
- Perform various scientific experiments and analyze data to check agreement with theoretical predictions.
- Apply appropriate physical laws and mathematical techniques to analyze various physical situations.

Major requirements*	Units
Physics 250A, Physics for Scientists and Engineers I	5
Physics 250B, Physics for Scientists and Engineers II	5
Physics 250C, Physics for Scientists and Engineers III	5
Mathematics 180/180H, Single Variable Calculus I	4
Mathematics 185, Single Variable Calculus II	4
Mathematics 280, Intermediate Calculus	4
TOTAL	27

*It is highly recommended for students to meet with an SCC counselor to discuss other possible courses that are part of major preparation at a local CSU campus. Students are encouraged to take some additional courses, that may be articulated major preparation, prior to transfer such as **Mathematics 287, Mathematics 290, Chemistry 200A, and Computer Science 120**. While these additional courses are not required for this degree, completion of these courses will better prepare students for upper-division Physics courses at a CSU.*

PHYSICS COURSE SEQUENCES

A Note to Transfer Students: Most college and universities prefer students complete an entire sequence before transferring to a four-year institution. For students planning to transfer to public universities in California (CSU & UC), please check with assist.org to determine which of the three sequences is required for your school and major. Students planning to transfer to private or out-of-state institutions should check the individual school requirements.



*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Physical Science Courses

Physical Science 100

Survey of Chemistry and Physics

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Recommended Preparation: Mathematics 080 or qualifying profile from the Mathematics placement process.

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. **CSU/UC (C-ID PHYS 140)**

Physics Courses

Physics 100

Conceptual Physics

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Recommended Preparation: Mathematics N60.

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. **CSU/UC**

Physics 150A

Introductory Physics I

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Mathematics 171.

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. **CSU/UC (C-ID PHYS 105), PHYS 100SAB (PHYS 150A+150B)**

Physics 150AC

Introductory Physics I - Calculus

Unit(s): 1.0

Class Hours: 18 Lecture total.

Prerequisite: Mathematics 180/180H

Corequisite: Physics 150A.

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. **CSU/UC**

Physics 150B

Introductory Physics II

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Physics 150A.

A trigonometry-based physics course. Topics include: light, electricity, magnetism and modern physics. Students that have successfully completed Physics 211 may not enroll in Physics 150B. **CSU/UC (C-ID PHYS 110), PHYS 100S AB (PHYS 150A+150B)**

Physics 150BC

Introductory Physics II - Calculus

Unit(s): 1.0

Class Hours: 18 Lecture total.

Prerequisite: Physics 150A and 150AC

Corequisite: 150B.

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. **CSU/UC**

Physics 250A

Physics for Scientists and Engineers I

Unit(s): 5.0

Class Hours: 72 Lecture total, 54 Laboratory total.

Prerequisite: Mathematics 180/180H

Recommended Preparation: Physics 100 or High School Physics.

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. **CSU/UC (C-ID PHYS 205 A), PHYS 200S ABC (PHYS 250A+250B+250C)**

Physics 250B

Physics for Scientists and Engineers II

Unit(s): 5.0

Class Hours: 72 Lecture total, 54 Laboratory total.

Prerequisite: Physics 250A and Mathematics 185.

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. **CSU/UC (C-ID PHYS 210 B), PHYS 200S ABC (PHYS 250A+250B+250C)**

Physics 250C

Physics for Scientists and Engineers III

Unit(s): 5.0

Class Hours: 72 Lecture total, 54 Laboratory total.

Prerequisite: Physics 250B

Recommended Preparation: Mathematics 280.

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. **CSU/UC (C-ID PHYS 215 C), PHYS 200S ABC (PHYS 250A+250B+250C)**



POLITICAL SCIENCE (POLT)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Political Science: Nooshan Shekarabi

Faculty: Brenda Carpio, Cale Crammer, Michael Parrella, Narges Rabii-Rakin, Nooshan Shekarabi

Associate in Arts

Political Science for Transfer (31730)

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 the California State University system to pursue a baccalaureate degree that 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Political Science 101/101H, American Government and Politics	3
Students must take the following (List A):	9
Political Science 201, Introduction to Comparative Politics (3)	
Political Science 220, International Politics (3)	
Political Science 230, Political Theory (3)	
Select two (2) courses from the following (List B):	6
Anthropology 100/100H, Introduction to Cultural Anthropology (3)	
Economics 101, Principles/Micro (3)	
Economics 102, Principles/Macro (3)	
History 101/101H, World Civilizations to the 16th Century (3)	
Political Science 221, Women in American Politics (3)	
Sociology 100/100H, Introduction to Sociology (3)	
TOTAL	18

Courses

Political Science 101

American Government and Politics

Unit(s): 3.0

Class Hours: 54 Lecture total.

Study of United States national government and California state and local governments. Satisfies graduation requirement for American institutions and state requirements for California state government. **CSU/UC (C-ID POLS 110)**

Political Science 101H

Honors American Government and Politics

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above A high school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID POLS 110)**

Political Science 110

Introduction to Political Science

Unit(s): 3.0

Class Hours: 54 Lecture total.

An introduction to political science designed to familiarize students with basic political concepts, political ideologies, political systems, and subfields within political science. **CSU/UC**

Political Science 150

Introduction to Model United Nations

Model United Nations

Unit(s): 4.0-6.0

Class Hours: 54 Lecture total, 54-162 Laboratory total.

Class Hours: 52 Lecture total, 54 Laboratory total.

Recommended Preparation: Political Science 101/101H or 220.

Prerequisite: Political Science 101/101H or 220.

An introductory course in the study of the United Nations. The focus will be on the role of the United Nations in world politics in relation to the success and failure of theories of collective security, international disputes resolution, human rights, peacekeeping attempts and technological cooperation. Prepares students for individual and team Model United Nations events for intercollegiate United Nations conferences and competitions. Students are required to attend Model United Nations conferences. May be repeated. **CSU**

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Political Science 200

American Political Thought

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Political Science 201

Introduction to Comparative Politics

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID POLS 130)**

Political Science 220

International Politics

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID POLS 140)**

Political Science 221

Women in American Politics

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Political Science 101/101H.

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. **CSU/UC**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.

**Political Science 230****Political Theory**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID POLS 120)*

Political Science 250**Advanced Model United Nations**

Unit(s): 4.0-6.0

Class Hours: 54 Lecture total, 54-162 Laboratory total.

Prerequisite: Political Science 150.

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. May be repeated. *CSU*

PSYCHOLOGY (PSYC)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Psychology: Christine Umali Kopp

Faculty: Emma Breeden, Cari Cannon, Christine Umali Kopp

Associate in Arts**Psychology for Transfer (31041)**

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 the California State University system to pursue a baccalaureate degree in Psychology or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Psychology 100/100H, Introduction to Psychology	3
Psychology 220, Introduction to Research Methods in Psychology	4
Mathematics 219/219H, Statistics and Probability	4
Select one (1) course from the following (List A):	3
Psychology 200, Introduction to Biological Psychology	
Biology 109/109H, Fundamentals of Biology	
Select one (1) course from the following (List B):	3
An additional course from List A	
(may not be a course used to satisfy the requirements in List A)	
Psychology 157, Introduction to Child Psychology (3)	
OR Child Development 107, Child Growth and Development (DS1) (3)	
OR Psychology 240, Introduction to Social Psychology (3)	
OR Sociology 240, Introduction to Social Psychology (3)	

Students may not earn credit for both Sociology 240 and Psychology 240. Students may not earn credit for both Child Development 107 and Psychology 157.

Select one (1) course from the following (List C): 3-4
Any list A or B course not already used.



(may not be a course used to satisfy the requirements in List A or B)
 Anthropology 100/100H, Introduction to Cultural Anthropology (3)
 Anthropology 101, Introduction to Physical Anthropology (3)
 Philosophy 110, Critical Thinking (4)
 Philosophy 111, Introductory Logic (4)
 Psychology 160, Introduction to Lifespan Psychology (3)
 Psychology 170, Multicultural Psychology (3)
 Psychology 180, Psychology of Gender (3)
 Psychology 190, Psychology of Human Sexuality (3)
 Psychology 230, Psychology and Effective Behavior (3)
 Psychology 250, Introduction to Abnormal Psychology (3)
 Sociology 100/100H, Introduction to Sociology (3)

1/13/2020 TOTAL 20-21

Courses

Psychology 100
Introduction to Psychology
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID PSY 110)**

Psychology 100H
Honors Introduction to Psychology
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.
 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. **CSU/UC (C-ID PSY 110)**

Psychology 157
Introduction to Child Psychology
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

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.) **CSU/UC (C-ID CDEV 100)**

Psychology 160
Introduction to Lifespan Psychology
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID PSY 180)**

Psychology 170
Multicultural Psychology
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

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. **CSU/UC**

Psychology 180
Psychology of Gender
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

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. **CSU/UC**

Psychology 190
Psychology of Human Sexuality
 Unit(s): 3.0
 Class Hours: 54 Lecture total.

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.) **CSU/UC (C-ID PSY 130) - This course is an introductory overview of the field of human sexuality. Human sexuality will be examined from psychological, biological, sociocultural, and historical perspectives. Students will be encouraged to become aware of their own sexual attitudes, values, and behaviors and to evaluate the consistency of their behaviors within their own moral frameworks. Current sex norms and various aspects of interpersonal and individual sexual adjustment will be explored.**

Psychology 200
Introduction to Biological Psychology
 Unit(s): 3.0
 Class Hours: 54 Lecture total.
 Prerequisite: Psychology 100/100H.

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. **CSU/UC (C-ID PSY 150)**

Psychology 220
Introduction to Research Methods in Psychology
 Unit(s): 4.0
 Class Hours: 54 Lecture total, 54 Laboratory total.
 Prerequisite: Psychology 100/100H and Mathematics 219/219H.

Emphasizes methods of study in psychology including: sound and ethical experimental design, analysis of variables contributing to experimental results, data treatment, and communicating findings. **CSU/UC (C-ID PSY 200)**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Psychology 230
Psychology and Effective Behavior

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. Includes exercises for increasing self-awareness, self-motivation, and self-management of everyday problems. *CSU/UC*

Psychology 240
Introduction to Social Psychology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.) *CSU/UC (C-ID PSY 170)*

Psychology 250
Introduction to Abnormal Psychology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Psychology 100/100H

Recommended Preparation: English 061.

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. *CSU/UC (C-ID PSY 120)*

PUBLIC WORKS (PBLC)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Facilitator: Carlos Castellanos

Associate of Science
Construction Inspection (32319)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Inspection.

Major requirements*	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 051, Infrastructure Construction and Maintenance	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 063, Construction Materials and Testing	3
Public Works 070, Construction Inspection	3
OR Business 222, Business Writing	3
Management 122, Business Communications	
Computer Information Systems 101, Introduction to Microsoft Office	3
TOTAL	21

Certificate of Achievement
Construction Inspection (11910)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Management.

Certificate requirements	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 051 Infrastructure Construction and Maintenance	3
Public Works 061 Plan Interpretation and Cost Estimating	3
Public Works 063 Construction Materials and Testing	3
Public Works 070 Construction Inspection	3
OR Business 222, Business Writing	3
Management 122, Business Communications	
Computer Information Systems 101, Introduction to Microsoft Office	3
TOTAL	21



**Associate of Science
Construction Management (11909)**

The Associate of Science degree and Certificate of Achievement in Construction Management is for current, new or future project managers and team members. 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Management.

Major requirements*	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 074, Contract Administration	3
OR Public Works 080, Principles of Project Management	3
OR Business 090, Principles of Project Management	3
OR Public Works 110, Introduction to Microsoft Project	3
OR Computer Information Systems 110, Introduction to Microsoft Project	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
TOTAL	21

**Certificate of Achievement
Construction Management (21673)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Construction Management.

Certificate requirements	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 074, Contract Administration	3
OR Public Works 080, Principles of Project Management	3
OR Business 090, Principles of Project Management	3
OR Public Works 110, Introduction to Microsoft Project	3
OR Computer Information Systems 110, Introduction to Microsoft Project	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
TOTAL	21

**Associate of Science
Environmental Management (31847)**

The Associate of Science degree and Certificate of Achievement in Environmental Management are 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Environmental Management.

Major requirements*	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 067, Environmental Management	3
Public Works 068, Fundamentals of Storm Water Management	3
Public Works 069, Green Infrastructure Construction	3
Computer Information Systems 101, Introduction to Microsoft Office	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
TOTAL	21

**Certificate of Achievement
Environmental Management (31848)**

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be eligible for employment in high wage, high growth careers as demonstrated by the biennial review process in Environmental Management.

Certificate requirements	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 067, Environmental Management	3
Public Works 068, Fundamentals of Storm Water Management	3
Public Works 069, Green Infrastructure Construction	3
Computer Information Systems 101, Introduction to Microsoft Office	3
OR Business 222, Business Writing	3
OR Management 122, Business Communications	3
TOTAL	21

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Associate of Science Code Enforcement and Compliance (37073)

The Associate in Science and 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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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

Major requirements*	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 085, Code Enforcement Officer	3
OR Business 222, Business Writing	
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
Criminal Justice 101, Introduction to Criminal Justice	3
TOTAL	18

Certificate of Achievement Code Enforcement and Compliance (37102)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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

Certificate requirements	Units
Public Works 050, Fundamentals of Public Works	3
Public Works 061, Plan Interpretation and Cost Estimating	3
Public Works 085, Code Enforcement Officer	3
OR Business 222, Business Writing	
OR Management 122, Business Communications	3
Computer Information Systems 101, Introduction to Microsoft Office	3
Criminal Justice 101, Introduction to Criminal Justice	3
TOTAL	18

Certificate of Proficiency Code Enforcement Officer

The Certificate of Proficiency in Code Enforcement 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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Public Works 086, Basic Code Enforcement Officer	1
Public Works 087, Intermediate Code Enforcement Officer	1
Public Works 088, Advanced Code Enforcement Officer	1
Public Works 089, Code Enforcement Officer-Supervision	1
TOTAL	4

Certificate of Proficiency Public Administration and Policy ()

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Public Works 150 - Introduction to Public Administration	3
Public Works 151 - Ethics and Professionalism: The High Calling of Public Service	3
Public Works 152 - Preparing for Supervision Public Sector	3
Public Works 155 - The Art of Politics and Policymaking	3
Select one (1) course from following:	3
Public Works 153 - Public Sector Budgeting Fundamentals (3)	
Public Works 154 - Public Sector Human Resources Fundamentals (3)	
TOTAL	15

1/13/2020



Courses

Public Works 050

Fundamentals of Public Works

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 051

Infrastructure Construction and Maintenance

Unit(s): 3.0

Class Hours: 54 Lecture total.

Focuses on the infrastructure construction and maintenance processes of public facilities including equipment and material procurement, scheduling, financing, project management, and permitting.

Public Works 061

Plan Interpretation and Cost Estimating

Unit(s): 3.0

Class Hours: 54 Lecture total.

Reading and interpreting plans related to public works projects, including roadway, water, sewer, storm drain and traffic projects. Related concepts include basic mathematical formulas and conversions, construction materials and equipment, surveying, project management, contract documents, costing, quantifying and computer applications.

Public Works 063

Construction Materials and Testing

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 067

Environmental Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 068

Fundamentals of Storm Water Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 069

Green Infrastructure Construction

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 070

Construction Inspection

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 074

Contract Administration

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 080

Principles of Project Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. (Same as Business 090.)

Public Works 085

Code Enforcement Officer

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Public Works 086

Basic Code Enforcement Officer Module 1

Unit(s): 1.0

Class Hours: 5 Lecture total, 35 Laboratory total.

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.** Grade: Pass/No Pass. 1/13/2020

**Public Works 087****Intermediate Code Enforcement Officer Module 2**

Unit(s): 1.0

Class Hours: 5 Lecture total, 35 Laboratory total.

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.** Grade: Pass/No Pass. 1/13/202

Public Works 088**Advanced Code Enforcement Officer Module 3**

Unit(s): 1.0

Class Hours: 5 Lecture total, 35 Laboratory total.

~~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, developing staff reports and new ordinances, building, residential, mechanical, plumbing, and fire codes, and gang and drug awareness and officer safety. Optional field trips may be included.~~

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.** Grade: Pass/No Pass. 1/13/202

Public Works 089**Code Enforcement Officer-Supervision Module 4**

Unit(s): 1.0

Class Hours: 5 Lecture total, 35 Laboratory total.

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. Grade: Pass/No Pass. 1/13/202

Public Works 110**Introduction to Microsoft Project**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. (Same as Computer Information Systems 110.) **CSU**

Public Works 150**Introduction to Public Administration**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

1/13/2020

Public Works 151**Ethics and Professionalism: The High Calling of Public Service**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. 1/13/2020

Public Works 152**Preparing for Supervision Public Sector**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. 1/13/2020

Public Works 153**Public Sector Budgeting Fundamentals**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. 1/13/2020

Public Works 154**Public Sector Human Resources Fundamental**

Unit(s): 3.0

Class Hours: 54 Lecture total.

The purpose of is 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 Organizational Development 1/13/2020

Public Works 155**The Art of Politics and Policymaking**

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. 1/13/2020



Public Works 199
Cooperative Work Experience Education

Unit(s): 1.0-4.0

Class Hours: 60-300 Laboratory total.

Corequisite: Six (6) units in Public Works courses.

This course will provide students majoring in the Public Works the opportunity to apply knowledge and skills gained from college courses in an actual 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. Grade: Pass/No Pass. Open Entry/Open Exit. **CSU**

READING (READ)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Reading: Amy Freese

The Reading program offers a comprehensive set of courses designed to help students develop and enhance reading comprehension and critical thinking skills for greater success in college courses. Reading courses assist students in building academic vocabulary, enhancing reading comprehension across disciplines and developing critical analysis and interpretation of college-level text.

Courses

Reading-N96

Foundation for College Reading

Unit(s): 3.0

Class Hours: 54 Lecture total:

~~Introduces strategies for developing vocabulary and reading comprehension skills. Word recognition, context clues and dictionary skills are addressed. Comprehension skills such as finding main idea and supporting details, and recognizing patterns and structures are presented. Includes strategies for effective reading practices and overcoming reading anxiety.~~ 1/13/2020

Reading-097

Advanced College Reading

Unit(s): 3.0

Class Hours: 54 Lecture total:

~~Designed to expand reading comprehension, increase knowledge of academic vocabulary, develop basic critical reading skills, improve reading rate and build confidence and positive attitudes toward reading. Includes strategies for effective reading practices and overcoming reading anxiety.~~ 1/13/2020

Reading 101

Introduction to Academic Reading

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Reading 102

Academic Reading

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Reading 128

Expanding ESL Reading Skills

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students are advised to concurrently enrolled in American College English 052. **Qualifying profile from the placement process.**

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. **CSU**

1/13/2020



Reading 129 Refining ESL Reading Skills

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students are advised to concurrently enroll in American College English 102. [Qualifying profile from the placement process.](#)

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. **CSU**

1/13/2020

Reading 130 Reading Strategies for Across the Curriculum

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students should be concurrently enrolled in another discipline course.

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. **CSU**

Reading 131 Reading in Apprenticeship

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students should be concurrently enrolled in an SCC Apprenticeship course.

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. **CSU**

Reading 132 Reading in Career Education

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students should be concurrently enrolled in an SCC Career Education (CE) course. .

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. **CSU**

Reading 134 Reading in the Social Sciences

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students should be concurrently enrolled in an SCC Cultural, Behavioral, or Social Science course.

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. **CSU**

Reading 136 Reading in STEM

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students should be concurrently enrolled in an SCC STEM course.

