



Santiago Canyon College



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Start Your Career in Biotechnology at SCC

YOU can explore, unlock, and transform the future of genetics in the biotechnology manufacturing industry.



Biotechnology Certificate Program

You can be qualified to work in the Biotech Manufacturing Industry after completing just 3 courses!

Complete Biology 190 & 190L, Biology 191, and Chemistry 100 and earn a Certificate of Proficiency in Biotechnology

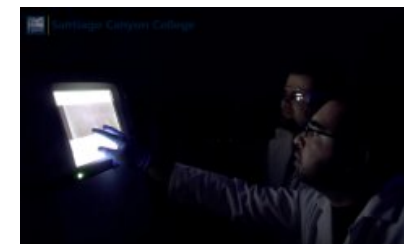
Our certificate is stackable so you can also earn higher level Certificates of Achievement and an AS Degree in Biotechnology by completing other courses in the program (Click Images Below for more information)



[Brochure](#)



[Diagram of Courses for Stackable Certificate](#)



[SCC Biotechnology Program Video](#)

Wonder what Biotechnology means? [Click Here.](#)

[Interested? Click here to apply to college!](#)

After applying you will be given a date to register before the new semester begins

Biotechnology Courses Planned for Spring 2021 at SCC:



BIOTECHNOLOGY

CERTIFICATE AND A.S. DEGREE PATHWAY

NOW ENROLLING

WINTER 2020

BIOL 194 | 2 UNITS
QUALITY & REGULATORY COMPLIANCE
ONLINE

BIOL 196 | 2 UNITS
FOOD SAFETY
ONLINE

SPRING 2021

BIOL 190 | 3 UNITS
INTRO TO BIOTECH
ONLINE

BIOL 190L | 1 UNIT
INTRO TO BIOTECH LAB
IN PERSON COURSE

BIOL 191 | 4 UNITS
BIOTECH A: BASIC LAB SKILLS
IN PERSON COURSE

BIOL 193 | 4 UNITS
BIOTECH C: NUCLEIC ACIDS
IN PERSON COURSE

IN PERSON COURSES RESUME SPRING 2021

INTRO TO BIOTECH LECTURE & LAB
BIOL190/L is an 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. Laboratory experiments emphasizing entry-level employment include chemistry of buffers, metrology, biological molecules, gene expression, cell structure, and molecular biology techniques. Introduces basic biotechnology skills including separation methods, aseptic technique, and documentation.

BIOTECH A: BASIC LAB SKILLS
BIOL 191 is a skills-based course with topics that 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. Compliance with industry standards and regulations will be incorporated into course procedures.

BIOTECH C: NUCLEIC ACIDS
BIOL 193 introduces the fundamental skills in any biotech laboratory focusing on the upstream research and development process. DNA/RNA extraction and purification, bioinformatics, polymerase chain reaction, electrophoresis, DNA sequencing, recombinant DNA technology, DNA cloning, fluorescence in situ hybridization, and Southern blot analysis. Compliance with industry standards and regulations will be incorporated into course procedures. Prereq: Completing BIOL 191 with a C or higher.

QUALITY & REGULATORY COMPLIANCE
BIOL 194 covers quality assurance and regulatory compliance for the biosciences industries. 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 CMP, ISO9000, Six Sigma and Lean.

NEW! FOOD SAFETY
BIOL 196 covers the regulatory agencies that oversee and the methodologies prescribed to ensure a safe food supply. The basics of quality assurance and quality improvement as applied to the food industry, HACCP, product traceability, allergens, and contaminants including microorganisms are presented. Illnesses known to result from ingestion of contaminated foods are discussed.

SCCOLLEGE.EDU/BIOTECHNOLOGY

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[Interession 2020 and Spring 2021 Biotechnology Courses](#)

Introduction to Biotechnology - Spring 2021

- Biology 190-XXXXX: (02/8/2021-06/05/2021)
 - Lecture: (TBA)
- No Prerequisite!
- Counts for SCC GE and is UC/CSU transferable!

- 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.
- This is 1 of only 3 classes needed to earn a certificate!

Introduction to Biotechnology Laboratory- Spring 2021

- Biology 190-XXXXX: (02/8/2021-06/05/2021)
 - Lab: (TBA)
- Prerequisite/Corequisite: Biology 190
- Counts for SCC GE and is UC/CSU transferable!
- Laboratory experiments emphasizing basic concepts needed for entry-level employment in the bioscience industry.
- This is 1 of only 3 classes needed to earn a certificate!

