## **Biology**

## **Biology AS-T Degree**

The Associate of Science in Biology for Transfer Degree program is designed to provide entry-level skills and knowledge for a student transferring to a 4-year institution with a major in Biology. The Biology major requires 31 units in Biology and related fields. Course work in this program will provide a foundation in subjects students will study as Biology majors in 4-year colleges or university programs. The Associate of Science in Biology for Transfer degree provides students with a comprehensive knowledge of the scientific study of living organisms. The degree provides students with an understanding of the major theoretical perspectives in biology, knowledge about and the ability to use biological concepts in the analysis of scientific phenomena, opportunities to develop critical thinking as well as written and oral communication skills utilizing a biological perspective, an understanding of chemical and physical concepts relevant to living organisms, and qualitative and quantitative research skills.

## Program student learning outcomes:

- 1. Students will make informed judgments based upon scientific principles and assessment of data.
- 2. Students will apply the scientific method and propose new questions about the topic based upon the results.
- 3. Students will explain the symbiotic impacts of humans and the environment based upon an integrative approach.
- 4. Students will apply the metric system using standard laboratory equipment, assess the validity of the data, and interpret it correctly.
- 5. Students will demonstrate comprehension of biological principles by working in teams to manage time and tasks, sharing results and analyses, and arriving at a final collaborative product.

## Students must meet the following requirements to qualify for an Associates for Transfer Degree (ADT):

- Complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University (CSU), including both of the following:
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education (CSU GE) Breadth Requirements
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtain a minimum grade point average of 2.0
- Minimum grade of "C" (or "P") for each course in the major, and
- Completion of the IGETC and/or CSU GE-Breadth for STEM

Course #	Title	Units
Required Core C	Courses (31 Units)	
BIO 001A	Cell and Molecular Biology	4
BIO 001B	Organismal Biology	4
CHEM 001A	General Chemistry I	5
CHEM 001B	General Chemistry II	5
MATH 001A	Introduction to Calculus	5
PHYSICS	Mechanics and Thermodynamics	4
002A		
PHYSICS	Electricity, Magnetism, Optics and Modern Physics	4
002B		
	Total Major Units	31
	Units to be double-counted as General Education.	9-10
	CSU GE Breadth or IGETC Units for STEM	31-33
	Transferable Elective Units	5-8
	Total	60