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. **CSU**

Reading 138 Reading in the Humanities

Unit(s): 1.0

Class Hours: 18 Lecture total.

Recommended Preparation: Students should be concurrently enrolled in an SCC Humanities course.

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. **CSU**

Reading 150 Critical Reading

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: English 100 or 101/101H or concurrent enrollment.

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. **CSU**

1/13/2020

Reading 151 Critical Reading and Analysis

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: English 100 or English 101/101H.

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. **CSU**

1/13/2020



REAL ESTATE (RE)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Facilitator: Alana Gates

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 pass the California Real Estate Sales Associate Exam.

Associate of Science Real Estate (11869)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Real Estate 102, Real Estate Principles	3
Real Estate 103, Legal Aspects of Real Estate	3
Real Estate 105, Real Estate Practice	3
Real Estate 106, Real Estate Finance	3
Real Estate 110, Real Estate Economics	3
Real Estate 112, Real Property Management	3
Real Estate 114, Appraisal Principles and Procedures	3.5
Select one (1) course from the following:	1-4
Accounting 100, Accounting for Small Business (3)	
Accounting 101, Financial Accounting (4)	
Real Estate 116, Residential Real Estate Appraisal (3.5)	
Real Estate 117, Residential Report Writing and Case Studies (1)	
Real Estate 151, Fundamentals of Escrow (3)	
TOTAL	22.5-25.5

Individuals interested in obtaining a California real estate salesperson or broker license are directed to contact the State of California Bureau of Real Estate at www.dre.ca.gov to ensure they are meeting both current and their individual requirements for licensing and taking the exam.

Certificate of Achievement Real Estate (21639)

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 pass the California Real Estate Sales Associates Exam.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Real Estate 102, Real Estate Principles	3
Real Estate 103, Legal Aspects of Real Estate	3
Real Estate 105, Real Estate Practice	3
Real Estate 106, Real Estate Finance	3
Real Estate 110, Real Estate Economics	3
Real Estate 112, Real Property Management	3
Real Estate 114, Appraisal Principles and Procedures	3.5
Select one (1) course from the following:	1-4
Accounting 100, Accounting for Small Business (3)	
Accounting 101, Financial Accounting (4)	
Real Estate 116, Residential Real Estate Appraisal (3.5)	
Real Estate 117, Residential Report Writing and Case Studies (1)	
Real Estate 151, Fundamentals of Escrow (3)	
TOTAL	22.5-25.5

Individuals interested in obtaining a California real estate salesperson or broker license are directed to contact the State of California Bureau of Real Estate at www.dre.ca.gov to ensure they are meeting both current and their individual requirements for licensing and taking the exam.

Certificate of Proficiency Real Estate Appraisal

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 as it provides coursework for real estate professionals.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate and apply knowledge of methods, concepts and standards according to USPAP (Uniform Standards of Professional Appraisal Practice.)

Certificate requirements	Units
Real Estate 102, Real Estate Principles	3
OR Real Estate 103, Legal Aspects of Real Estate	3
OR Real Estate 110, Real Estate Economics	3
Real Estate 114, Appraisal Principles and Procedures	3.5
Real Estate 116, Residential Real Estate Appraisal	3.5
Real Estate 117, Residential Report Writing and Case Studies	1
TOTAL	14

Individuals interested in obtaining a Real Estate Appraiser Trainee and Residential license or a Real Estate Appraiser Certified Residential or General license are directed to contact the California State Office of Real Estate Appraisers (OREA) at www.OREA.ca.gov to ensure they are meeting both current and their individual educational and other requirements for licensing and taking the exam.

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Certificate of Proficiency Real Estate Salesperson

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate and apply knowledge of principles, procedures and practices of real estate sales according to DRE (Department of Real Estate) standards.

Certificate requirements	Units
Real Estate 102, Real Estate Principles	3
Real Estate 105, Real Estate Practice	3
Real Estate 110, Real Estate Economics	3
Real Estate 114, Appraisal Principles and Procedures	3.5
TOTAL	12.5

Courses

Real Estate 053

Real Estate License Preparation

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Real Estate 102 or 105.

Real estate licensure preparation. Fundamental information regarding practice of real estate with emphasis on real estate law, principles, practice, and other topics covered in the state licensure examination. Important preparation for those intending to take the California real estate salesperson's or broker's license examination.

Real Estate 102

Real Estate Principles

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Real Estate 103

Legal Aspects of Real Estate

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Real Estate 105

Real Estate Practice

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Real Estate 106

Real Estate Finance

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Real Estate 110

Real Estate Economics

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Real Estate 112

Real Property Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Real Estate 114

Appraisal Principles and Procedures

Unit(s): 3.5

Class Hours: 63 Lecture total.

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. Course applies 60 hours of educational instruction towards the requirements for licensure from the California Office of Real Estate Appraisal (OREA). Course is required for the appraisal licenses for Trainee, Residential, Certified Residential, and Certified General license. 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. **CSU**

Real Estate 116

Residential Real Estate Appraisal

Unit(s): 3.5

Class Hours: 63 Lecture total.

Studies in residential market analysis and highest and best use; residential appraiser site valuation and cost approach; and residential sales comparison and income approach. Course applies 60 hours of educational instruction towards the requirements for licensure from the California Office of Real Estate Appraisal (OREA). Course is required for the appraisal licenses for Trainee, Residential, Certified Residential, and Certified General license. 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. **CSU**



Real Estate 117
Residential Report Writing and Case Studies

Unit(s): 1.0
 Class Hours: 18 Lecture total.
 Residential report writing and case studies in appraisal to include theories, techniques, and procedures of using various residential forms and reports for appraisal. Course applies 16 hours of educational instruction towards the requirements for licensure from the California Office of Real Estate Appraisal (OREA). Course is required for the appraisal licenses for Trainee, Residential, Certified Residential, and Certified General license. **CSU**

Real Estate 151
Fundamentals of Escrow

Unit(s): 3.0
 Class Hours: 54 Lecture total.
 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). **CSU**

Real Estate 171
Real Estate Cooperative Work Experience/Career Internship

Unit(s): 1.0-4.0
 Class Hours: 60-300 Laboratory total.
 Recommended Preparation: Real Estate 102 and 105.
 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. May be repeated. Open Entry/Open Exit. **CSU**

SOCIOLOGY (SOC)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil
Department Chair, Sociology: Tiffany Gause
Faculty: Tiffany Gause, Melissa Govea-Von Velasco, Erika Gutierrez, Shereen Siddiqui

Associate in Arts
Sociology for Transfer (30600)

~~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 the California State University system to pursue a baccalaureate degree in Sociology or a related field.~~

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 the California State University system to pursue a baccalaureate degree in Sociology or a related field.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate familiarity with the theoretical perspectives, concepts, findings, problems, institutions, history, and trends in the field of sociology.

Major requirements*	Units
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
Mathematics 219/219H, Statistics and Probability	4
Sociology 100/100H, Introduction to Sociology	3
Sociology 116, Social Problems	3
Select two (2) courses from the following (List A):	6
Sociology 130, Relationships, Marriages, and Family Dynamics (3)	
Sociology 240/Psychology 240, Introduction to Social Psychology (3)	
Select one (1) course from the following (List B):	3-4
Anthropology 100 /100H, Introduction to Cultural Anthropology (3)	
English 103/103H, Critical Thinking and Writing (4)	
Psychology 100/100H, Introduction to Psychology (3)	
Sociology 115, Death and Dying (3)	
Sociology 220, Introduction to Gender and Sexualities (3)	
1/13/2020	TOTAL 19-20

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Associate in Arts

Social Justice Studies: General for Transfer (37161)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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

Major requirements*	Units
Sociology 150, Introduction to Race and Ethnicity	3
Sociology 220, Introduction to Gender and Sexualities	3

Select one (1) course from the following (Core):

OR Chicano Studies 101, Introduction to Chicano Studies (3)	3
Ethnic Studies 101, Ethnic Studies (3)	

Select three (3) courses from at least two (2) of the following areas (List A):

Area 1: History and Government

History 118, Social and Cultural History of the United States (3)
 History 124, Mexican-American History in the United States (3)
 History 127, Women in U.S. History (3)
 History 132, Modern African History (3)
 Political Science 221, Women in American Politics (3)

Area 2: Arts and Humanities

English 246, Survey of Chicano Literature (3)
 English 278, Survey of Literature by Women (3)
 History 152, Latin American History (3)
 History 162, Asian Civilizations (3)
 Philosophy 120, Introduction to Social and Political Philosophy (3)

Area 3: Social Science

Communication 120/120H, Intercultural Communication (3)
 Communication 225/225H, Gender Communication (3)
 History 240, Introduction to Peace and Conflict Studies (3)
 Psychology 170, Multicultural Psychology (3)
 Psychology 180, Psychology of Gender (3)

Area 4: Quantitative Reasoning and Research Methods

Mathematics 219/219H, Statistics and Probability (4)
 Sociology 120, Introduction to Sociological Research Methods (3)

Area 5: Major Preparation (may not be a course used to satisfy the core requirements)

Chicano Studies 101, Introduction to Chicano Studies (3)
 Ethnic Studies 101, Ethnic Studies (3)

TOTAL 18-19

Associate in Arts

Social Justice Studies: Chicano Studies for Transfer (37132)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Chicano Studies 101, Introduction to Chicano Studies	3
Sociology 150, Introduction to Race and Ethnicity	3
Sociology 220, Introduction to Gender and Sexualities	3

Select three (3) courses from at least two (2) of the following areas (List A):

Area 1: History and Government

History 118, Social and Cultural History of the United States (3)
 History 124, Mexican-American History in the United States (3)

Area 2: Arts and Humanities

English 246, Survey of Chicano Literature (3)
 History 152, Latin American History (3)

Area 3: Social Science

Communication 120/120H, Intercultural Communication (3)
 Psychology 170, Multicultural Psychology (3)

Area 4: Quantitative Reasoning and Research Methods

Sociology 120, Introduction to Sociological Research Methods (3)

Area 5: Major Preparation

Ethnic Studies 101, Ethnic Studies (3)

TOTAL 18



Associate in Arts

Social Justice Studies: Ethnic Studies for Transfer (37162)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Ethnic Studies 101, Ethnic Studies	3
Sociology 150, Introduction to Race and Ethnicity	3
Sociology 220, Introduction to Gender and Sexualities	3

Select three (3) courses from at least two (2) of the following areas (List A): 9

Area 1: History and Government

- History 118, Social and Cultural History of the United States (3)
- History 124, Mexican-American History in the United States (3)
- History 127, Women in U.S. History (3)
- Political Science 221, Women in American Politics (3)

Area 2: Arts and Humanities

- English 246, Survey of Chicano Literature (3)
- English 278, Survey of Literature by Women (3)
- History 152, Latin American History (3)
- History 162, Asian Civilizations (3)

Area 3: Social Science

- Communication 120/120H, Intercultural Communication (3)
- History 240, Introduction to Peace and Conflict Studies (3)
- Psychology 170, Multicultural Psychology (3)
- Psychology 180, Psychology of Gender (3)

Area 4: Quantitative Reasoning and Research Methods

- Sociology 120, Introduction to Sociological Research Methods (3)

Area 5: Major Preparation

- Chicano Studies 101, Introduction to Chicano Studies (3)
- Ethnic Studies 130, Introduction to Chicano Studies (3)

1/13/2020	TOTAL	18
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Associate in Arts

Social Justice Studies: Gender Studies for Transfer (37133)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Sociology 150, Introduction to Race and Ethnicity	3
Sociology 220, Introduction to Gender and Sexualities	3

Select one (1) course from the following (Core): 3

- Chicano Studies 101, Introduction to Chicano Studies (3)
- Ethnic Studies 101, Ethnic Studies (3)

- Ethnic Studies 130, Introduction to Chicano Studies (3)

- Gender, Sexuality and Women's Studies 101, Introduction to Women's Studies (3)

Select three (3) courses from at least two (2) of the following areas (List A): 9

Area 1: History and Government

- History 127, Women in U.S. History (3)
- Political Science 221, Women in American Politics (3)

Area 2: Arts and Humanities

- English 278, Survey of Literature by Women (3)
- Philosophy 120, Introduction to Social and Political Philosophy (3)

Area 3: Social Science

- Communication 225/225H, Gender Communication (3)
- Psychology 180, Psychology of Gender (3)

Area 4: Quantitative Reasoning and Research Methods

- Sociology 120, Introduction to Sociological Research Methods (3)

Area 5: Major Preparation (may not be a course used to satisfy the core requirements)

- Chicano Studies 101, Introduction to Chicano Studies (3)
- Ethnic Studies 101, Ethnic Studies (3)

- Ethnic Studies 130, Introduction to Chicano Studies (3)

- Gender, Sexuality and Women's Studies 101, Introduction to Women's Studies (3)

- Gender, Sexuality and Women's Studies 102, Money, Sex, and Power (3)

1/13/2020	TOTAL	18
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*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Associate of Arts Sociology (11947)

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 of arts degree prepares students to move into a curriculum at a four-year institution leading to a baccalaureate degree.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Learn to implement perspectives in dealing with social dynamics.100
 - Learn the application of research methods in investigating social problems.100
 - Understand group interaction, including gender, ethnicity, age differences, and social class.100
 - Learn the influence of social institutions on individuals and groups.
- Learn to implement perspectives in dealing with social dynamics.100
 - Learn the application of research methods in investigating social problems.100
 - Understand group interaction, including gender, ethnicity, age differences, and social class.100
 - Learn the influence of social institutions on individuals and groups.

Major requirements*	Units
Sociology 100/100H, Introduction to Sociology	3
Select two (2) courses from the following core requirements:	6-7
Mathematics 219/219H, Statistics and Probability (4)	
OR Mathematics 220, Statistics and Probability with Integrated Review (4)	4
Sociology 116/116H, Social Problems	3
Sociology 120, Introduction to Sociological Research Methods	3
Select two (2) courses from the following (List A):	6
Sociology 130, Relationships, Marriages, and Family Dynamics (3)	
Sociology 150, Introduction to Race and Ethnicity (3)	
Sociology 240, Introduction to Social Psychology (3)	
Sociology 220, Introduction to Gender and Sexualities (3)	
Select one (1) course from the following (List A):	3-4
Anthropology 100/100H, Introduction to Cultural Anthropology (3)	
English 103/103H, Critical Thinking and Writing (4)	
Psychology 100/100H, Introduction to Psychology (3)	
Sociology 115, Death and Dying (3)	

1/13/2020 **TOTAL 18-20**

Courses

Sociology 100 Introduction to Sociology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID SOCI 110)**

Sociology 100H Honors Introduction to Sociology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

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. **CSU/UC (C-ID SOCI 110)**

Sociology 115 Death and Dying

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC**

Sociology 116 Social Problems

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU/UC (C-ID SOCI 115)**

Sociology 120 Introduction to Sociological Research Methods

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Sociology 100/100H

Recommended Preparation: Mathematics 219/219H or **Mathematics 220.**

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. **CSU/UC (C-ID SOCI 120)**

1/13/2020

Sociology 125 Introduction to Statistics in Sociology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 080 or 086 or qualifying profile from the math placement process.

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.



Sociology 125H

Honors Introduction to Statistics in Sociology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Mathematics 080 or 086 or qualifying profile from the math placement process. A high school or college GPA of 3.0 or above.

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.

Sociology 130

Relationships, Marriages, and Family Dynamics

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID SOCI 130)*

Sociology 150

Introduction to Race and Ethnicity

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Sociology 100.

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. *CSU/UC (C-ID SOCI 150)*

Sociology 220

Introduction to Gender and Sexualities

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC (C-ID SOCI 140)*

Sociology 240

Introduction to Social Psychology

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.) *CSU/UC (C-ID PSY 170)*

Sociology 240H

Honors Introduction to Social Psychology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: A high school or college GPA of 3.0 or above.

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.) *CSU/UC*

Sociology 286

Introduction to LGBTQ Studies

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*



SPANISH (SPAN)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Modern Languages: Lourdes Fajardo

Associate in Arts

Spanish for Transfer (32045)

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

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements (Option 1)

Units

**If student places out of any of the courses mentioned in Option 1, student will need to take additional courses from LIST A to fulfill the unit requirement.*

Spanish 101/101H, Elementary Spanish I (5)	
OR	
AND Spanish 101A, Elementary Spanish IA (2.5)	5
Spanish 101B, Elementary Spanish IB (2.5)	
Spanish 102, Elementary Spanish II (5)	5
Spanish 201, Intermediate Spanish I	5
Spanish 202, Intermediate Spanish II	5

Major requirements (Option 2: Native Speaker)

Units

In addition to the required core courses for Option 2, student will need to take additional courses from LIST A to fulfill the 23-25 unit requirement for this major.

Spanish 110, Spanish for Spanish Speakers 1	5
Spanish 111, Spanish for Spanish Speakers 2	5

Select one (1) course from the following (List A):

3

- Anthropology 100/100H, Introduction to Cultural Anthropology (3)
- Chicano Studies 101, Introduction to Chicano Studies (3)
- Communications 120/120H, Introduction to Intercultural Communication (3)
- English 246, Survey of Chicano Literature (3)
- Ethnic Studies 101, Introduction to Ethnic Studies (3)
- Geography 100/100H, World Regional Geography (3)
- History 124, Mexican-American History in the United States (3)
- French 101 Elementary French 1 (5)
- Italian 101 Elementary Italian I (5)
- Sociology 100/100H Introduction to Sociology (3)
- Sociology 220 Introduction to Gender and Sexualities (3)
- Spanish 194, Beginning Conversational Spanish (3)
- Spanish 195A, Advanced Conversational Spanish (3)
- Spanish 195B, Advanced Conversational Spanish (3)
- Spanish 213, College Spanish Composition (3)

TOTAL 23-25

Courses

Spanish N51

Spanish for Public Personnel

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Spanish 101

Elementary Spanish I

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

~~A college-level Spanish class. Practice and integration of pronunciation, grammar, vocabulary, common idioms, listening, speaking, reading and writing techniques for the expression of ideas orally and in writing. Introduction to Hispanic culture. Spanish 101 is equivalent to two years of high school Spanish.~~

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. **CSU/UC (C-ID SPAN 100)** 1/13/2020

Spanish 101A

Elementary Spanish IA

Unit(s): 2.5

Class Hours: 45 Lecture total, 8 Laboratory total.

Spanish class focusing on pronunciation, grammar essentials, basic vocabulary including common idioms, listening, speaking, reading and writing techniques to provide avenues for the expression of ideas orally and in writing. Introduction to Hispanic culture is included. Spanish 101A and Spanish 101B together are equivalent in units and content to Spanish 101 and equivalent to two years of high school Spanish. **CSU/UC (C-ID SPAN 100)**

Spanish 101B

Elementary Spanish IB

Unit(s): 2.5

Class Hours: 45 Lecture total, 8 Laboratory total.

Prerequisite: Spanish 101A.

Spanish class focusing on pronunciation, grammar essentials, basic vocabulary including common idioms, listening, speaking, reading and writing techniques to provide avenues for the expression of ideas orally and in writing. Introduction to Hispanic culture is included. Spanish 101A and Spanish 101B together are equivalent in units and content to Spanish 101 and equivalent to 2 years of high school Spanish. **CSU/UC (C-ID SPAN 100) (SPAN 101A + 101B)**



Spanish 101H

Honors Elementary Spanish I

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: A high school or college GPA of 3.0 or above.

