

**Biology Program**  
**Biology**  
**Associate in Science for Transfer Degree\***  
**Effective Term: Fall 2016**

The Associate of Science Degree for Transfer (AST) in Biology is designed for students who plan to transfer to CSU as biology majors. In this program, they gain exposure to the six main topics of biology (cell, molecular, organismal biology, and evolution and ecology).

Students who successfully complete the AST in Biology earn specific guarantees for transfer to the CSU system: admission to a CSU with junior status, and priority admission to their local CSU campus and to a program or major in biology or a similar major. Students transferring to a CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Students are required to complete 60 semester units or 90 quarter units that are eligible for transfer to a California State University, including the following: (1) The Intersegmental General Education Transfer Curriculum (IGETC for STEM) Breadth Requirements (31 units) and (2) 39 semester units with a grade of C or better in the major or area of emphasis and an overall minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.

Students are advised to consult with a Berkeley City College counselor for additional information and to verify transfer requirements.

<b>Required Courses:</b>	<b>Units</b>
BIOL 1A General Biology	5
BIOL 1B General Biology	5
CHEM 1A General Chemistry	5
CHEM 1B General Chemistry	5
MATH 3A Calculus I	5
PHYS 3A General Physics	5
PHYS 3B General Physics	5
Select one of the following courses:	
CHEM 30B Introductory Organic and Biochemistry	4
MATH 13 Introduction to Statistics	4
Major Requirements	39
General Education	21
<b>Total Units:</b>	<b>60</b>

\* Please note that students can only take the IGETC for Stem as the GE pattern for this program.

**Program Learning Outcomes**

Students who complete the program will be able to:

- Demonstrate skills in the scientific methods used in the biological sciences.
- Explain core concepts of biology: chemical makeup of biomolecules and their importance in the structure and function of the cell; functions of organelles, cellular processing, including respiration, photosynthesis, mitosis, meiosis, transcription/translation, and fundamental biological concepts in classical and molecular genetics, and molecular biology; classification, life cycles, physiology, anatomy and development of animals, plants, fungi, protista and prokaryotes.
- Explain the core concepts of evolution and ecology.