

Biology Associate in Science Degree Program

Meet with a CSM counselor to discuss how to achieve academic goals and to develop a comprehensive student educational plan (SEP).

University Transfer Program 60–70 transferable units

California State University
University of California
Independent Colleges and Universities

Program Overview

The Biology AS degree satisfies requirements for students to transfer into bachelor's degree programs in most Biology majors at U. C. campuses. Students should be sure to check the UC website for an explanation of IGETC for STEM.

Program Requirements

Major Requirements

Required Core Courses: 24 units		Units
BIOL 210	General Zoology	5 units
BIOL 220	General Botany	5 units
BIOL 230	Introductory Cell Biology	4 units
CHEM 210	General Chemistry I	5 units
CHEM 220	General Chemistry II	5 units

Students with little or no high school preparation should complete BIOL 110, CHEM 192, MATH 110, and PHYS 100 prior to beginning major coursework.

Total Required Major Units: 24

And required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.

Please refer to the AA/AS Degree Requirements for more information.

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Related Degrees & Certificates

AS	Associate in Science Degree Program	
	Biology: Pre-Nursing	60 units
AS-T	Associate in Science Degree for Transfer	
	Biology	60 units
	Nutrition and Dietetics	60 units
CS	Certificate of Specialization	
	Biotechnology	10 - 11 units

Career Opportunities

Career opportunities for those who major in the Biological Sciences and obtain a Bachelor's or advanced degree include a variety of interesting occupations related mainly to biology, agriculture or medicine. Biological professions include anatomist, aquatic biologist, bacteriologist, biologist, biotechnologist, botanist, cytogeneticist, cytologist, ecologist, embryologist, entomologist, geneticist, herpetologist, ichthyologist, mammalogist, marine biologist, microbiologist, molecular biologist, morphologist, mycologist, ornithologist, paleobotanist, paleozoologist, parasitologist, pathologist, pharmacologist, photobiologist, phycologist, physiologist, protozoologist, systematist, taxonomist, toxicologist, tropical biologist, virologist, wildlife biologist, and zoologist. Many biologists are educators as well as scientists. Biologists are also employed as forensic scientists, illustrators, museum specialists, naturalists, photographers, and science writers/editors. Agricultural professions include agricultural biologist, agrigeneticist, animal scientist, apiculturist, farmer/farm manager, field crop manager, fish and game warden, food technologist, foresters/forestry technicians, horticulturist, plant and animal breeder, plant and animal physiologist, plant quarantine/ pest control inspector, range scientist, and soil scientist/conservationist. Medical professions include audiologist, chiropractor, coroner, dentist, exercise physiologist, health care administrator, medical laboratory technologist/technician, medical librarian, nurse, nutritionist, optometrist, pharmacist, physician, podiatrist, public/ environmental health specialist, sanitarian, speech pathologist, and veterinarian. Additional medical careers include specialists in sports medicine, and manual arts, music, occupational, physical, and recreational therapists.

Program Learning Outcomes

Students completing this program will be able to:

- Explain the scientific method and its applications, and use the scientific method in a laboratory setting.
- Explain the principle of evolution as a fundamental process of all biology.
- Describe how structure and function are related at all levels of life.
- Demonstrate proficiency in basic lab skills and analysis.

Recommended high school preparation

One year of Biology, Chemistry, Physics, four years of Mathematics, English

University Transfer Program

Use [Assist](#) to identify lower division major preparation for the California State University and the University of California systems. For independent or out-of-state colleges and universities use their catalogs to locate this information. Transfer Services can assist you to gather this information.

About the Program

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