Enhanced and intensive practice and integration of pronunciation, grammar, vocabulary, common idioms, listening, speaking, reading and writing techniques for the expression of ideas orally and in writing. Enriched introduction of Hispanic culture. Spanish 101H is equivalent to two years of high school Spanish. **CSU/UC (C-ID SPAN 100)**

Spanish 102

Elementary Spanish II

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Spanish 101/101H or 101A and 101B or two years of high school Spanish.

A college level Spanish class focusing on further training in language skills providing avenues for the expression of ideas orally and in writing. Additional study of Hispanic culture. Spanish 102 is equivalent to the third year of high school Spanish. **CSU/UC (C-ID SPAN 110)**

Spanish 110

Spanish for Spanish Speakers 1

Unit(s): 5.0

Class Hours: 90 Lecture total.

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. **CSU/UC (C-ID SPAN 220)**

Spanish 111

Spanish for Spanish Speakers 2

Unit(s): 5.0

Class Hours: 90 Lecture total.

Prerequisite: Spanish 110.

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. **CSU/UC (C-ID SPAN 230)**

Spanish 115

Practical Communication in Spanish for Teachers

Unit(s): 2.0

Class Hours: 36 Lecture total.

Recommended Preparation: Spanish 101/101H or 101B.

~~Course emphasizes development of basic reading, oral, and written communication skills in Spanish for realistic situations in a classroom environment, and familiarizes students with the culture of Spanish speakers.~~

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. **CSU**

1/13/2020

Spanish 194

Beginning Conversational Spanish

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Spanish 101/101H or 101B or two years of high school Spanish.

Development of conversational and composition skills. Review of language structure through discussions, conversations, readings and compositions dealing with Spanish speakers' culture and current events. **CSU**

Spanish 195A

Advanced Conversational Spanish

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Spanish 102/102H.

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. **CSU/UC**

Spanish 195B

Advanced Conversational Spanish

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Spanish 195A.

Continuation of development of conversational skills. Provides avenues for the expression of ideas introduced in literary and current event readings through discussions and class presentations to deepen appreciation of Hispanic cultures. **CSU/UC**

Spanish 201

Intermediate Spanish I

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Spanish 102/102H or three years of high school Spanish.

A college-level Spanish class focusing on expansive review of usage and grammar, discussions of interpretive readings, conversation, and composition. **CSU/UC (C-ID SPAN 200)**

Spanish 202

Intermediate Spanish II

Unit(s): 5.0

Class Hours: 90 Lecture total, 18 Laboratory total.

Prerequisite: Spanish 201 or four years of high school Spanish.

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. **CSU/UC (C-ID SPAN 210)**

Spanish 213

College Spanish Composition

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Spanish 201 (may be taken concurrently) or three years of high school Spanish.

Comprehensive review and application of Spanish grammar and emphasis on the development of writing based on discussions, cultural, and literary materials. **CSU/UC**



SURVEY/MAPPING SCIENCES (SURV)

Division of Business and Career Education

Interim Dean: Elizabeth Arteaga

Facilitator: Mark Counts

The Associate of Science degree and Certificate of Achievement in Land Surveying provide 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 for Professional Engineers and Land Surveyors will grant one year of experience credit for students completing an Associate Degree in Survey/Mapping Sciences.

Associate of Science

Land Surveying (11906)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Be prepared for careers in Geographical Information Systems, Land Surveying, and Digital Photogrammetry.

Major requirements*	Units
Survey/Mapping Sciences 118, Plane Surveying	4
Survey/Mapping Sciences 119, Advanced Plane Surveying	4
Survey/Mapping Sciences 205, Computer Aided Drafting Fundamentals for Surveyors	3
Survey/Mapping Sciences 221, Advanced Problems in Surveying I	3
Survey/Mapping Sciences 222, Advanced Problems in Surveying II	3
Survey/Mapping Sciences 229, Legal Aspects of Land Surveying I	3
Survey/Mapping Sciences 230, Legal Aspects of Land Surveying II	3
TOTAL	23

Certificate of Achievement

Land Surveying (21668)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Be prepared for careers in Geographical Information Systems, Land Surveying, and Digital Photogrammetry.

Certificate requirements	Units
Survey/Mapping Sciences 118, Plane Surveying	4
Survey/Mapping Sciences 119, Advanced Plane Surveying	4
Survey/Mapping Sciences 205, Computer Aided Drafting Fundamentals for Surveyors	3
Survey/Mapping Sciences 221, Advanced Problems in Surveying I	3
Survey/Mapping Sciences 222, Advanced Problems in Surveying II	3
Survey/Mapping Sciences 229, Legal Aspects of Land Surveying I	3
Survey/Mapping Sciences 230, Legal Aspects of Land Surveying II	3
TOTAL	23

Courses

Survey/Mapping Sciences 118

Plane Surveying

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Recommended Preparation: Mathematics 160.

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. **CSU/UC**

Survey/Mapping Sciences 119

Advanced Plane Surveying

Unit(s): 4.0

Class Hours: 54 Lecture total, 54 Laboratory total.

Prerequisite: Survey/Mapping Sciences 118 or possession of a valid Certificate as a Land Surveyor-In-Training (LSIT) issued by any state.

Recommended Preparation: Mathematics 160.

Emphasis on coordinate geometry calculations. Route surveying with horizontal and vertical curves. Topographic surveying and mapping. Construction surveying. Introduction to geospatial technologies, boundary surveying and surveys of public lands. Field surveying projects. Assists in passing the land surveyor-in-training exam. **CSU/UC**

Survey/Mapping Sciences 155

Introduction to Geographic Information Systems

Unit(s): 3.0

Class Hours: 45 Lecture total, 27 Laboratory total.

Recommended Preparation: Familiarity with PC and Windows operating environment.

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. (Same as Geography 155.) **CSU/UC (C-ID GEOG 155)**

Survey/Mapping Sciences 205

Computer Aided Drafting Fundamentals For Surveyors

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Survey/Mapping Sciences 119.

A first course in computer drafting with applications in land surveying specifically intended for students with land surveying training or experience. **CSU**

Survey/Mapping Sciences 221

Advanced Problems in Surveying I

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Survey/Mapping Sciences 119 and Mathematics 160.

Measurement analysis, adjustments, geodesy, state plane coordinates, global position system. Prepares students for land survey exams. **CSU**

Survey/Mapping Sciences 222

Advanced Problems in Surveying II

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Survey/Mapping Sciences 119 and 221 and Mathematics 160.

Introduction to photogrammetry emphasizing concepts and calculations. Route surveying includes horizontal and vertical curves, volume calculations and construction staking. Prepares students for land survey exams. **CSU**



Survey/Mapping Sciences 229
Legal Aspects of Land Surveying I

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Survey/Mapping Sciences 119.

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. **CSU**

Survey/Mapping Sciences 230
Legal Aspects of Land Surveying II

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Survey/Mapping Sciences 229.

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. **CSU**

THEATRE ARTS (THEA)

Division of Arts, Humanities and Social Sciences

Dean: David Vakil

Department Chair, Performing Arts: Binh Vu

Courses

Theatre Arts 100
Introduction to Theatre

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSUI/UC (C-ID THTR 112)**

Theatre Arts 110
Acting Fundamentals

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

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. **CSUI/UC**

Theatre Arts 111
Intermediate Acting

Unit(s): 3.0

Class Hours: 54 Lecture total, 18 Laboratory total.

Recommended Preparation: Theatre Arts 110.

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. **CSUI/UC (C-ID THTR 152)**

Theatre Arts 118
Fundamentals of Scene Study

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Recommended Preparation: Theatre Arts 110 Audition/Interview.

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. **CSUI/UC**

Theatre Arts 121
Beginning Performance Ensemble

Unit(s): 2.5

Class Hours: 36 Lecture total, 36 Laboratory total.

Prerequisite: Audition:

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. **CSUI/UC**

1/13/2020

Theatre Arts 122
Beginning Production Showcase

Unit(s): 3.0

Class Hours: 36 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

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. **CSUI/UC**

**Theatre Arts 180A****Rehearsal and Performance: Drama - Minor/Supporting Role**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 180B**Rehearsal and Performance: Drama - Leading Role**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 181A**Rehearsal and Performance: Comedy - Minor/Supporting Role**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 181B**Rehearsal and Performance: Comedy - Leading Role**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 182A**Rehearsal and Performance: One-Act Plays**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 182B**Rehearsal and Performance: Original One-Act Plays**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition/Interview.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 183A**Rehearsal and Performance: Musical - Minor/Supporting Role**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 183B**Rehearsal and Performance: Musical - Leading Role**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Audition.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 186A**Beginning Technical Theatre Production**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Interview.

Recommended Preparation: Theatre Arts 110.

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. **CSU**

Theatre Arts 186B**Intermediate Technical Theatre Production**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Interview.

Recommended Preparation: Theatre Arts 110.

Students will gain technical theatre experience working as a crew head in one of the following production areas: Stage management, directionial associate, scenery, properties, costuming, makeup, lighting, and/or sound. **CSU**

Theatre Arts 186C**Advanced Technical Theatre Production**

Unit(s): 2.0

Class Hours: 18 Lecture total, 54 Laboratory total.

Prerequisite: Interview.

Recommended Preparation: Theatre Arts 110.

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. **CSU**



WATER UTILITY SCIENCE (WATR)

Division of Business and Career Education

Interim Dean: Elizabeth Artega
Facilitator: Stephen McLean

The Associate of Science degree and Certificate of Achievement in Water Utility Science cover basic concepts in the operation of water treatment plants, controlling and monitoring water deliveries, water quality control methods, water and wastewater pumping equipment electrical systems repair, in addition to pump repair and maintenance procedures. The program is designed to train new personnel and to enable those already working in the field to upgrade their skills. Typically, the new employee starts as an entry level worker, then advances to other higher levels including lead operator, Operations and Maintenance Supervision, Superintendent and/or Manager.

Associate of Science Water Distribution (11907)

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Analyze drinking water distribution systems and practices with respect to their ability to achieve compliance with California public health standards.

Major requirements*	Units
Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 061, Water Distribution	3
Water Utility Science 062, Advanced Water Distribution	3
Select four (4) courses from the following:	12
Water Utility Science 020, Introduction to Water Science (3)	
Water Utility Science 052, Water Conservation Practitioner	
Water Utility Science 053, Water Reclamation and Reuse	
Water Utility Science 060, Water Utility Maintenance and Construction (3)	
Water Utility Science 063, Electrical Wiring and Controls for Operators (3)	
Water Utility Science 064, Pumps and Pumping (3)	
Water Utility Science 071, Water Treatment Fundamentals (3)	
Water Utility Science 107, California Water Resources (3)	
TOTAL	21

Certificate of Achievement Water Distribution (19625)

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Evaluate drinking water distribution systems and practices with respect to their capabilities to achieve compliance with California public health standards.

Certificate requirements	Units
Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 061, Water Distribution	3
Water Utility Science 062, Advanced Water Distribution	3
Select four (4) courses from the following:	12
Water Utility Science 020, Introduction to Water Science (3)	
Water Utility Science 052, Water Conservation Practitioner	
Water Utility Science 053, Water Reclamation and Reuse	
Water Utility Science 060, Water Utility Maintenance and Construction (3)	
Water Utility Science 063, Electrical Wiring and Controls for Operators (3)	
Water Utility Science 064, Pumps and Pumping (3)	
Water Utility Science 071, Water Treatment Fundamentals (3)	
Water Utility Science 107, California Water Resources (3)	
TOTAL	21

Certificate of Proficiency Water Distribution

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Evaluate drinking water distribution systems and practices with respect to their capabilities to achieve compliance with California public health standards.

Certificate requirements	Units
Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 061, Water Distribution	3
Water Utility Science 062, Advanced Water Distribution	3
Water Utility Science 052, Water Conservation Practitioner OR Water Utility Science 060, Water Utility Maintenance and Construction	3
TOTAL	12

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Associate of Science Water Treatment (19623)

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.

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- 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.

Major requirements*	Units
Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 071, Water Treatment Fundamentals	3
Water Utility Science 072, Advanced Water Treatment	3
Water Utility Science 073, Water Quality	3

Select three (3) courses from the following:

Water Utility Science 020, Introduction to Water Science (3)	3
Water Utility Science 052, Water Conservation Practitioner	3
Water Utility Science 053, Water Reclamation and Reuse	3
Water Utility Science 060, Water Utility Maintenance and Construction (3)	3
Water Utility Science 061, Water Distribution (3)	3
Water Utility Science 062, Advanced Water Distribution (3)	3
Water Utility Science 063, Electrical Wiring and Controls for Operators (3)	3
Water Utility Science 064, Pumps and Pumping (3)	3
Water Utility Science 065, Backflow Prevention Devices (2)	2
Water Utility Science 074, Water Quality Laboratory Analysis (2)	2
Water Utility Science 080, Introduction to Wastewater Treatment (3)	3
Water Utility Science 107. California Water Resources (3)	3
TOTAL	21

Certificate of Achievement Water Treatment (19624)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 071, Water Treatment Fundamentals	3
Water Utility Science 072, Advanced Water Treatment	3
Water Utility Science 073, Water Quality	3
Select three (3) courses from the following:	9
Water Utility Science 020, Introduction to Water Science (3)	3
Water Utility Science 052, Water Conservation Practitioner	3
Water Utility Science 053, Water Reclamation and Reuse	3
Water Utility Science 060, Water Utility Maintenance and Construction (3)	3
Water Utility Science 061, Water Distribution (3)	3
Water Utility Science 062, Advanced Water Distribution (3)	3
Water Utility Science 063, Electrical Wiring and Controls for Operators (3)	3
Water Utility Science 064, Pumps and Pumping (3)	3
Water Utility Science 065, Backflow Prevention Devices (2)	2
Water Utility Science 074, Water Quality Laboratory Analysis (2)	2
Water Utility Science 080, Introduction to Wastewater Treatment (3)	3
Water Utility Science 107. California Water Resources (3)	3
TOTAL	21

Certificate of Proficiency Water Treatment

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Units
Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 071, Water Treatment Fundamentals	3
Water Utility Science 072, Advanced Water Treatment	3
Water Utility Science 073, Water Quality	3
TOTAL	12



**Associate of Science
Wastewater/Environmental Sanitation (11908)**

Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Evaluate wastewater treatment processes with respect to their capabilities to achieve compliance with California public health and environmental standards.

Major requirements* **Units**

Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 080, Introduction to Wastewater Treatment	3
Water Utility Science 081, Wastewater Treatment	3
Water Utility Science 082, Advanced Wastewater Treatment	3

Select three (3) courses from the following: **9**

Water Utility Science 020, Introduction to Water Science (3)	
Water Utility Science 053, Water Reclamation and Reuse (3)	
Water Utility Science 060, Water Utility Maintenance and Construction (3)	
Water Utility Science 061, Water Distribution (3)	
Water Utility Science 062, Advanced Water Distribution (3)	
Water Utility Science 063, Electrical Wiring and Controls for Operators (3)	
Water Utility Science 064, Pumps and Pumping (3)	
Water Utility Science 071, Water Treatment Fundamentals (3)	
Water Utility Science 073, Water Quality (3)	
Water Utility Science 083, Collection Systems (3)	
Water Utility Science 107. California Water Resources (3)	

TOTAL **21**

**Certificate of Achievement
Wastewater/Environmental Sanitation (21669)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Evaluate wastewater treatment processes with respect to their capabilities to achieve compliance with California public health and environmental standards.

Certificate requirements **Units**

Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 080, Introduction to Wastewater Treatment	3
Water Utility Science 081, Wastewater Treatment	3
Water Utility Science 082, Advanced Wastewater Treatment	3

Select three (3) courses from the following: **9**

Water Utility Science 020, Introduction to Water Science (3)	
Water Utility Science 053, Water Reclamation and Reuse (3)	
Water Utility Science 060, Water Utility Maintenance and Construction (3)	
Water Utility Science 061, Water Distribution (3)	
Water Utility Science 062, Advanced Water Distribution (3)	
Water Utility Science 063, Electrical Wiring and Controls for Operators (3)	
Water Utility Science 064, Pumps and Pumping (3)	
Water Utility Science 071, Water Treatment Fundamentals (3)	
Water Utility Science 073, Water Quality (3)	
Water Utility Science 083, Collection Systems (3)	

Water Utility Science 107. California Water Resources (3)

TOTAL **21**

**Certificate of Proficiency
Wastewater Treatment**

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.

Learning Outcome(s)

- 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.

Certificate requirements **Units**

Water Utility Science 050, Water Mathematics and Hydraulics	3
Water Utility Science 081, Wastewater Treatment	3
Water Utility Science 082, Advanced Wastewater Treatment	3
Water Utility Science 053, Water Reclamation and Reuse	
OR Water Utility Science 080, Introduction to Wastewater Treatment	3
Water Utility Science 083, Collection Systems	

TOTAL **12**

**Certificate of Proficiency
Water Conservation**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements **Units**

Water Utility Science 052, Water Conservation Practitioner	3
Water Utility Science 107, California Water Resources	3
OR Public Works 080, Principles of Project Management	
Business 090, Principles of Project Management	3
OR Management 122, Business Communications	
Business 222, Business Writing	3

TOTAL **12**

*Major requirements for the associate degrees are in addition to the General Education requirements found on page 40.



Certificate of Proficiency Water Equipment Operation and Maintenance

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Analyze the performance of a wide variety of equipment items used in the water and wastewater industry.

Certificate requirements	Units
Water Utility Science 063, Electrical Wiring and Controls for Operators	3
Water Utility Science 064, Pumps and Pumping	3
Water Utility Science 060, Water Utility Maintenance and Construction (3) OR	2-3
Water Utility Science 065, Backflow Prevention Devices (2)	
Water Utility Science 083, Collection Systems	3
TOTAL	11-12

Certificate of Proficiency Water Utility Management

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Formulate and evaluate a project team to execute routine and special missions in the Water and Wastewater industries.

Certificate requirements	Units
Public Works 080/Business 090, Principles of Project Management	3
Computer Information Systems 101, Introduction to Microsoft Office	3
Business 121/Management 121, Human Relations and Organizational Behavior OR	3
Management 135, Human Resource Management	
Management 122, Business Communications OR	3
Business 222, Business Writing	
Management 123, Supervision	3
Water Utility Science 092, Water Utility Management	1
TOTAL	16

Courses

Water Utility Science 020 Introduction to Water Science

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Water Utility Science 048 Wastewater Operator Exam Review

Unit(s): 0.5

Class Hours: 9 Lecture total.

Recommended Preparation: Water Utility Science 081

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.

Water Utility Science 050 Water Mathematics and Hydraulics

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Mathematics N06 or equivalent skills as measured by the Mathematics Level 1 Exam.

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.

Water Utility Science 052 Water Conservation Practitioner

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Water Utility Science 053 Water Reclamation and Reuse

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Water Utility Science 054 Advanced Treatment Exam Preparation

Unit(s): 0.5

Class Hours: 9 Lecture total.

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.

Water Utility Science 056 Treatment Exam Preparation

Unit(s): 0.5

Class Hours: 9 Lecture total.

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.

Water Utility Science 057 Water Distribution Test Preparation

Unit(s): 0.5

Class Hours: 9 Lecture total.

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.



Water Utility Science 059
Advanced Distribution Exam Preparation

Unit(s): 0.5

Class Hours: 9 Lecture total.

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.

Water Utility Science 060
Water Utility Maintenance and Construction

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Water Utility Science 061
Water Distribution

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Water Utility Science 050 or current certification by the California State Water Resources Control Board as a Water Treatment, Water Distribution, or Wastewater Operator.

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.

Water Utility Science 062
Advanced Water Distribution

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Water Utility Science 061.