Biotechnology A: Basic Laboratory Skills - Spring 2021

- Biology 191-XXXXX: (02/8/2021-06/5/2021)
 - Lecture: (TBA)
 - Lab: (TBA)
- No Prerequisite!
- 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.

Biotechnology C: Nucleic Acids - Spring 2021

- Biology 193-XXXXX: (02/8/2021-06/5/2021)
 - Lab: (TBA)
 - Lecture: (TBA)
- Prerequisite: Biology 191 with a grade of C or better
- This course introduces the fundamental skills in any biotechnology laboratory focusing on the upstream research and development process. Compliance with industry standards and regulations will be incorporated into course procedures.

Biotechnology Courses for Intersession 2021 at SCC:

Quality and Regulatory Compliance in Biosciences - Interession 2021

- Biology 194-XXXXX: (01/04/2021-01/30/2021)
 - Lecture: (Location - TBA)
 - Days and Times: (TBA)
- No Prerequisite!
- 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.

Food Safety and Microbiology - Interession 2021

- Biology 196-XXXXX: (01/04/2021-01/30/2021)
 - Lecture: (Location - TBA)
 - Days and Times: (TBA)
- No Prerequisite!
- Prior completion of Biology 190 or Biology 229 is recommended.
- This course will cover 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 will be presented. Discussion of illnesses known to result from ingestion of contaminated foods will occur.

Biotechnology Courses Currently Offered at SCC:

Introduction to Biotechnology - Fall 2020

- Biology 190-84188: (08/24/2020-12/12/2020)
 - Lecture: Online
- No Prerequisite!
- Counts for SCC GE and is UC/CSU transferable!

- 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.
- This is 1 of only 3 classes needed to earn a certificate!

Introduction to Biotechnology - Fall 2020

- Biology 190-84221: (09/14/2020-12/09/2020)
 - Lecture: Online
- No Prerequisite!
- Counts for SCC GE and is UC/CSU transferable!
- 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.
- This is 1 of only 3 classes needed to earn a certificate!

Introduction to Biotechnology Laboratory- Fall 2020

- Biology 190-84189: (09/14/2020-12/19/2020)
 - Lab: Online
- Corequisite: Biology 190
- Counts for SCC GE and is UC/CSU transferable!
- Laboratory experiments emphasizing basic concepts needed for entry-level employment in the bioscience industry.
- This is 1 of only 3 classes needed to earn a certificate!

Biotechnology Courses Previously Offered at SCC:

Biotechnology A: Basic Lab Skills - Summer 2020

Introduction to Biotechnology - Summer 2020

Introduction to Biotechnology Laboratory- Summer 2020

Introduction to Biotechnology - Spring 2020

Introduction to Biotechnology Laboratory- Spring 2020

Biotechnology B: Proteins - Spring 2020

Cellular and Molecular Biology - Spring 2020

Quality and Regulatory Compliance in Biosciences - Interession 2020

Introduction to Biotechnology - Fall 2019

Introduction to Biotechnology Laboratory- Fall 2019

Biotechnology C: Nucleic Acids - Fall 2019

Cellular and Molecular Biology - Fall 2019

Biotechnology A: Basic Lab Skills - Summer 2019

Introduction to Biotechnology - Spring 2019

Introduction to Biotechnology Laboratory- Spring 2019

Cellular and Molecular Biology - Spring 2019

Quality and Regulatory Compliance in Biosciences - Interession 2019

Biotechnology A: Basic Lab Skills - Fall 2018

Introduction to Biotechnology - Fall 2018

Introduction to Biotechnology Laboratory- Fall 2018

Cellular and Molecular Biology - Fall 2018

Cell Culture Techniques - Summer 2018

Introduction to Biotechnology - Spring 2018

Introduction to Biotechnology Laboratory- Spring 2018

Biotechnology C: Nucleic Acids - Spring 2018

Cellular and Molecular Biology - Spring 2018

CHECK OUT THESE VIDEOS TO SEE HOW AMAZING BIOTECHNOLOGY IS!



Contact [Denise Foley](#) (Program Coordinator) for more information.



Santiago Canyon College is part of the [Rancho Santiago Community College District](#) and is accredited by the [Accrediting Commission for Community and Junior Colleges](#).

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