



Associate Degree for TransferSM

BIOLOGY FOR TRANSFER (AS-T)



The Associate in Science in Biology for Transfer (AS-T) Degree is designed to facilitate transfer to a California State University in keeping with SB 1440. A total of 35-36 units are required to fulfill the major portion of this degree. Students must also complete the Intersegmental General Education Transfer Curriculum (IGETC) STEM (Science, Technology, Engineering, and Math) requirements or the California State University System (CSU) STEM requirements (see the "General Education Requirements and Transfer Information" section of the catalog).

Students should speak with a counselor to verify that the requirements for this degree have been met.

The following requirements must be met to be awarded an Associate in Science in Biology for Transfer (AS-T) Degree:

1. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirement.
 - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0. Students are also required to earn a "C" grade or higher or "Pass" in all courses required for the major.

The Biological Sciences Department offers a solid academic foundation for further study in life sciences. The primary emphasis of the biological sciences major program is to prepare students for successful transfer to baccalaureate (four-year) institutions. This course package for majors is modeled on the transfer requirement for the California State University system. Students should check the catalog of the transfer school being considered for its specific requirements and speak with a counselor.

The Program-level Student Learning Outcomes (PSLOs) below are outcomes that students will achieve after completing specific degree / certificate requirements in this program. Students will:

1. Explain how differences are the result of changes in characteristics due to natural selection and other forces of evolution.
2. Compare and contrast the ways that different kinds of cells, organisms or the community take in, use, and transfer energy to meet their metabolic needs (Homeostasis).
3. Describe how genetic information is stored, expressed, and transferred to offspring.

4. Explain how a specific structure has a specific function based on its characteristics.
5. Explain causes of climate change (natural and anthropogenic influences), consequences of climate change and strategies for addressing the human influence.
6. Demonstrate comfort and competence in interpreting and working with numerical data to weigh evidence, draw conclusions, and solve problems in biological applications.

Associate Degree Major Requirements

Note: All courses must be completed with a letter grade of "C" or higher or "Pass."

Code	Title	Units
Required Core		
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO-240	Principles of Ecology, Evolution and Organismal Biology	5
List A		
CHEM-141	General Chemistry I	5
CHEM-142	General Chemistry II	5
MATH-180	Analytic Geometry and Calculus I	5
PHYC-130	Fundamentals of Physics	4
PHYC-131	Fundamentals of Physics	4
List B		
BIO-215	Statistics for Life Sciences	3-4
or ANTH-215	Statistics for the Behavioral Sciences	
or PSY-215	Statistics for the Behavioral Sciences	
or SOC-215	Statistics for the Behavioral Sciences	
or MATH-160	Elementary Statistics	
Units in the major		35-36
Plus General Education Requirements (CSU GE or IGETC) (https://catalog.gcccd.edu/grossmont/admission-information/general-education-transfer/)		31-33
Total Units		60

Complete transferable units as needed to reach 60.

Students completing IGETC may be awarded the degree, but they must complete a course from Area 1C: Oral Communication to meet CSU admission requirements.