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.

Water Utility Science 063
Electrical Wiring and Controls for Operators

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. **CSU**

Water Utility Science 064
Pumps and Pumping

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Water Utility Science 065
Backflow Prevention Devices

Unit(s): 2.0

Class Hours: 27 Lecture total, 27 Laboratory total.

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.

Water Utility Science 071
Water Treatment Fundamentals

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Water Utility Science 050 or possession of current certification by the State Water Resources Control Board as a Water Treatment, Water Distribution, or Wastewater Treatment Operator.

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.

Water Utility Science 072
Advanced Water Treatment

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Water Utility Science 071.

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.

Water Utility Science 073
Water Quality

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Water Utility Science 050.

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.

Water Utility Science 074
Water Quality Laboratory Analysis

Unit(s): 2.0

Class Hours: 27 Lecture total, 27 Laboratory total.

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.

Water Utility Science 080
Introduction to Wastewater Treatment

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.



Water Utility Science 081 Wastewater Treatment

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Water Utility Science 050 or possession of valid certification from the State Water Resources Control Board as a Water Treatment, Water Distribution, or Wastewater Treatment Operator.

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.

Water Utility Science 082 Advanced Wastewater Treatment

Unit(s): 3.0

Class Hours: 54 Lecture total.

Prerequisite: Water Utility Science 081.

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 and 2. Optional field trips may be offered.

Water Utility Science 083 Collection Systems

Unit(s): 3.0

Class Hours: 54 Lecture total.

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.

Water Utility Science 091 Cross Connection Control Specialist

Unit(s): 3.0

Class Hours: 54 Lecture total.

Introduction and methodology of establishing a cross connection control program. Includes local, state and federal regulations. Prepares students for American Water Works Association Cross Connection Control Specialist examination.

Water Utility Science 092 Water Utility Management

Unit(s): 3.0

Class Hours: 54 Lecture total.

Recommended Preparation: Completion or concurrent enrollment in Management 122 or Business 222.

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.

Water Utility Science 107 California Water Resources

Unit(s): 3.0

Class Hours: 54 Lecture total.

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. *CSU/UC*

Water Utility Science 199 Cooperative Work Experience Education

Unit(s): 1.0-4.0

Class Hours: 60-300 Laboratory total.

Prerequisite: Successful completion of 6 units in Water Utility Science.

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. May be repeated. Grade: Pass/No Pass. Open Entry/Open Exit. *CSU*



CONTINUING EDUCATION



SANTIAGO CANYON COLLEGE—CONTINUING EDUCATION INSTRUCTIONAL CALENDAR

CONTINUING EDUCATION DIVISION INSTRUCTIONAL CALENDAR 2019-2020

FALL SEMESTER 2019

August 12–16	Faculty projects
August 19	INSTRUCTION BEGINS
September 2	Labor Day — Holiday
November 11	Veterans' Day — Holiday
November 25–30	Thanksgiving recess
December 19	INSTRUCTION ENDS
December 23–January 7	Winter recess

SPRING SEMESTER 2020

January 8–10	Faculty projects
January 13	INSTRUCTION BEGINS
January 20	Martin Luther King, Jr. — Holiday
February 14–15	Lincoln's Birthday — Holiday
February 17	President's Day — Holiday
March 30	Cesar Chavez Day — Holiday
April 6–12	OEC Spring recess*
May 22	OEC Commencement
May 22	INSTRUCTION ENDS
May 25	Memorial Day — Holiday

SUMMER SESSION 2020

May 26	INSTRUCTION BEGINS**
July 3	Independence Day — Holiday Observed
August 1	INSTRUCTION ENDS**

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

**beginning/ending date could be adjusted

For Santiago Canyon College Instructional Calendar see page 2.

JUNE 2019						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY 2019						
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28	29	30	31			

AUGUST 2019						
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SEPTEMBER 2019						
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OCTOBER 2019						
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NOVEMBER 2019						
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DECEMBER 2019						
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JANUARY 2020						
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FEBRUARY 2020						
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MARCH 2020						
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APRIL 2020						
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MAY 2020						
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JUNE 2020						
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JULY 2020						
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CONTINUING EDUCATION

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, a changing American society as productive, active members of their communities.

**Santiago Canyon College
Orange Education Center
1465 North Batavia Street
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 which 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 in program scheduling.

For the current class schedule, please visit the website at www.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.

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 Program

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 Programs

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 beginning through advanced levels. Core classes integrate 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 speciality courses.

Health and Safety Program

Provides courses specifically designed to offer lifelong education to promote the health, safety and well-being of individuals, families and communities.

Older Adults Program

Offers courses designed to meet 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 Program

Provides courses which 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 on 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
Phone: 714-628-5900

**Santiago Canyon College
OEC Provisional Education Facility**
1937 West Chapman Avenue, 2nd Floor
Orange, CA 92868
Phone: 714-628-5900

Santiago Canyon College
8045 East Chapman Avenue
Room U-80
Orange, CA 92869
Phone: 714-628-5929

College and Workforce Preparation Center
1572 North Main Street
Orange, CA 92867
Phone: 714-628-5999

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 anytime 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 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 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 first hand 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

A. 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.

B. Enrollment

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.

C. 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. For the complete guidelines for Student Conduct, see pages 24-25.

D. 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. For the complete guidelines for Standards of Conduct for Computer Classrooms and Computer Labs, see page 25 and Computer Network Use, see page 18.

E. 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. For procedures see page 14.

F. 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.

G. 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 But Passing	1 grade point 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

H. 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, 068, 084, 098
 Mathematics 156, 157, 159, 163, 164, 165, 166
 Science 168, 169, 190, 191
 Social Sciences 215, 218, 219, 222, 229, 230

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

I. Procedures for Student Complaints Regarding Grades

1. 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."

2. Procedure

- Student shall meet with instructor to discuss 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.



J. 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.

1. Definitions

Days: number of days refers to the days when the District offices are open.

Committee: Continuing Education Student Complaint Committee.

2. Procedure

- a. 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.

- b. 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.

- c. 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.

- d. 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.

- e. 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.

- f. 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.

- g. 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.

- h. If no resolution of the complaint is obtained under (f.) or (g.) above, the Area Dean of Instruction and Student Services shall forward the complaint together with findings of the committee to the Chancellor for review and decision.

- i. 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 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.

K. 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 information to be inaccurate, misleading, or otherwise in violation of their rights of privacy or other rights. Forms for 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 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.

L. 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.**

1. 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.**

2. 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.

M. Special Rules, Regulations and Student Obligations

Because of special program characteristics, the following programs must adhere to special rules, regulations and student obligation 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.

N. 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 request must be in writing and submitted each semester.

O. Use of Public School Facilities for Adult Classes

1. **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 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.

- 2. **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 disposal of cigarettes.

- 3. **Food and Beverages:** Food and beverages are not to be brought into the classrooms at any time. Proper containers are provided for disposal of trash in designated areas.



ADULT HIGH SCHOOL DIPLOMA 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:

Course of Study

Adult High School Graduation Requirements

The high school diploma requires a total of 160 credits taken from the following:

Subject Area	Credits
English (a maximum of 10 credits of reading; must include at least one composition course)	40.0
Mathematics	20.0
Natural Sciences (must include both a biological and a physical science course)	20.0
Social and Behavioral Sciences (must include U.S. History, American Government, Economics, World History, Geography, and Culture)	30.0
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 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 notation on a transcript (letter grade, SP, NP, or P) 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) per academic year, the student has the ability to elect to meet the 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 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.

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 a 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.

Policies Governing Sources of Credit

A. 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.

B. Trade or Business Schools

Courses 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.

C. 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:

1. Officer and enlisted service school courses;
2. Off-duty classes offered by the armed forces and cooperating local institutions;
3. Correspondence courses offered by the United States Armed Forces Institute, the Marine Corps Institute, the Coast Guard Institute, and

cooperating colleges and universities;

4. 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.)

D. 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.

E. 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 to the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

F. 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 to the district transcripts, certificates, and/or other records requested for the evaluation and possible awarding of credit.

G. 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:

1. Dates of employment.
2. Job description.
3. Nature of duties performed, indicating progress to more complex operations justifying a division into beginning and advanced skills.
4. Statements regarding successful performance.
5. Reason for termination of employment, if applicable.
6. The letter of self-employed students must be accompanied by a copy of the student's business license or W-2 form.
7. Upon receipt of verification of all work experience which the student wishes to be considered for credit, evaluation will be made on the following basis:
 - a. Up to 10 credits will be given for the first year of successful work experience.
 - b. 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.
 - c. After the initial 10 credits for the first year, student may earn 5 credits for a period of six months employment, provided there is evidence of successful progress.

H. Testing

The district may award a maximum of 80 high school credits on the basis of district approved testing.

1. 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.)

2. 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.

I. 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:

1. RSCCD will accept an official Grade Reporting Sheet from Central County Regional Occupational Program in lieu of a unified school district transcript provided it has a grade and a number of total hours.
2. The amount of credit issued is to be based on 16 clock hours per credit unit.
3. The maximum of 20 units toward electives will be accepted in this manner.
4. Students coming from outside the CCROP will have to validate their credits only through an official school district transcript.

J. Other Electives

1. 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.

2. 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.

3. 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

NONCREDIT COURSE DESCRIPTIONS

Continuing education courses are listed by subject on the following pages. Course numbers are listed at the beginning of each course title.

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.



CAREER DEVELOPMENT & COLLEGE PREPARATION CERTIFICATES

PROGRAM	PROGRAM
Adult Basic Education Mathematics Reading Writing	Vocational: Business 3-D Printing/Advanced Manufacturing Customer Service Representative Digital Marketing Executive Secretary / Administrative Assistant First-Line Supervisor / Manager, Office and Administrative Support Workers General Office Clerk Home-based Business Medical Billing Multi-Media Artist and Animators Receptionist/Information Clerk Web Associate
English as a Second Language ESL Advanced ESL Beginning ESL Beginning Multilevel ESL Civics ESL Communication ESL Intermediate ESL Intermediate Communication ESL Intermediate Multilevel ESL Intermediate Writing ESL Literacy ESL Program Enhanced Beginning ESL Skills Enhanced Intermediate ESL Skills Vocational ESL	Vocational: Clothing Commercial Textile Worker
High School Subjects College Readiness College Preparation Algebra Composition High School Equivalency Test (HiSET) Mathematics Secondary Education Student Leadership	Vocational: Construction Carpenter Construction Laborer
Secondary Education/GED Preparation	Vocational: Food Commercial and Institutional Food Preparation
	Vocational: Medical Caregiver / Personal Care Aide Healthcare Support Worker Home Health Aide Medical Assistant Nursing Assistant Nurse Assistant Acute Care
	Vocational: Shelter Dog Training
	Vocational: Warehousing
	Workforce Preparation Basic Employment Skills Effective Communication Skills Employment Readiness General Medical Office Clerk Office Leadership Skills Technical Skills for Higher Learning Transition to Higher Learning Understanding and Supporting Employees with Disabilities Workforce Skills



ADULT BASIC EDUCATION (ABE)

Division of Continuing Education

Dean: Joanne Armstrong

Department Chair: Jolene Shields

Coordinators: Elaine Pham, Denise Salcido

Certificate of Competency Adult Basic Education (33421)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proficient skills in basic writing, mathematics, reading and spelling used in high school courses, GED Preparation, and college courses.

Certificate requirements	Hours
Adult Basic Education 024, Adult Basic Education Writing	72
Adult Basic Education 025, Adult Basic Education Mathematics	72
Select one (1) course from the following:	72
Adult Basic Education 023, Adult Basic Education Reading (72)	
Adult Basic Education 026, Adult Basic Education Spelling (72)	
TOTAL	216

Certificate of Competency Adult Basic Education/Adult Secondary Education Mathematics (33422)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proficiency in pre algebraic concepts.

Certificate requirements	Hours
Adult Basic Education 025, Adult Basic Education Mathematics	72
High School Subjects Math 159, Math Fundamentals 2	72
TOTAL	144

Certificate of Competency Adult Basic Education/Adult Secondary Education Reading (33420)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate level gains in reading.

Certificate requirements	Hours
High School Subjects Reading 093, Building Reading Skills 1	72
High School Subjects Reading 094, Building Reading Skills 2	72
TOTAL	144

Certificate of Competency Adult Basic Education/Adult Secondary Education Writing (33555)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Emphasize mastery of grammar, sentence and paragraph skills, including organization in terms of unity, support, and coherence.

Certificate requirements	Hours
High School Subjects English 066, English Fundamentals 2	72
High School Subjects English 083, Composition 1	72
TOTAL	144

Courses

Adult Basic Education 009

Academic Skills

Credit(s): 5.0-20.0

Class Hours: 72-288 Lecture total.

Recommended Preparation: English as a Second Language 460 or higher and/or placement by counselor assessment.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Adult Basic Education 011

Native Language Basic Skills for Adults

Credit(s): 0

Class Hours: 216 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Adult Basic Education 023

Adult Basic Education Reading

Credit(s): 5.0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Adult Basic Education 024

Adult Basic Education Writing

Credit(s): 5.0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Adult Basic Education 025

Adult Basic Education Mathematics

Credit(s): 5.0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Adult Basic Education 026
Adult Basic Education Spelling

Credit(s): 5.0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

CITIZENSHIP (CTZN)

Division of Continuing Education

Dean: Lori Fasbinder

Coordinator: Eden Quimzon

Courses

Citizenship 020

Citizenship

Credit(s): 0

Class Hours: 72 Lecture total.

Recommended Preparation: English as a Second Language 303 or higher.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

COUNSELING (CNG)

Division of Continuing Education

Dean: Joanne Armstrong

Department Chair: Rosa Salazar de la Torre

Faculty: Ruby Frias, Rosalba Hernandez,
 Rosa Salazar de la Torre

Courses

Counseling 303

Education and Career Assessment

Credit(s): 0

Class Hours: 3 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



ENGLISH AS A SECOND LANGUAGE (ESL)

Division of Continuing Education

Dean: Lori Fasbinder

Coordinator and Chair: Eden Quimzon

Certificate of Competency ESL Advanced (33137)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate advanced written communication skills in English.

Certificate requirements	Hours
English as a Second Language 305, Advanced Low	216
English as a Second Language 306, Advanced High	216
TOTAL	432

Certificate of Competency ESL Beginning (30644)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate fundamental reading, writing, listening, and speaking skills in English.

Certificate requirements	Hours
English as a Second Language 301, Beginning Low	216
English as a Second Language 302, Beginning High	216
TOTAL	432

Certificate of Competency ESL Beginning Multilevel (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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate fundamental reading, writing, listening, and speaking skills in English.

Certificate requirements	Hours
English as a Second Language 300, Literacy	216
English as a Second Language 440, Beginning 1-3 Multilevel	216
TOTAL	432

Certificate of Competency ESL Civics (24191)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate knowledge of citizenship and civic-related issues.

Certificate requirements	Hours
English as a Second Language 120, ESL Civics	144
English as a Second Language 303, Intermediate Low	216
TOTAL	360

Certificate of Competency ESL Communication (36665)

The certificate of competency in ESL Communication improves the English language skills of limited English-speaking students with an emphasis on speaking and pronunciation.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate fundamental communication skills with a focus on pronunciation in English.

Certificate requirements	Hours
English as a Second Language 303, Intermediate Low	216
English as a Second Language 530, American English Pronunciation	216
TOTAL	432

Certificate of Competency ESL Intermediate (30646)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate essential reading, writing, listening, and speaking skills in English.

Certificate requirements	Hours
English as a Second Language 303 Intermediate Low	216
English as a Second Language 304 Intermediate High	216
TOTAL	432

Certificate of Competency ESL Intermediate Communication (24195)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate essential oral communication skills in English.



Certificate requirements	Hours
English as a Second Language 570, Conversation 1	72
English as a Second Language 580, Conversation 2	72
TOTAL	144

Certificate of Competency ESL Intermediate Multilevel (24234)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate essential reading, writing, listening, and speaking skills in English.

Certificate requirements	Hours
English as a Second Language 303 Intermediate Low	216
English as a Second Language 500, Intermediate 1-3 Multilevel	216
TOTAL	432

Certificate of Competency ESL Intermediate Writing (24196)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate essential written communication skills in English.

Certificate requirements	Hours
English as a Second Language 010, ESL Writing	72
English as a Second Language 303, Intermediate Low	216
TOTAL	288

Certificate of Competency ESL Literacy (24230)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate basic oral communication and literacy skills in English.

Certificate requirements	Hours
Adult Basic Education 011, Native Language Basic Skills for Adults	216
English as a Second Language 300, Literacy	216
TOTAL	432

Certificate of Competency English as a Second Language Program (24285)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate improved communication skills as they pertain to second language learners
- Demonstrate the ability to complete everyday written tasks

Certificate requirements	Hours
English as a Second Language 410, Beginning ESL 1	216
English as a Second Language 420, Beginning ESL 2	216
English as a Second Language 430, Beginning ESL 3	216
English as a Second Language 460, Intermediate ESL 1	216
English as a Second Language 470, Intermediate ESL 2	216
English as a Second Language 480, Intermediate ESL 3	216
TOTAL	1296

Certificate of Competency Enhanced Beginning ESL Skills (30690)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate fundamental reading, writing, listening, and speaking skills with a focus on pronunciation in English.

Certificate requirements	Hours
English as a Second Language 250, Seminar for Beginning ESL Students	72
English as a Second Language 530, American English Pronunciation	216
TOTAL	288

Certificate of Competency Enhanced Intermediate ESL Skills (30647)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate essential reading, writing, listening, and speaking skills with a focus on writing in English.

Certificate requirements	Hours
English as a Second Language 010, ESL Writing	72
English as a Second Language 260, Seminar for Intermediate ESL Students	72
TOTAL	144



**Certificate of Competency
Vocational ESL (24198)**

The Certificate of Competency in Vocational ESL develops the English language and workplace skills of limited-English speaking students.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate essential workplace communication skills.

Certificate requirements	Hours
English as a Second Language 510, English for Work 1	216
English as a Second Language 520, English for Work 2	216
TOTAL	432

Courses

ENGLISH AS A SECOND LANGUAGE (ESL)

English as a Second Language 010

ESL Writing

Credit(s): 0

Class Hours: 72 Lecture total.

Introduces non-native English speakers to an overview of the writing process including activities to improve student composition skills. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 120

ESL Civics

Credit(s): 0

Class Hours: 144 Lecture total.

Recommended Preparation: English as a Second Language 430 or higher.

Provides development in listening, speaking, reading, and writing English within the context of history and government in preparation for the United States Citizenship Examination. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 250

Seminar for Beginning ESL Students

Credit(s): 0

Class Hours: 72 Lecture total.

Provides instruction in 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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 260

Seminar for Intermediate ESL Students

Credit(s): 0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 270

Seminar for Advanced ESL Students

Credit(s): 0

Class Hours: 72 Lecture total, 72 Hours Arranged.

Recommended Preparation: English as a Second Language 304 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 300

Literacy

Credit(s): 0

Class Hours: 216 Lecture total.

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. Optional field trips may be offered. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 301

Beginning Low

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 300 or equivalent.

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. Optional field trips may be offered. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 302

Beginning High

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 301 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 303

Intermediate Low

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 302 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 304

Intermediate High

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 303 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**English as a Second Language 305****Advanced Low**

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 304 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 306**Advanced High**

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 305 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 399**ESL Literacy**

Credit(s): 0

Class Hours: 216 Lecture total.

Develops the ability of second language learners to recognize and read letters and numbers, copy/produce the alphabet, numerals, and simple personal information. This is the first course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 410**Beginning ESL 1**

Credit(s): 0

Class Hours: 216 Lecture total.

Emphasizes listening comprehension and beginning oral production of simple conversations, reading of practiced words and phrases, and prewriting tasks. This is the second course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 420**Beginning ESL 2**

Credit(s): 0

Class Hours: 216 Lecture total.

Emphasizes comprehending simple conversations, communicating survival needs, reading phrases and simple sentences, and performing communicative written tasks. This is the third course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 430**Beginning ESL 3**

Credit(s): 0

Class Hours: 216 Lecture total.

Emphasizes comprehending, participating in, and sustaining simple conversations, reading short passages with understanding, and producing short written passages. This is the fourth course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 440**Beginning 1-3 Multilevel**

Credit(s): 0

Class Hours: 216 Lecture total.

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 Beginning ESL levels 1 - 3. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 460**Intermediate ESL 1**

Credit(s): 0

Class Hours: 216 Lecture total.

Emphasizes creative oral language activities, initial critical thinking skills in reading comprehension, and written tasks which begin to focus on academic skills. This is the fifth course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 470**Intermediate ESL 2**

Credit(s): 0

Class Hours: 216 Lecture total.

Emphasizes understanding higher level language activities, reading passages with increased understanding, and increasing focus on creative and academic writing tasks. This is the sixth course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 480**Intermediate ESL 3**

Credit(s): 0

Class Hours: 216 Lecture total.

Emphasizes higher level language activities, conversations which convey complex thought patterns, authentic material which expands the use of critical thinking skills, and expanding realistic and creative/academic writing. This is the seventh course in the Continuing Education ESL continuum. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 500**Intermediate 1-3 Multilevel**

Credit(s): 0

Class Hours: 216 Lecture total.

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 ESL levels 1 - 3. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 510**English for Work 1**

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 420 or 430.

Prepares limited English-speaking students for employment. Focuses on vocabulary skills and vocational readings with emphasis on oral communication through basic language skills instruction. Grade: Pass/No Pass. Open Entry/Open Exit.

English as a Second Language 520**English for Work 2**

Credit(s): 0

Class Hours: 216 Lecture total.

Recommended Preparation: English as a Second Language 460 or higher.

Prepares limited English-speaking students for employment. Focuses on vocabulary skills and vocational readings with emphasis on oral communication through intermediate language skills instruction. Grade: Pass/No Pass. Open Entry/Open Exit.



**English as a Second Language 530
American English Pronunciation**

Credit(s): 0
Class Hours: 216 Lecture total.
Recommended Preparation: English as a Second Language 430 or higher.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**English as a Second Language 570
Conversation 1**

Credit(s): 0
Class Hours: 72 Lecture total.
Recommended Preparation: English as a Second Language 430.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**English as a Second Language 580
Conversation 2**

Credit(s): 0
Class Hours: 72 Lecture total.
Recommended Preparation: English as a Second Language 460 or higher.

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 American attitudes and culture. Grade: Pass/No Pass. Open Entry/Open Exit.

**English as a Second Language 601
Advanced Grammar and Writing**

Credit(s): 0
Class Hours: 96 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**English as a Second Language 606
Interactive Language Training**

Credit(s): 0
Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**English as a Second Language 800
ESL for Medical Occupations**

Credit(s): 0
Class Hours: 60 Lecture total.
Recommended Preparation: English as a Second Language 303 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



HEALTH & SAFETY (SAFE)

Division of Continuing Education

Dean: Lori Fasbinder

Coordinator: Nancy Parent

Courses

Health & Safety 200

Health and Safety Awareness and Application

Credit(s): 0

Class Hours: 30 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Health & Safety 850

Emergency Planning & Safety

Credit(s): 0

Class Hours: 30 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Health & Safety 877

Health Issues & Concepts

Credit(s): 0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Health & Safety 898

Substance Abuse

Credit(s): 0

Class Hours: 18 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

HIGH SCHOOL SUBJECTS (HSS)

Division of Continuing Education

Dean: Joanne Armstrong

Department Chair: Jolene Shields

Coordinators: Elaine Pham, Denise Salcido

Certificate of Competency

Adult Secondary Education,

College Preparation Algebra (36209)

The Certificate of Competency in Adult Secondary Education, College Preparation Algebra is designed to prepare students for higher level Algebra and math study skills to transition to College Math Algebra Course.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proficiency in core elementary algebra concepts.
- Demonstrate effective math study skills.

Certificate requirements	Hours
High School Subjects Math 103, Math Study Skills Support 1A	15
High School Subjects Math 104, Math Study Skills Support 1B	15
High School Subjects Math 176, College Preparation Algebra 1A	72
High School Subjects Math 177, College Preparation Algebra 1B	72
TOTAL	174

Certificate of Competency

Adult Secondary Education,

College Preparatory Composition (36211)

The Certificate of Competency in College Preparatory Composition is designed to prepare students for college level writing.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
High School Subjects English 083, Composition 1	72
High School Subjects English 086, College Preparatory Composition	72
TOTAL	144

Certificate of Competency

Adult Secondary Education,

Mathematics (36584)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proficiency in pre algebraic concepts.



Certificate requirements	Hours
High School Subjects Math 158, Math Fundamentals 1	72
High School Subjects Math 159, Math Fundamentals 2	72
TOTAL	144

**Certificate of Competency
College Readiness (36372)**

This certificate will provide college readiness algebra and composition classes to prepare students to be successful in college and/or university placement and studies.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate college readiness in composition.
- Demonstrate college readiness in algebra.

Certificate requirements	Hours
High School Subjects English 086, College Preparatory Composition	72
High School Subjects Math 176, College Preparation Algebra 1A	72
High School Subjects Math 177, College Preparation Algebra 1B	72
TOTAL	216

**Certificate of Competency
High School Equivalency Test (HiSET) (33941)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Adult Basic Education 009, Academic Skills	72-288
High School Subjects 400, High School Equivalency Test Preparation	180
TOTAL	252-468

**Certificate of Competency
Secondary Education (36914)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements:

ENGLISH:

Number of hours required: 576

Required courses:

Must include one (1) of the following composition courses:

	Hours
High School Subjects English 083, Composition 1	72
High School Subjects English 084, Composition 2	72
High School Subjects English 085, Composition 3	72
High School Subjects English 086, College Preparatory Composition	72

Electives:

	Hours
High School Subjects English 020, Literature Brought to Life	72
High School Subjects English 030, AP English 1A	72
High School Subjects English 050, English Through Literature 11B	72
High School Subjects English 051, English Through Literature 12B	72
High School Subjects English 052, English Language Arts 1	72
High School Subjects English 053, English Language Arts 2	72
High School Subjects English 063, English Through Literature 11A	72
High School Subjects English 064, English Through Literature 12A	72
High School Subjects English 066, English Fundamentals 2	72
High School Subjects English 067, English Fundamentals 3	72
High School Subjects English 068, English Fundamentals 4	72
High School Subjects English 070, The Short Story	72
High School Subjects English 072, Poetry	72
High School Subjects English 076, The Novel	72
High School Subjects English 098, Building Vocabulary 3	72
High School Subjects English 201, Survey of English Level 1	72
High School Subjects English 202, Survey of English Level 2	72
High School Subjects English 203, Survey of English Level 3	72
High School Subjects English 204, Survey of English Level 4	72
*High School Subjects Reading 089, Reading Proficiency Development	72
*High School Subjects Reading 090, Reading Improvement	72
*High School Subjects Reading 093, Building Reading Skills 1	72
*High School Subjects Reading 094, Building Reading Skills 2	72

*A maximum of 144 hours from High School Subjects Reading 089, 090, 093, and 094 can be used for English credit.

NATURAL SCIENCES:

Number of hours required: 288

Required courses:

Must include one (1) of the following biological science courses:

	Hours
High School Subjects Science 168, Life Science 1	72
High School Subjects Science 169, Life Science 2	72
High School Subjects Science 193, Basic Science 2	72

Must include one (1) of the following physical science courses:

	Hours
High School Subjects Science 100, Chemistry 1B	72
High School Subjects Science 184, Chemistry 1A	72
High School Subjects Science 190, Physical Science 1	72
High School Subjects Science 191, Physical Science 2	72
High School Subjects Science 192, Basic Science 1	72

Electives:

	Hours
High School Subjects Science 182, Physiology 1A	72
High School Subjects Science 183, Physiology 1B	72
High School Subjects Science 196, Health Science	72

SOCIAL AND BEHAVIORAL SCIENCES:

Number of hours required: 432

Required courses:

Must include both of the following US History courses:

	Hours
High School Subjects Social Science 218, US History 1: Colonization to Industrialization	72
High School Subjects Social Science 219, US History 2: The Shaping of Modern America	72

**Must include both of the following courses:**

High School Subjects Social Science 215, Introduction to Economics	72
High School Subjects Social Science 222, Government 1: United States Federal Government and Politics	72

Must include both of the following World History courses:

High School Subjects Social Science 229, World History, Geography, and Culture 1	72
High School Subjects Social Science 230, World History, Geography, and Culture 2	72

Electives:

High School Subjects Social Science 216, World Cultures 1A	72
High School Subjects Social Science 217, World Cultures 1B	72

HUMANITIES:

Number of hours required: 144

Electives:

High School Subjects Arts 020, Literature Brought to Life	72
High School Subjects Arts 070, Short Stories	72
High School Subjects Arts 828, Understanding America Through Art	72
High School Subjects Arts 837, The Film as Art	72
High School Subjects Arts 845, Drawing and Painting 1	72
High School Subjects Arts 846, Drawing and Painting 2	72

MATHEMATICS:

Number of hours required: 288

Electives:

High School Subjects Math 101, AP Calculus Preparation 1A	72
High School Subjects Math 102, AP Calculus Preparation 1B	72
High School Subjects Math 103, Math Study Skills Support 1A	15
High School Subjects Math 104, Math Study Skills Support 1B	15
High School Subjects Math 120, Integrated Math 1A	72
High School Subjects Math 121, Integrated Math 1B	72
High School Subjects Math 122, Integrated Math 2A	72
High School Subjects Math 123, Integrated Math 2B	72
High School Subjects Math 124, Integrated Math 3A	72
High School Subjects Math 125, Integrated Math 3B	72
High School Subjects Math 154, Pre-Algebra A	72
High School Subjects Math 155, Pre-Algebra B	72
High School Subjects Math 156, Essential Mathematics 1	72
High School Subjects Math 157, Essential Mathematics 2	72
High School Subjects Math 158, Math Fundamentals 1	72
High School Subjects Math 159, Math Fundamentals 2	72
High School Subjects Math 161, Pre-Calculus with Trigonometry 1A	72
High School Subjects Math 163, Algebra 1A	72
High School Subjects Math 164, Algebra 1B	72
High School Subjects Math 165, Algebra 2A	72
High School Subjects Math 166, Algebra 2B	72
High School Subjects Math 167, Geometry A	72
High School Subjects Math 168, Geometry B	72
High School Subjects Math 176 College Preparation Algebra 1A	72
High School Subjects Math 177 College Preparation Algebra 1B	72
High School Subjects Math 180, Pre-Calculus with Trigonometry 1B	72
Math Continuing Education 206, College Preparation Essential Mathematics	144
Math Continuing Education 255, College Preparation Algebra	144

ELECTIVE COURSES:

Number of hours required: 576

Electives:

Adult Basic Education 009, Academic Skills	72-288
Adult Basic Education 023, Adult Basic Education Reading	72
Adult Basic Education 024, Adult Basic Education Writing	72
Adult Basic Education 025, Adult Basic Education Mathematics	72
Adult Basic Education 026, Adult Basic Education Spelling	72
High School Subjects Other 050, Basics of Leadership Part 1	72
High School Subjects Other 202, Basics of Leadership Part 2	72
High School Subjects Other 505, Spanish 2A	72
High School Subjects Other 510, Spanish 2B	72
High School Subjects Other 513, Spanish 4A	72
High School Subjects Other 514, Spanish 4B	72
High School Subjects 338, Workforce Preparation	15
High School Subjects 770, Orientation to College	8
TOTAL	2304

Elective courses may include other courses not already taken for credit.*Certificate of Competency Student Leadership (33942)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Develop and demonstrate leadership skills.
- Identify team building strategies and the effect that interpersonal awareness and communication have on group dynamics.

Certificate requirements

High School Subjects Other 050, Basics of Leadership Part 1	72
High School Subjects Other 202, Basics of Leadership Part 2	72
TOTAL	144

Courses**HIGH SCHOOL SUBJECTS (HSS)****High School Subjects 338****Workforce Preparation**

Credit(s): 1.0

Class Hours: 15 Lecture total.

Provides instruction, exposure to career assessment tools, demonstration, identification, and discussion of topics that are critical for success in the 21st century workplace. Grade: Pass/No Pass. Open Entry/Open Exit.

High School Subjects 400**High School Equivalency Test Preparation**

Credit(s): 0

Class Hours: 180 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

High School Subjects 770**Orientation to College**

Credit(s): 1.5

Class Hours: 8 Lecture total.

Introduces college services and programs. Identifies and explores programs and services designed to assist students entering college credit courses. Open Entry/Open Exit.



HIGH SCHOOL SUBJECTS: ARTS (HSART)

High School Subjects: Arts 020

Literature Brought to Life

Credit(s): 5.0

Class Hours: 72 Lecture total.

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. (Same as High School Subjects: English 020.)

High School Subjects: Arts 070

Short Stories

Credit(s): 5.0

Class Hours: 72 Lecture total.

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. Open Entry/Open Exit. (Same as High School Subjects: English 070.)

High School Subjects: Arts 828

Understanding America Through Art

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Arts 837

The Film As Art

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Arts 845

Drawing and Painting 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Arts 846

Drawing and Painting 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Arts 845.

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.

HIGH SCHOOL SUBJECTS: ENGLISH (HSENG)

High School Subjects: English 020

Literature Brought to Life

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 030

AP English 1A

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 050

English Through Literature 11B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: English 063.

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.

High School Subjects: English 051

English Through Literature 12B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: English 064.

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.

High School Subjects: English 052

English Language Arts 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 053

English Language Arts 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 063

English Through Literature 11A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: 10th grade English or equivalent.

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.

High School Subjects: English 064

English Through Literature 12A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: 11th grade English or equivalent.

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.



High School Subjects: English 066
English Fundamentals 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

Reinforces and expands the basic concepts of sentence structure, punctuation, grammar, parts of speech, and writing skills. Open Entry/Open Exit.

High School Subjects: English 067
English Fundamentals 3

Credit(s): 5.0

Class Hours: 72 Lecture total.

Provides an intermediate English course that expands on parts of speech, grammar, punctuation, sentence patterns, and sentence skills to develop a students' writing ability. Open Entry/Open Exit.

High School Subjects: English 068
English Fundamentals 4

Credit(s): 5.0

Class Hours: 72 Lecture total.

Provides 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.

High School Subjects: English 070

The Short Story

Credit(s): 5.0

Class Hours: 72 Lecture total.

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 of 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. Open Entry/Open Exit.

High School Subjects: English 072

Poetry

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 076

The Novel

Credit(s): 5.0

Class Hours: 72 Lecture total.

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 then read and analyze two novels from an annotated reading list. Open Entry/Open Exit.

High School Subjects: English 083

Composition 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 084

Composition 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: English 083 or equivalent.

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.

High School Subjects: English 085
Composition 3

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: English 084 or equivalent.

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.

High School Subjects: English 086

College Preparatory Composition

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: English 083.

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.

High School Subjects: English 098

Building Vocabulary 3

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 201

Survey of English Level 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 202

Survey of English Level 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 203

Survey of English Level 3

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: English 204

Survey of English Level 4

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.



HIGH SCHOOL SUBJECTS: MATHEMATICS (HSMTH)

High School Subjects: Mathematics 101

Introduction to Calculus 1A

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Mathematics 102

Introduction to Calculus 1B

Credit(s): 5.0

Class Hours: 72 Lecture total.

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/Open Exit.

High School Subjects: Mathematics 103

Math Study Skills Support 1A

Credit(s): 1.0

Class Hours: 15 Lecture total.

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.

High School Subjects: Mathematics 104

Math Study Skills Support 1B

Credit(s): 1.0

Class Hours: 15 Lecture total.

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.

High School Subjects: Mathematics 120

Integrated Math 1A

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Mathematics 121

Integrated Math 1B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 120.

Provides instruction in systems of equations, describing data, linear models for data, transformations, constructions and congruence, and analytic geometry. Open Entry/Open Exit.

High School Subjects: Mathematics 122

Integrated Math 2A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 121.

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.

High School Subjects: Mathematics 123

Integrated Math 2B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 122.

Provides instruction in geometric reasoning, area and volume, circles, right triangle trigonometry, and conic sections. Open Entry/Open Exit.

High School Subjects: Mathematics 124

Integrated Math 3A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 123.

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.

High School Subjects: Mathematics 125

Integrated Math 3B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 124.

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.

High School Subjects: Mathematics 154

Pre-Algebra A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 159 or equivalent.

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.

High School Subjects: Mathematics 155

Pre-Algebra B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 154 or equivalent.

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.

High School Subjects: Mathematics 156

Essential Mathematics 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 159 and Adult Basic Education 009 (Math Unit).

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.



High School Subjects: Mathematics 157
Essential Mathematics 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 156 or equivalent.

Provides the student with practice in basic computational skills of mathematics, algebra, and geometry. Practical applications are included. Open Entry/Open Exit.

High School Subjects: Mathematics 158
Math Fundamentals 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

Introduces students to basic math skills including whole numbers, fractions, and decimals. Open Entry/Open Exit.

High School Subjects: Mathematics 159
Math Fundamentals 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: Adult Basic Education 009.

Provides instruction in the areas of decimals, percents, measurements, formulas, equations, ratios, and proportions. Provides learning activities which allow for remediation of difficulties and mastery of necessary skills. Open Entry/Open Exit.

High School Subjects: Mathematics 161
Introduction to Trigonometry 1A

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Mathematics 163
Algebra 1A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 159 or equivalent.

Provides instruction in sets, numbers, formulas, monomials, exponents, square roots, the laws of the sign, binomials, and simultaneous equations. Open Entry/Open Exit.

High School Subjects: Mathematics 164
Algebra 1B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 163 or equivalent.

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.

High School Subjects: Mathematics 165
Algebra 2A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 164.

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.

High School Subjects: Mathematics 166
Algebra 2B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 165 or equivalent.

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.

High School Subjects: Mathematics 167
Geometry A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: Completion of ten credits in algebra.

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.

High School Subjects: Mathematics 168
Geometry B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 167.

This course covers topics in transformations, similarity, right triangles, trigonometry, circles, areas of polygons and circles, surface area and volume. Open Entry/Open Exit.

High School Subjects: Mathematics 176
College Preparation Algebra 1A

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 159.

This course offers an introduction to basic algebra concepts, math vocabulary, and algebraic operations. Open Entry/Open Exit.

High School Subjects: Mathematics 177
College Preparation Algebra 1B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 176.

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.

High School Subjects: Mathematics 180
Introduction to Trigonometry 1B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Mathematics 161 or equivalent.

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.

HIGH SCHOOL SUBJECTS: OTHER (HSOTH)

High School Subjects: Other 040
Introduction to Academic Pathways and Programs

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.



High School Subjects: Other 050

Basics of Leadership Part 1

Credit(s): 2.5

Class Hours: 36 Lecture total.

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.

High School Subjects: Other 153

Supervised Tutoring

Credit(s): 0

Class Hours: 72 Lecture total.

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.

High School Subjects: Other 202

Basics of Leadership Part 2

Credit(s): 2.5

Class Hours: 36 Lecture total.

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.

High School Subjects: Other 505

Spanish 2A

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Other 510

Spanish 2B

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Other 513

Spanish 4A

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Other 514

Spanish 4B

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

HIGH SCHOOL SUBJECTS: READING (HSRDG)

High School Subjects: Reading 089

Reading Proficiency Development

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Reading 090

Reading Improvement

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Reading 093

Building Reading Skills 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Reading 094

Building Reading Skills 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

HIGH SCHOOL SUBJECTS: SCIENCE (HSSCI)

High School Subjects: Science 100

Chemistry 1B

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Science 184 or equivalent.

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.

High School Subjects: Science 168

Life Science 1

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Science 169

Life Science 2

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Science 168.

Surveys the principles and concepts of life science, including the study of animals, ecology, and the human body. Open Entry/Open Exit.

**High School Subjects: Science 182****Physiology 1A**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Science 183**Physiology 1B**

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Science 182 or equivalent.

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.

High School Subjects: Science 184**Chemistry 1A**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Science 190**Physical Science 1**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Science 191**Physical Science 2**

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Science 190.

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.

High School Subjects: Science 192**Basic Science 1**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Science 193**Basic Science 2**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Science 196**Health Science**

Credit(s): 5.0

Class Hours: 72 Lecture total.

Provides a basic foundation in personal health, nutrition, body functions, first aid and community health. Open Entry/Open Exit.

HIGH SCHOOL SUBJECTS: SOCIAL SCIENCES (HSSOC)**High School Subjects: Social Sciences 215****Introduction to Economics**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Social Sciences 216**World Cultures 1A**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Social Sciences 217**World Cultures 1B**

Credit(s): 5.0

Class Hours: 72 Lecture total.

A general survey of world history and culture from World War I to the present including modern industrialization and globalization. Open Entry/Open Exit.

High School Subjects: Social Sciences 218**U.S. History 1: Colonization to Industrialization**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Social Sciences 219**U.S. History 2: The Shaping of Modern America**

Credit(s): 5.0

Class Hours: 72 Lecture total.

Recommended Preparation: High School Subjects: Social Sciences 218.

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.

High School Subjects: Social Sciences 222**Government 1: United States Federal Government and Politics**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.

High School Subjects: Social Sciences 229**World History, Geography, and Culture 1**

Credit(s): 5.0

Class Hours: 72 Lecture total.

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.



**High School Subjects: Social Sciences 230
World History, Geography, and Culture 2**
Credit(s): 5.0
Class Hours: 72 Lecture total.

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.

MATH CONTINUING EDUCATION (MATHCE)

Division of Continuing Education

Dean: Joanne Armstrong

Coordinator: Elaine Pham, Denise Salcido, Jolene Shields

Certificate of Competency College Preparation Mathematics (36897)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Accurately compute using core arithmetic and elementary algebra concepts.
- Demonstrate effective math study skills.

Certificate requirements	Hours
Math Continuing Education 206, College Preparation Essential Mathematics	144
Math Continuing Education 255, College Preparation Algebra	144
High School Subjects Math 103, Math Study Skills Support 1A	15
High School Subjects Math 104, Math Study Skills Support 1B	15
TOTAL	318

Certificate of Competency Essential Mathematics and Math Study Skills Support (36898)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Accurately compute essential arithmetic concepts.
- Demonstrate effective math study skills.

Certificate requirements	Hours
Math Continuing Education 100, Math Study Skills and Basic Skills Support	100
Math Continuing Education 206, College Preparation Essential Mathematics	144
TOTAL	244

Courses

Math Continuing Education 100 Math Study Skills and Basic Skills Support

Credit(s): 7.0

Class Hours: 100 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Math Continuing Education 206
College Preparation Essential Mathematics

Unit(s) Credit(s): 10.0

Class Hours: 144 Lecture total.

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. 6/17/2019

Math Continuing Education 255
College Preparation Algebra

Unit(s)-Credit(s): 10.0

Class Hours: 144 Lecture total.

Recommended Preparation: Math Continuing Education 206 or High School Subjects: Mathematics 159 or Equivalent.

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. 6/17/2019

OLDER ADULTS (OAP)

Division of Continuing Education

Dean: Joanne Armstrong

Coordinator: Nancy Parent

Courses

Older Adults 200
Health and Wellness

Credit(s): 0

Class Hours: 30 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Older Adults 457
Music Arts for Older Adults

Credit(s): 0

Class Hours: 72 Lecture total.

Provides a positive framework for developing and enhancing music appreciation, vocal and instrumental skills. Emphasis will be on activities designed to encourage creative expression. Grade: Pass/No Pass. Open Entry/Open Exit.

Older Adults 518
Creative Cooking for Older Adults

Credit(s): 0

Class Hours: 72 Lecture total.

Enhances awareness of current cooking techniques, basic nutrition, and consumer awareness. A variety of cooking appliances and methods are utilized. Grade: Pass/No Pass. Open Entry/Open Exit.

Older Adults 800
Introduction to Keyboarding, Basic Windows and Navigating the Internet

Credit(s): 0

Class Hours: 72 Lecture total.

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. 1/13/2020

Older Adults 802
Seminar for Older Adults

Credit(s): 0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Older Adults 823
Manipulative Skills for Older Adults

Credit(s): 0

Class Hours: 72 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



**Older Adults 894
Physical Fitness for Older Adults**

Credit(s): 0

Class Hours: 72 Lecture total.

Teaches movement exercises designed to improve or maintain flexibility, strength, endurance and cardiovascular and respiratory functions. Emphasizes motor movements, hand-eye coordination, body space awareness, balance training, reaction time, joint protection, and relaxation techniques. Grade: Pass/No Pass. Open Entry/Open Exit.

PARENT EDUCATION (PRNT)

Division of Continuing Education

Dean: Lori Fasbinder

Courses

Parent Education 532

Effective Parenting

Credit(s): 0

Class Hours: 132 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Parent Education 544

Preparation for Childbirth

Credit(s): 0

Class Hours: 36 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



SECONDARY SUBJECTS GED (HSGED)

Division of Continuing Education

Dean: Joanne Armstrong

Department Chair: Jolene Shields

Coordinators: Elaine Pham, Denise Salcido

Certificate of Completion

Secondary Education/GED Preparation (24467)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Secondary Subjects GED 031, GED Test Preparation	360
Adult Basic Education 009, Academic Skills	288
TOTAL	648

Courses

Secondary Subjects GED 031

GED Test Preparation

Credit(s): 0

Class Hours: 360 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

SUBSTANTIAL DISABILITIES (SSD)

Division of Continuing Education

Executive Director, AEBG: Christine Gascon

Coordinator: Angela Guevara

Courses

Substantial Disabilities 200

Issues and Concepts for Adults With Developmental Disabilities

Credit(s): 0

Class Hours: 180 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Substantial Disabilities 787

Employment Preparation for Adults with Developmental Disabilities

Credit(s): 0

Class Hours: 180 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Substantial Disabilities 788

Independent Living Skills for Adults with Developmental Disabilities

Credit(s): 0

Class Hours: 180 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Substantial Disabilities 793

Physical Activities for Adults with Developmental Disabilities

Credit(s): 0

Class Hours: 180 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



VOCATIONAL

Division of Continuing Education

Executive Director, AEBG Christine Gascon

Coordinator and Chair: Daniel Oase

Coordinator: Jorge Saucedo-Daniel

VOCATIONAL: BUSINESS (VBUS)

Certificate of Completion

3D Printing / Advanced Manufacturing (36210)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate how to make 3D models and designs.

Certificate requirements	Hours
Vocational Business 101, Introduction to 3D Modeling using Blender	60
Vocational Business 105, Introduction to 3D Animation using Blender	60
Vocational Business 130, Introduction to 3D Printing	60
TOTAL	180

Certificate of Completion

Customer Service Representative (24427)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Vocational Business 119, Introduction to Keyboarding and Basic Windows	60
Vocational Business 258, Navigating the Internet	36
Vocational Business 260, Introduction to Word Processing using MS Word	60
Workforce Preparation 500, Workforce Readiness	60
TOTAL	216

Certificate of Completion (36585)

Digital Marketing Specialist

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Create a digital marketing campaign.

Certificate requirements	Hours
Vocational Business 014, Introduction to Mobile and Social Media 60 Tools	60
Vocational Business 150, Introduction to Digital Marketing	60
Vocational Business 152, Introduction to Digital Marketing Analytics	60
TOTAL	180

Certificate of Completion

Executive Secretary / Administrative Assistant (24426)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Vocational Business 013, Introduction to Personal Management using MS Outlook	60
Vocational Business 260, Introduction to Word Processing using MS Word	60
Vocational Business 261, Introduction to Databases using MS Access	60
Vocational Business 262, Introduction to Spreadsheets using MS Excel	60
Vocational Business 304, Introduction to Electronic Presentations using MS PowerPoint	60
Workforce Preparation 500, Workforce Readiness	60
TOTAL	360



Certificate of Completion First-Line Supervisor/Manager, Office and Administrative Support Workers (24187)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Vocational Business 014, Introduction to Mobile and Social Media Tools	60
Vocational Business 097, Introduction to Personal Commerce on the Internet	60
Vocational Business 103, Introduction to MS Project	60
Vocational Business 118, Introduction to Windows	60
Vocational Business 257, Seminar in Business Applications	60
Vocational Business 260, Introduction to Word Processing using MS Word	60
Vocational Business 262, Introduction to Spreadsheets using MS Excel	60
Vocational Business 304, Introduction to Electronic Presentations using MS PowerPoint	60
TOTAL	480

Certification of Completion General Office Clerk (24095)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Vocational Business 118, Introduction to Windows	60
Vocational Business 119, Introduction to Keyboarding and Basic Windows	60
Vocational Business 140 Introduction to Google Applications for Work	60
Vocational Business 258, Navigating the Internet	36
Vocational Business 260, Introduction to Word Processing using MS Word	60
Vocational Business 262, Introduction to Spreadsheets using MS Excel	60

Workforce Preparation 500, Workforce Readiness	60
TOTAL	396

Certificate of Completion Home-Based Business (36371)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Develop a home-based business.
- Demonstrate proficiency in using business and web applications.

Certificate requirements	Hours
Vocational Business 014, Introduction to Mobile and Social Media Tools	60
Vocational Business 030, How to Build a Home-Based Business	60
Vocational Business 040, Accounting for Non-Accountants	60
Vocational Business 097, Introduction to Personal Commerce on the Internet	60
TOTAL	240

Certificate of Completion Medical Billing (24052)

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 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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Apply the concepts and skills of medical billing using industry-standard software; e.g., using Allscripts software.
- Demonstrate effective workforce skills, including oral and written communication, and resume and interview preparation.

Certificate requirements	Hours
Vocational Business 080, Introduction to Medical Billing	120
Vocational Business 119, Introduction to Keyboarding and Basic Windows	60
Workforce Preparation 500, Workforce Readiness	60
TOTAL	240

Certificate of Completion Multi-Media Artists and Animators (33161)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proficiency in Digital Cameras, Video, 2D and 3D Animation applications.
- Work efficiently with Windows-based applications that operate in multiple platforms.



Certificate requirements	Hours
Vocational Business 096, Introduction to Use of Digital Cameras	60
Vocational Business 101, Introduction to 3D Modeling using Blender	60
Vocational Business 105, Introduction to 3D Animation using Blender	60
Vocational Business 109, Introduction to Desktop Video Editing using Adobe Premiere	60
Vocational Business 120, Introduction to Animations using Adobe Animate	60
TOTAL	300

**Certificate of Completion
Receptionist/Information Clerk (30985)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Complete job applications and prepare for the interviewing process.
- Demonstrate competence in a variety of Windows-based applications.

Certificate requirements	Hours
Vocational Business 121, Introduction to Computer Software Applications	60
Workforce Preparation 500, Workforce Readiness	60
TOTAL	120

**Certificate of Completion
Web Associate (24420)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Vocational Business 010, Introduction to Web Design using Adobe Dreamweaver	60
Vocational Business 107, Seminar in Adobe Tools	60
Vocational Business 242, Introduction to Vector Graphics using Adobe Illustrator	60
Vocational Business 302, Introduction to Web Page Development using HTML	60
Vocational Business 303, Introduction to Electronic Imaging using Adobe Photoshop	60
TOTAL	300

Courses

**Vocational: Business 010
Introduction to Web Design using Adobe Dreamweaver**
Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 012
Workforce Readiness**
Credit(s): 0

Class Hours: 60 Lecture total.

Provides instruction in office skills for employment preparation. Students will learn communication, decision-making, interpersonal, leadership, lifelong learning, and job seeking skills. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 013
Introduction to Personal Management using Microsoft Outlook**
Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 014
Introduction to Mobile and Social Media Tools**
Credit(s): 0

Class Hours: 60 Lecture total.

Provides introductory instruction on how to incorporate social networks and mobile technology in a business environment utilizing applications and tools such as LinkedIn, Facebook, Twitter, wikis, blogs, Pinterest, Instagram, and YouTube. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 030
How to Build a Home-Based Business**
Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 040
Accounting for Non-Accountants**
Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 080
Introduction to Medical Billing**
Credit(s): 0

Class Hours: 120 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

**Vocational: Business 096****Introduction to Use of Digital Cameras**

Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 097**Introduction to Personal Commerce on the Internet**

Credit(s): 0

Class Hours: 60 Lecture total.

Provides introductory instruction to personal commerce on the Internet. Topics include privacy and security issues, searching techniques, auction bidding, secure payment methods, selling techniques, and protecting consumer rights. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 101**Introduction to 3D Modeling using Blender**

Credit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Business 119 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 102**Introduction to Desktop Publishing using Adobe InDesign**

Credit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Business 119 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 103**Introduction to MS Project**

Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 105**Introduction to 3D Animation using Blender**

Credit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Business 119 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 107**Seminar in Adobe Tools**

Credit(s): 0

Class Hours: 60 Lecture total.

Explores and provides instruction in evolving Creative Cloud applications for the personal computer such as design, web and video/audio tools. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 109**Introduction to Desktop Video Editing using Adobe Premiere**

Credit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Business 119 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 117**Introduction to Document Processing using Adobe Acrobat**

Credit(s): 0

Class Hours: 30 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 118**Introduction to Windows**

Credit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Business 119 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 119**Introduction to Keyboarding and Basic Windows**

Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 120**Introduction to Animations using Adobe Animate**

Credit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Vocational: Business 121
Introduction to Computer Software Applications

Credit(s): 0
 Class Hours: 60 Lecture total.
 Provides individual skill-building assistance on industry-standard computer applications, e.g. Web, MS Office, Adobe Creative Suite/Cloud, and Multi-Media applications. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 130
Introduction to 3D Printing

Credit(s): 0
 Class Hours: 60 Lecture total.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 140
Introduction to Google Applications for Work

Credit(s): 0
 Class Hours: 60 Lecture total.
 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 in effective workplace communication. Applications covered include Google Documents, Sheets, Slides, Drive, and Forms. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 150
Introduction to Digital Marketing

Credit(s): 0
 Class Hours: 60 Lecture total.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 152
Introduction to Digital Marketing Analytics

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 150.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 242
Introduction to Vector Graphics using Adobe Illustrator

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 119 or equivalent.
 Provides introductory instruction in computer graphics and design. Includes basic design concepts, use of illustration tools, and modification of art work and text layout. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 257
Seminar in Business Applications

Credit(s): 0
 Class Hours: 60 Lecture total.
 Explores and provides instruction in evolving standard software applications commonly used in business. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 258
Navigating the Internet

Credit(s): 0
 Class Hours: 36 Lecture total.
 Introduces students to the Internet. Topics include types of Internet connections, e-mail, research, and data retrieval techniques. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 260
Introduction to Word Processing using MS Word

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 119 or equivalent.
 Provides introductory instruction to word processing techniques using the personal computer. Includes creating, formatting, editing, saving, and printing of simple documents using MS Word software. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 261
Introduction to Databases using MS Access

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 119 or equivalent.
 Provides instruction in basic concepts addressing typical database problems with MS Access software. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 262
Introduction to Spreadsheets using MS Excel

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 119 or equivalent.
 Provides instruction in basic spreadsheet concepts using typical spreadsheet problems with Microsoft Excel software. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 302
Introduction to Web Page Development using HTML

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 119 or equivalent.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Business 303
Introduction to Electronic Imaging using Adobe Photoshop

Credit(s): 0
 Class Hours: 60 Lecture total.
 Recommended Preparation: Vocational: Business 119 or equivalent.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.



Vocational: Business 304
Introduction to Electronic Presentations using MS PowerPoint

Credit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Business 119 or equivalent.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

VOCATIONAL: CLOTHING (VCLTH)

Certificate of Completion
Commercial Textile Worker (24146)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Apply the concept and skills of sewing to successfully construct a garment.

Certificate requirements	Hours
Vocational Clothing 477, Fundamentals of Commercial Sewing	180
Vocational Clothing 483, Introduction to Commercial Sewing	160
TOTAL	340

Courses

Vocational: Clothing 477
Fundamentals of Commercial Sewing

Credit(s): 0

Class Hours: 180 Lecture total.

Recommended Preparation: Vocational: Clothing 483 or instructor's approval by assessment.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Clothing 483
Introduction to Commercial Sewing

Credit(s): 0

Class Hours: 160 Lecture total.

Introduces basic commercial sewing skills, including safe operation of equipment, sewing terminology, use of patterns, fabric cutting, garment construction, and repair. Grade: Pass/No Pass. Open Entry/Open Exit.

VOCATIONAL: CONSTRUCTION (VCNST)

Certificate of Completion
Carpenter (24097)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Apply the concepts and skills of safe cabinetry in the design and construction of a project.

Certificate requirements	Hours
Vocational Construction 859, Introduction to Cabinetry/ Furniture Refinishing, Pre-Apprentice	180
Vocational Construction 953, Fundamentals of Cabinetry/ Furniture Refinishing, Pre-Apprentice	180
TOTAL	360

Certificate of Completion
Construction Laborer (24037)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Apply the concepts and skills of safe welding in the design and construction of a project.

Certificate requirements	Hours
Vocational Construction 608, Introduction to Welding, Pre-Apprentice	180
Vocational Construction 611, Fundamentals of Welding, Pre-Apprentice	180
TOTAL	360

Courses

Vocational: Construction 608
Introduction to Welding, Pre-Apprentice

Credit(s): 0

Class Hours: 180 Lecture total.

Introduces welding safety, proper use of hand and power tools, and the basics of arc welding. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Construction 611
Fundamentals of Welding, Pre-Apprentice

Credit(s): 0

Class Hours: 180 Lecture total.

Recommended Preparation: Vocational: Construction 608 or instructor's approval by assessment.

Provides basic instruction and training in Arc welding, Tungsten Inert Gas welding (TIG), and Metal Inert Gas welding (MIG). Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Construction 859
Introduction to Cabinetry/Furniture Refinishing Pre-Apprentice

Credit(s): 0

Class Hours: 180 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Construction 953
Fundamentals of Cabinetry/Furniture Refinishing, Pre-Apprentice

Credit(s): 0

Class Hours: 180 Lecture total.

Recommended Preparation: Vocational: Construction 859 or instructor's approval by assessment.

Provides instruction in basic cabinetry/furniture construction, refinishing and repair with an emphasis on the use of hand and power tools. Grade: Pass/No Pass. Open Entry/Open Exit.



VOCATIONAL: CUSTODIAL TECHNICIAN (VCST)

Certificate of Completion Custodial Technician (36900)

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).

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Apply the concepts of safety standards and hazardous materials used for custodial work in a private and public facility.

Certificate requirements	Hours
Vocational Custodial Technician 101, Custodial Technician	60
Vocational Custodial Technician 102, Basic Hazmat Safety Standards	36
TOTAL	96

Courses

Vocational: Custodial Technician 101 Custodial Technician

Unit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Custodial Technician 102 Basic Hazmat Safety Standards

Unit(s): 0

Class Hours: 36 Lecture total.

Recommended Preparation: Vocational: Custodial Technician 101 or Equivalent.

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). Grade: Pass/No Pass. Open Entry/Open Exit.

VOCATIONAL: FOOD (VFOOD)

Certificate of Completion

Commercial and Institutional Food Preparation (24093) Food Service Manager (24093)

The Certificate of Completion in Commercial and Institutional Food Preparation prepares students for employment in commercial and institutional food kitchens, especially in the restaurant industry, by providing knowledge and skills in hygiene, sanitation, storage, nutrition, and food service administration.

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Apply the concepts of safe food preparation in commercial and institutional kitchens.
- Apply the concepts of food service administration in commercial and institutional kitchens.

Certificate requirements	Hours
Vocational Food 010, Food Service Manager Test Preparation	72
High School Subjects 338, Workforce Preparation	15
Workforce Preparation 500, Workforce Readiness	60
11/26/2018	TOTAL 87 132

Courses

Vocational: Food 005 Food Handler Test Preparation

Credit(s): 0

Class Hours: 36 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Food 010 Food Service Manager Test Preparation

Credit(s): 0

Class Hours: 72 Lecture total.

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 ServSafeR Food Protection Manager Certification. Grade: Pass/No Pass. Open Entry/Open Exit.

VOCATIONAL: MEDICAL (VMED)

Certificate of Completion

Caregiver / Personal Care Aide (36901)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate how to correctly perform the duties of a caregiver.

Certificate requirements	Hours
Vocational Medical 030, Introduction to Caregiving	20
Vocational Medical 031, Caregiver Training	40
TOTAL	60



Certificate of Completion Home Health Aide (37806)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate how to perform administrative and patient care duties.

Certificate requirements	Hours
Vocational Medical 060, Overview of the Home Health Aide Training Program	10
Vocational Medical 061, Home Health Aide (HHA) Training	52
TOTAL	60

Certificate of Completion Healthcare Support Worker (37807)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Identify the academic and clinical requirements to become a healthcare support worker

Certificate requirements	Hours
Vocational Medical 050, Introduction to Healthcare Occupations	60
Vocational Medical 051, Healthcare Support Worker Pathways	20
TOTAL	80

Certificate of Completion Medical Assistant (36212)

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).

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate how to perform administrative and patient care duties.

Certificate requirements	Hours
Vocational Medical 020, Overview of the Medical Assistant Training Program	10
Vocational Medical 021, Medical Terminology for Medical Assistants	60
Vocational Medical 022, Business Procedures for Medical Assistants	180
Vocational Medical 023, Body Systems for Medical Assistants	60
Vocational Medical 024, Human Diseases and Disorders for Medical Assistants	60
Vocational Medical 025, Clinical Procedures for Medical Assistants	120
Vocational Medical 026, Surgical Assisting for Medical Assistants	90
Vocational Medical 027, Externship for Medical Assistants	150
TOTAL	730

Certificate of Completion Nursing Assistant (36213)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate the clinical skills required to become a Nursing Assistant.

Certificate requirements	Hours
Vocational Medical 010, Overview of the Nursing Assistant Training Program	10
Vocational Medical 011, Certified Nursing Assistant (CNA) Training	160
TOTAL	170

Certificate of Completion Nurse Assistant Acute Care (37805)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proper patient care skills in the acute care setting.

Certificate requirements	Hours
Vocational Medical 070, Acute Care Theory for Nurse Assistants	90
Vocational Medical 071, Acute Care Practice for Nurse Assistants	90
TOTAL	180



**Certificate of Completion
Behavior Technician (38398)**

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).

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Perform the duties of a behavior technician.

Certificate requirements	Hours
Vocational Medical 080, Introduction to the Behavior Technician Program	24
Vocational Medical081 - Behavior Technician Certification Training	24
6/17/2019	TOTAL 48

Courses

Vocational: Medical 010

Overview of the Nursing Assistant Training Program

Unit(s): 0

Class Hours: 10 Lecture total.

This course is designed to provide an introduction to the clinical and theoretical requirements for the Certified Nursing Assistant (CNA) Training Program. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 011

Certified Nursing Assistant (CNA) Training

Unit(s): 0

Class Hours: 160 Lecture total.

Recommended Preparation: Vocational: Medical 010.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 020

Overview of the Medical Assistant Training Program

Unit(s): 0

Class Hours: 10 Lecture total.

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). Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 021

Medical Terminology for Medical Assistants

Unit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Medical 020.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 022

Business Procedures for Medical Assistants

Unit(s): 0

Class Hours: 180 Lecture total.

Recommended Preparation: Vocational: Medical 020.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 023

Body Systems for Medical Assistants

Unit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Medical 020.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 024

Human Diseases and Disorders for Medical Assistants

Unit(s): 0

Class Hours: 60 Lecture total.

Recommended Preparation: Vocational: Medical 020.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Vocational: Medical 025
Clinical Procedures for Medical Assistants

Unit(s): 0

Class Hours: 120 Lecture total.

Recommended Preparation: Vocational: Medical 020.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 026
Surgical Assisting for Medical Assistants

Unit(s): 0

Class Hours: 90 Lecture total.

Recommended Preparation: Vocational: Medical 020.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 027
Externship for Medical Assistants

Unit(s): 0

Class Hours: 150 Lecture total.

Recommended Preparation: Vocational: Medical 020 and 021 and 022 and 023 and 024 and 025 and 026.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 030
Introduction to Caregiving

Unit(s): 0

Class Hours: 20 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 031
Caregiver Training

Unit(s): 0

Class Hours: 40 Lecture total.

Recommended Preparation: Vocational: Medical 030.

This course is designed to provide students with hands-on experience as caregivers. Students will apply caregiver skills in a simulated caregiving environment. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 050
Introduction to Healthcare Occupations

Unit(s): 0

Class Hours: 60 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 051
Healthcare Support Worker Pathways

Unit(s): 0

Class Hours: 20 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 060
Overview of the Home Health Aide Training Program

Unit(s): 0

Class Hours: 10 Lecture total.

Recommended Preparation: Vocational: Medical 011.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 061
Home Health Aide (HHA) Training

Unit(s): 0

Class Hours: 52 Lecture total.

Recommended Preparation: Vocational: Medical 011 or Certified Nurse Assistant (CNA) Certification, and Vocational: Medical 060.

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. Grade: Pass/No Pass. Open Entry/Open Exit.



Vocational: Medical 070
Acute Care Theory for Nurse Assistants
 Unit(s): 0
 Class Hours: 90 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Medical 071
Acute Care Practice for Nurse Assistants
 Unit(s): 0
 Class Hours: 90 Lecture total.

Recommended Preparation: Vocational: Medical 011 Certified Nurse Assistant (CNA) License, and or 070.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

VOCATIONAL: SHELTER DOG TRAINING (VDOG)

Certificate of Completion
Shelter Dog Training (33561)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate mastery of canine handling and training skills.

Certificate requirements	Hours
Vocational Shelter Dog Training 020, Concepts in Dog Training	12
Vocational Shelter Dog Training 030, Practical Dog Training	36
TOTAL	48

Courses

Vocational: Shelter Dog Training 020
Concepts in Dog Training

Unit(s): 0
 Class Hours: 12 Lecture total.

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. Grade: Pass/No Pass. Open Entry/Open Exit.

Vocational: Shelter Dog Training 030
Practical Dog Training

Unit(s): 0
 Class Hours: 36 Lecture total.

Applies the concepts of dog training to the actual training of a shelter dog preparing it for adoption in a family home. Grade: Pass/No Pass. Open Entry/Open Exit.

VOCATIONAL: WAREHOUSING (VWHS)

Certificate of Completion
Warehousing (33562)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- 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.

Certificate requirements	Hours
Vocational Warehousing 010, Warehouse Worker	40
High School Subjects 338, Workforce Preparation	15
TOTAL	55

Courses

Vocational: Warehousing 010
Warehouse Worker

Unit(s): 0
 Class Hours: 40 Lecture total.

Provides instruction, demonstration and discussion of topics that are critical for the entry level warehouse worker. Grade: Pass/No Pass. Open Entry/Open Exit.



WORKFORCE PREPARATION (WKPR)

Division of Continuing Education

Executive Director, AEBG: Christine Gascon

Coordinator: Angela Guevara

Certificate of Completion Basic Employment Skills (36370)

The Certificate of Completion in Basic Employment Skills is designed for students with disabilities to provide strategies to reinforce and maintain money handling, reading, and writing skills necessary for entry-level employment.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proficient money handling, reading, and writing skills that are used in the workplace.

Certificate requirements	Hours
Workforce Preparation 011, Introduction to Handling Money	60
Workforce Preparation 012, Applying Reading Skills on the Job	60
Workforce Preparation 013, Applying Writing Skills on the Job	60
Workforce Preparation 017, Applying Writing Skills on the Job	60
TOTAL	180

1/13/2020

Certificate of Completion Effective Communication Skills (36214)

The Certificate of Completion in Communication Skills for Adults is designed to develop the foundational communication skills necessary for successful employment and continuing education.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate foundational communication skills to interact effectively with other people.

Certificate requirements	Hours
Workforce Preparation 002, Self-Advocacy	60
Workforce Preparation 006, Communication Skills for Successful Employment	60
Workforce Preparation 007, Social Skills and Necessary Etiquette	60
Workforce Preparation 008, Building Critical Thinking Skills	60
TOTAL	240

1/13/2020

Certificate of Completion Employment Readiness (36215)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate foundational knowledge and comprehension of basic employment skills.

Certificate requirements	Hours
Workforce Preparation 003, Getting Around Town	60
Workforce Preparation 004, Choosing the Right Employment Path	60
Workforce Preparation 005, Safety on the Job	60
TOTAL	180

6/17/2019

Certificate of Completion General Medical Office Clerk (36208)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Medical office clerk, healthcare, registration clerk, medical record clerk, file clerk, center service technician.

Certificate requirements	Hours
Workforce Preparation 007, Social Skills and Necessary Etiquette	60
Workforce Preparation 010, Customer Service for the Medical Field	60
Workforce Preparation 016, Long Term Competitive Employment Training	300
TOTAL	180

Certificate of Completion Technical Skills for Higher Learning (36216)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate appropriate decision-making skills on-the-job.
- Demonstrate basic touch-typing proficiency.

Certificate requirements	Hours
Workforce Preparation 008, Building Critical Thinking Skills	60
Workforce Preparation 009, Beginning Computers	60
TOTAL	120

Certificate of Completion Transition to Higher Learning (36217)

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate how to appropriately ask for accommodations needed in the classroom.

Certificate requirements	Hours
Workforce Preparation 001, Transition to Higher Learning	60
Workforce Preparation 002, Self-Advocacy	60
TOTAL	120



**Certificate of Completion
Understanding and Supporting Employees with
Disabilities (36369)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Demonstrate proactive strategies to increase disability awareness and success for all employees in the workplace.

Certificate requirements	Hours
Workforce Preparation 100, Understanding Employees with Disabilities in the Workplace	40
Workforce Preparation 101, Strategies for Working with Employees with Disabilities	40
TOTAL	80

**Certificate of Completion
Office Leadership Skills (37803)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Employ office leadership skills using clear and concise communication and basic budgeting knowledge.

Certificate requirements	Hours
Workforce Preparation 002, Self-Advocacy	60
Workforce Preparation 014, Basic Finances in the Workforce	32
Workforce Preparation 015, Public Communications	32
Workforce Preparation 007, Social Skills and Necessary Etiquette	60
1/13/2020	TOTAL 64 184

**Certificate of Completion
Office Technology (38399)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Employ office technology skills using effective communication skills via social media networking and other online media forms.

Certificate requirements	Hours
Workforce Preparation 009, Beginning Computers	60
Workforce Preparation 018, Social Media and Online Safety in the Workplace	60
6/17/2019	TOTAL 120

**Certificate of Completion
Workforce Skills (37825)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Explain how to achieve wellness through physical, emotional, social, intellectual and occupational development
- Create a personal budget

Certificate requirements	Hours
Workforce Preparation 600, Attitudes for Success	36
Workforce Preparation 601, Money Matters	36
TOTAL	72

**Certificate of Completion
Working with Students with Disabilities (38400)**

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.

Learning Outcome(s)

Upon successful completion of the requirements for this certificate, students will be able to

- Develop an understanding of different instructional strategies to support a diverse classroom

Certificate requirements	Hours
Workforce Preparation 102, Understanding Students with Disabilities	40
Workforce Preparation 103, Strategies for Instructing Students with Disabilities	40
6/17/2019	TOTAL 80

Courses

**Workforce Preparation 001
Transition to Higher Learning**

Unit(s): 0

Class Hours: 60 32 Lecture total.

This course is designed to prepare students who have intellectual, developmental, and learning disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit. 1/13/2020

**Workforce Preparation 002****Self-Advocacy**

Unit(s): 0

Class Hours: 60 Lecture total.

~~Students with intellectual and developmental disabilities 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 laws that pertain to people with disabilities and identify advocacy groups. Grade: Pass/No Pass. Open Entry/Open Exit.~~

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. 1/13/2020

Workforce Preparation 003**Getting Around Town**

Unit(s): 0

Class Hours: 60 Lecture total.

~~A class designed for students with intellectual, development, or learning disabilities to enhance independence by introduction to safe practices and knowledge about using public transportation. Grade: Pass/No Pass. Open Entry/Open Exit.~~

A class designed for students to enhance independence by introduction to safe practices and knowledge about using public transportation. Open Entry/Open Exit. 1/13/2020

Workforce Preparation 004**Choosing the Right Employment Path**

Unit(s): 0

Class Hours: 60 Lecture total.

~~This course is intended to assist adults with intellectual, developmental, and learning disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit.~~

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. 1/13/2020

Workforce Preparation 005**Safety on the Job**

Unit(s): 0

Class Hours: 60 Lecture total.

This course is designed to introduce students with intellectual, developmental, and learning disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 006**Communication Skills for Successful Employment**

Unit(s): 0

Class Hours: 60 Lecture total.

This course is designed to help students with intellectual, developmental, and learning disabilities improve communication skills related to employment. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 007**Social Skills and Necessary Etiquette**

Unit(s): 0

Class Hours: 60 Lecture total.

This course is designed to introduce students with intellectual, developmental, and learning disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 008**Building Critical Thinking Skills**

Unit(s): 0

Class Hours: 60 Lecture total.

~~This course is intended to prepare students with intellectual, developmental, or learning disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit.~~

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. 1/13/2020

Workforce Preparation 009**Beginning Computers**

Unit(s): 0

Class Hours: 60 Lecture total.

Provides students who have intellectual, developmental, and learning disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 010**Customer Service for the Medical Field**

Unit(s): 0

Class Hours: 60 Lecture total.

~~This course is intended to prepare students with intellectual, developmental, or learning disabilities in acquiring or improving critical thinking, communication skills, and basic clerical skills necessary to work independently in a variety of hospital departments. Grade: Pass/No Pass. Open Entry/Open Exit.~~

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. 1/13/2020

Workforce Preparation 011**Introduction to Handling Money**

Unit(s): 0

Class Hours: 60 Lecture total.

This course is designed for students with disabilities 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. Grade: Pass/No Pass. Open Entry/Open Exit.



Workforce Preparation 012
Applying Reading Skills on the Job

Unit(s): 0
 Class Hours: 60 Lecture total.
 This course is designed for students with disabilities to increase students reading comprehension skills necessary for successful employment. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 013
Applying Writing Skills on the Job

Unit(s): 0
 Class Hours: 60 Lecture total.
 This course is designed for students with disabilities to assist students with the writing process and includes activities to improve written composition skills. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 014
Basic Finances in the Workforce

Unit(s): 0
 Class Hours: 32 Lecture total.
 This is an introductory course to teach students how to manage and maintain a budget for payroll services. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 015
Public Communications

Unit(s): 0
 Class Hours: 32 Lecture total.
 This course is designed to teach students public speaking skills through the use of demonstrative, informative, and persuasive speeches. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 016
Long Term Competitive Employment Training

Unit(s): 0
 Class Hours: 180 Lecture total.
 This course is designed to provide students with critical thinking, decision-making, and problem-solving skills necessary for long-term competitive employment opportunities. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 017
Applying Math Skills on the Job

Unit(s): 0
 Class Hours: 60 Lecture total.
 This course is designed to provide students with critical thinking, decision-making, and problem-solving skills necessary for long-term competitive employment opportunities. Grade: Pass/No Pass. Open Entry/Open Exit. 6/17/2019

Workforce Preparation 100
Understanding Employees with Disabilities in the Workplace

Unit(s): 0
 Class Hours: 40 Lecture total.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 101
Strategies for Working with Employees with Disabilities

Unit(s): 0
 Class Hours: 40 Lecture total.
 Recommended Preparation: Workforce Preparation 100.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 500
Workforce Readiness

Unit(s): 0
 Class Hours: 60 Lecture total.
 Provides instruction in office skills for employment preparation. Students will learn communication, decision-making, interpersonal, leadership, lifelong learning, and job seeking skills. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 600
Attitudes for Success

Unit(s): 0
 Class Hours: 36 Lecture total.
 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. Grade: Pass/No Pass. Open Entry/Open Exit.

Workforce Preparation 601
Money Matters

Unit(s): 0
 Class Hours: 36 Lecture total.
 Prepares the student for the world of financial management by developing sound decision-making skills in personal and household money matters. Grade: Pass/No Pass. Open Entry/Open Exit.





COLLEGE FACULTY & ADMINISTRATORS



COLLEGE FACULTY & ADMINISTRATORS

Adams, Rick (2001)

Professor of English

B.A., University of California, Berkeley
M.A., Fuller Theological Seminary
M.S., California State University Los Angeles

Aguilera, Leonor (2007)

Professor of Counseling

B.A., Social Welfare, University of California, Berkeley
M.S., Academic Counseling, National University

Armbruster, Lynda (1990)

Professor of Marketing and Business

B.B.A., M.B.A., National University, Irvine

Armstrong, Joanne (2018)

Dean of Instruction and Student Services, Continuing Education

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)

Interim 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

Babayan, Diana (1981)

Professor of American College English

B.A., Linguistics, California State University, Fullerton
M.A., Linguistics, California State University, Long Beach

Babeshoff, Ruth (1980)

Dean of Counseling & Student Support Services

B.A., Sociology, California State University, Fullerton
M.A., Sociology, Pepperdine University

Bailey, Denise (2011)

Associate Professor of Chemistry

B.A., Chemistry, University of San Diego
Ph.D., Organic Chemistry, University of California, Irvine

Baldizon-Rios, Nena (1994)

Professor of Counseling

B.S., Human Services, California State University, Fullerton
M.A., Counseling, Chapman University
Ed.D., Educational Leadership, Argosy University

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

Beers-McCormick, Lynnette (2004)

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

Brooks, Debra Ann (1993)

Professor of Geology

A.A., Physics, San Bernardino Valley College
B.S., Geophysics, University of California, Riverside
M.S., Geophysics, Texas A & M University

Camarco, Lisa L. (2006)

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

Cannon, Cari B. (1998)

Professor of Psychology

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

Carpio, Brenda (2016)

Assistant Professor of Political Science

B.A., Politics and Latin American Studies, Pomona College
M.A., Political Science, University of California, Irvine

Carrion, 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)

Assistant 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)

Interim Dean of Enrollment and Support Services

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)

Assistant Professor of Mathematics

B.A., Applied Mathematics, California State University, Fullerton
M.A., Applied Mathematics, California State University, Fullerton

**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)**Assistant 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)**Assistant Professor of Mathematics**

B.S., M.S., Mathematics: Pure Option, California State
 Polytechnic University, Pomona

Daugherty, Seth (2016)**Assistant Professor of Library and Information Science**

B.S., Instructional Design, California State University, Chico
 M.L.I.S., San Jose State University
 M.S., Educational and Instructional Technology, National
 University

Deaver, Douglas (2005)**Professor of Philosophy**

B.A., M.A., California State University, Long Beach
 Ph.D., University of Southern California

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

Dela Cusack, Lisa (2004)**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

Elchlepp, Elizabeth (1991)**Professor of English**

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

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)**Assistant Professor of Geography**

B.S., Regional Development, University of Arizona
 M.A., Geography, University of Arizona

Escobar, Dora (2015)**Assistant 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

Fasbinder, Lori (2002)**Dean of Instruction and Student Services, Continuing Education**

B.A., M.A., Linguistics, California State University, Fullerton
 Ed.D., Educational Leadership, Argosy University

Flores, Marilyn (2013)**Vice President of Academic Affairs**

B.A., Liberal Studies, University of California, Riverside
 M.A., Education - Curriculum & Instruction, University of
 California, Los Angeles
 Ph.D., Institutional Leadership & Policy Studies, University of
 California, Riverside

Foley, Denise (2006)**Professor of Biology**

B.S., Loyola Marymount University
 Ph.D., University of California, Los Angeles

Freese, Amy (2016)**Assistant 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)**Assistant 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)**Executive Director, Adult Education Block Grant**

B.A., German Literature, California State University, Fullerton
 M.S., Education – TESOL, 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)**Assistant Professor of Gender, Sexuality, and Women's Studies**

B.A., Sociology, Chapman University

M.A., Sociology, California State University, Fullerton

Graham, Song (2015)**Assistant 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)**Assistant 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)**Assistant 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)**Assistant 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)**Assistant Professor of Counseling**

B.S., Human Services, California State University, Fullerton

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

Hernandez, John C. (2005)**President**

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

M.S., Counseling, California State University, Long Beach

Ph.D., College Student Personnel Administration, University of Maryland, College Park

Hernandez, Rosalba (2016)**Assistant Professor of Counseling**

B.A., Psychology, University of California, Irvine

M.S., Psychology, California State University, Long Beach

Ho, Alice (2001)**Professor of Library and Information Science**

M.S., University of North Texas

Hoffman, Elizabeth (2000)**Student Health & Wellness Services Coordinator and Registered Nurse**

B.S.N., Public Health Nursing, California State University, Long Beach

M.N., Nursing Administration, University of California, Los Angeles

Howell, Scott (2004)**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)**Assistant 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)**Associate Dean of Student Development**

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)**Assistant Professor of Mathematics**

A.A., Liberal Arts, Santiago Canyon College

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

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

Kosuth-Wood, Kathryn (2004)**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

Kubicka-Miller, Tara (2004)**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 and Information Science

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

McLean, Stephen (2014)

Associate Professor of Water Utility Science

B.S., Biochemistry, California Polytechnic State University, San Luis Obispo
M.S., Engineering, Loyola Marymount University, Los Angeles

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

Moore, Kathleen (1996)

Professor of Mathematics

B.A., University of Dallas
M.A., California State University, Fullerton

Murphy, Ryan (2017)

Assistant 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

Myers, Stewart (1984)

Professor of Computer Information Systems and Computer Science

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

Nguyen, Steven (2017)

Assistant 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)

Assistant Professor of Career Education

B.A., Psychology, University of California, Berkeley
M.B.A., University of California, Irvine

Pecenkov, Nidzara (2015)

Associate Professor of English

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

Perry, Janis (1985)

Professor of Counseling and Teacher Education

B.S., Elementary Education, University of Southern California
M.S., Education, University of Southern California

Petrocelli, Rachel (2016)

Assistant Professor of History

B.S., French, Georgetown University
M.A., History, Stanford University
Ph.D., History, Stanford University

Pham, Elaine (2016)

Assistant 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)

Professor of English as a Second Language

B.A., Liberal Arts, California State University, Long Beach
M.A., Reading and Literacy, Walden University

Rabii-Rakin, Narges (2004)

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

Resnick, Barry (1980)

Professor of Counseling

B.S., University of Southern California
M.A., California State University, Long Beach
M.A., National University
Ed.D., Brigham Young University

Rizvi, Syed (2005)

Vice President of Student Services

M.S., Counseling, National University, La Jolla

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)**Assistant 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)**Assistant 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

Scott, Randy (2004)**Professor of Mathematics**

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

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)**Assistant 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)**Assistant 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 and Information Science**

B.A., University of Minnesota, Duluth
M.L.S., University of Minnesota, Minneapolis
M.A., Children's Literature, Hollins University

Stringer, Martin (2008)**Dean of Mathematics & Sciences**

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)**Assistant 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

Vakil, David (2017)**Dean, Arts, Humanities & Social Sciences Division**

B.S., Astronomy, Math, and Physics, University of Arizona
M.S., Astronomy, California Institute of Technology

Valdos, Yanina (2017)**Assistant Professor, Anthropology-Physical**

B.A., Anthropology, conc. in Archeology, UC San Diego
M.A., Anthropology, Tulane University

Vargas, Jose F. (2004)**Vice President of Continuing Education**

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)**Assistant 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

Wirtz, Laura (2000)**Professor of Disabled Students Programs & Services**

B.A., Psychology, California State University, Fullerton
M.A., Psy.D., Clinical Psychology, Pepperdine University

Womack, Melinda S. (1987)**Professor of Communication**

B.A., Chapman University
M.F.A., Ph.D., University of Southern California

Wong, Lana (1997)**Professor of Library and Information Science**

B.A., Political Science, University of Texas, El Paso
M.L.S., Library Science, University of Texas, Austin

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



Santiago Canyon College

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A-LOWER LEVEL

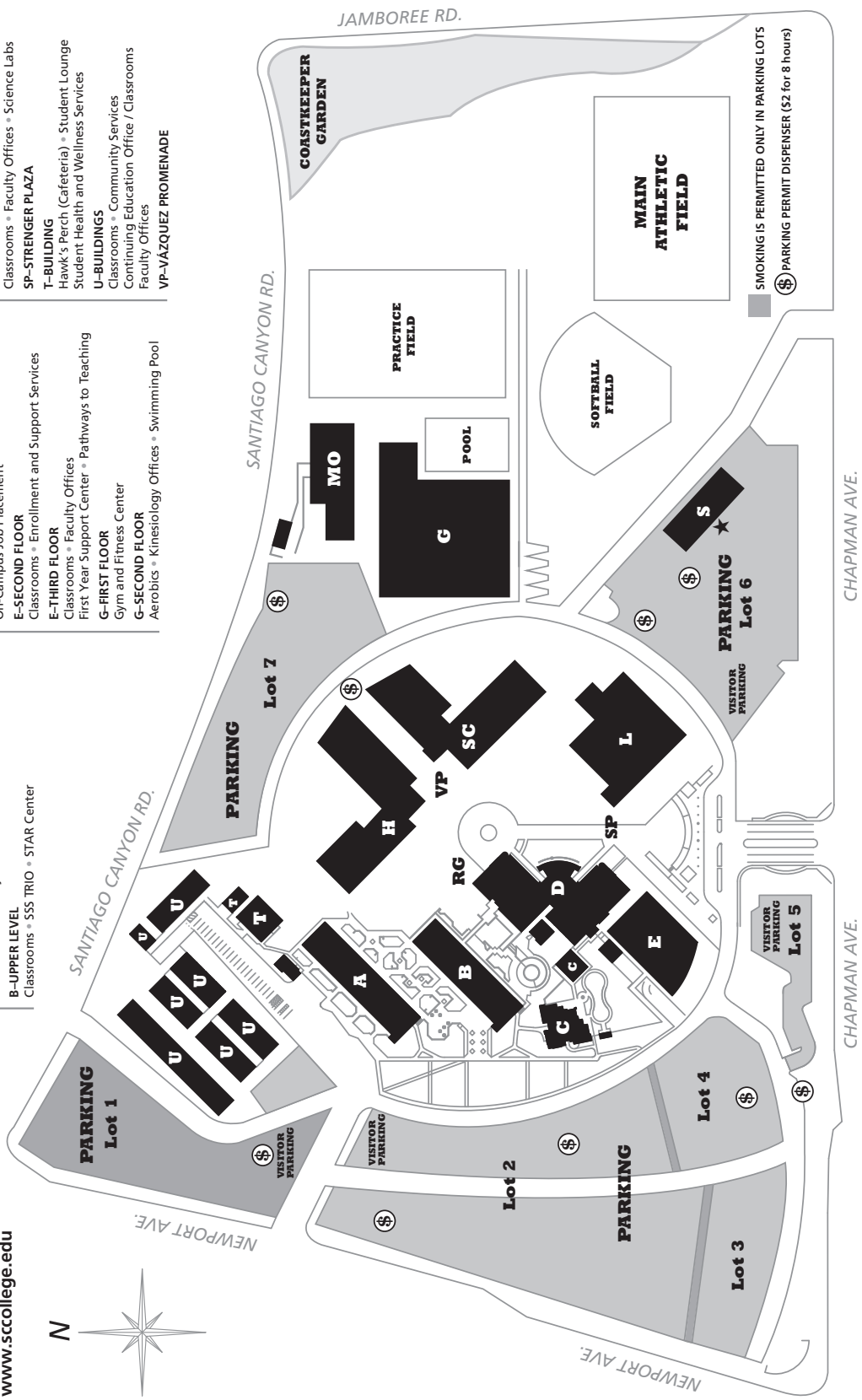
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- A-UPPER LEVEL**
- Academic Senate Office • Administration
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- B-UPPER LEVEL**
- Classrooms • SSS TRIO • STAR Center

C-BUILDING

- Child Development Center
- D-FIRST FLOOR**
- Career Services • Classrooms • Counseling
- Faculty Offices • Transfer Success Center
- D-SECOND FLOOR**
- Math Success Center • Faculty Offices • Classrooms
- E-FIRST FLOOR**
- Admissions • CalWORKs • CARE • Cashier
- Financial Aid • EOPS • Disabled Students Program
- Graduation Office • Photo ID
- On-Campus Job Placement
- E-SECOND FLOOR**
- Classrooms • Enrollment and Support Services
- E-THIRD FLOOR**
- Classrooms • Faculty Offices
- First Year Support Center • Pathways to Teaching
- G-FIRST FLOOR**
- Gym and Fitness Center
- G-SECOND FLOOR**
- Aerobics • Kinesiology Offices • Swimming Pool

H-HUMANITIES BUILDING

- Classrooms • Faculty Offices
- Information Technology • Language Lab
- Writing Center
- L-LIBRARY**
- Instructional Design Center
- MO-MAINTENANCE & OPERATIONS**
- District Publications • District Warehouse
- RG-ROSE GARDEN**
- S-SECURITY & CAMPUS SAFETY** ★
- SC-SCIENCE CENTER**
- Classrooms • Faculty Offices • Science Labs
- SP-STRENGER PLAZA**
- T-BUILDING**
- Hawk's Perch (Cafeteria) • Student Lounge
- Student Health and Wellness Services
- U-BUILDINGS**
- Classrooms • Community Services
- Continuing Education Office / Classrooms
- Faculty Offices
- VP-VAZQUEZ PROMENADE**



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 (P) PARKING PERMIT DISPENSER (\$2 for 8 hours)



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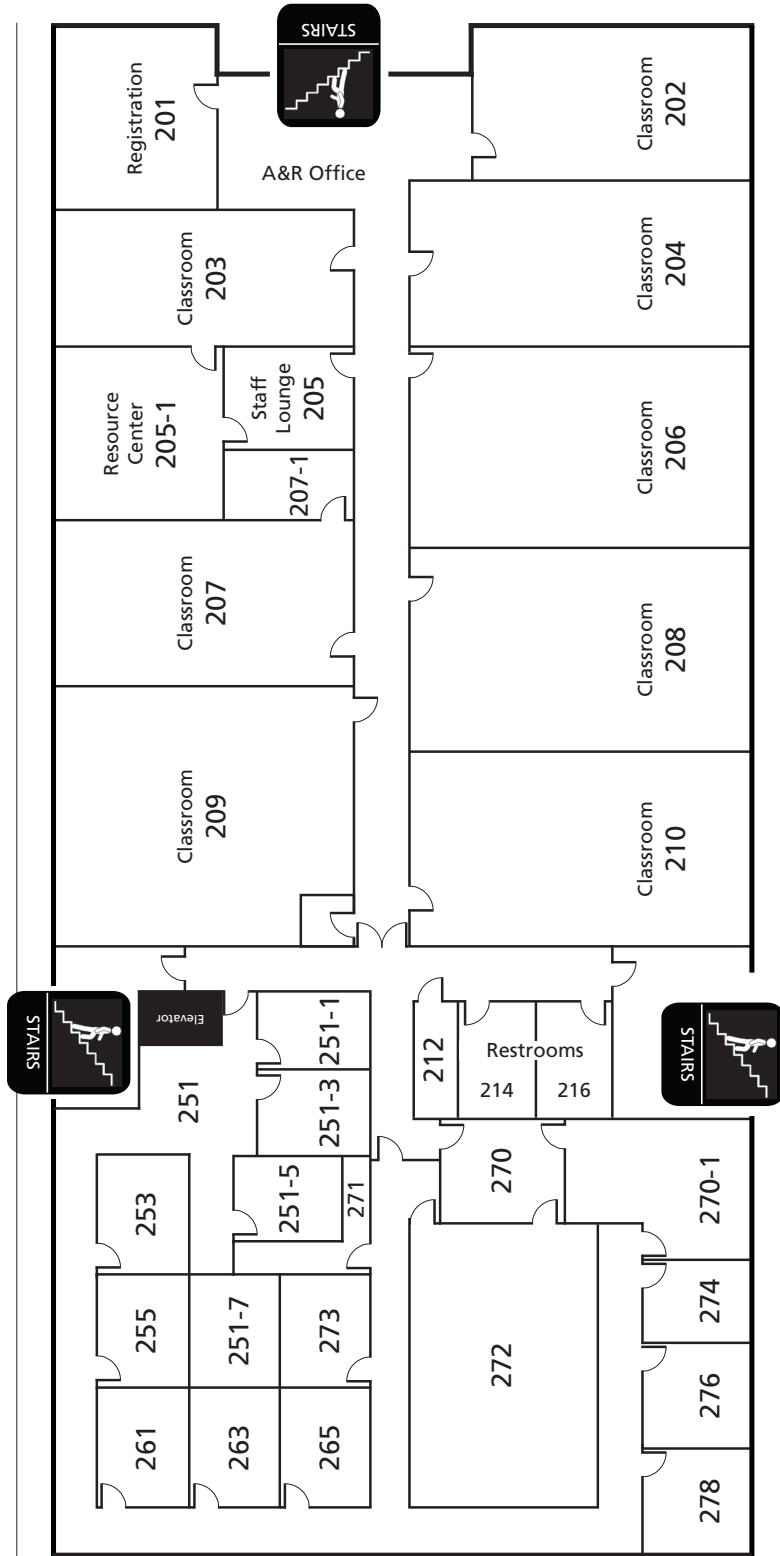
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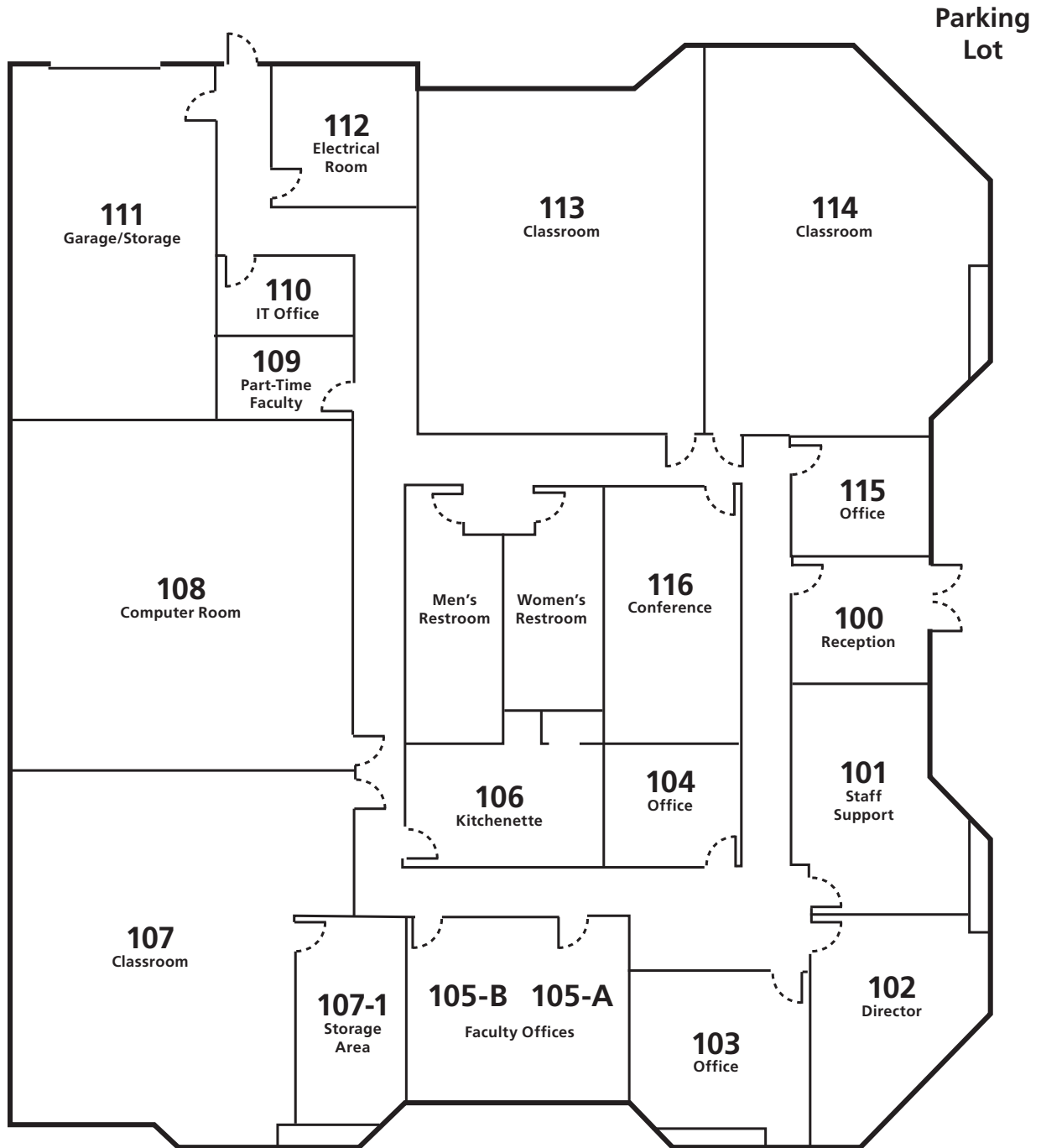


COLLEGE AND WORKFORCE PREPARATION CENTER

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