

# PROGRAM OF STUDY

## Associate in Science in Biology for Transfer

Biology is the study of living organisms. Through the use of the scientific method, biologists seek to understand the unity and diversity of life. By understanding biological processes, we can make intelligent decisions regarding our environment, our health and our place in the ecosystem.

A solid background in the life sciences is required for many careers, including work in the allied health professions, agriculture, food service, parks and recreation, and education. Occupations with a scientific and technological component will be increasingly available in the future.

High School Preparation: Chemistry, physics, and four years of college preparatory mathematics; a foreign language is recommended.

A biology major transfers to a four-year institution to complete a bachelor's degree in Biology, Biological Sciences, or Biochemistry, with a choice of concentrations from Biotechnology to Zoology. Cabrillo's Biology program is articulated with the UC and CSU systems and includes the standard courses needed to complete the first two years of the major.

Cabrillo offers options for degrees in Biology. The first option listed below is an Associate in Science in Biology for Transfer (A.S.-T), which is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees are guaranteed admission to the CSU system, but not to a particular campus or major. See Associate Degree for Transfer information in the Cabrillo CollegeCatalog . **IGETC for STEM (for CSU) is required for the Biology A.S.-T degree.**

The following is required for all A.A.-T or A.S.-T degrees:

- Completion of 60 CSU-transferable semester units.
- Minimum grade-point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA.
- Completion of a minimum of \*18 semester units in the major with a letter grade of "C" or better, or a "P" if the course is taken on a "pass/no pass" basis. \*Note: this degree requires greater than 18 units in the major for completion.
- Certified completion of the Intersegmental General Education Transfer Curriculum (IGETC) for STEM for CSU pattern.

### Completion of IGETC for STEM (for CSU) General Education Requirements

**GE Units**

31 - 33

### Core Courses

**Units**

BIO 9A	Molecular, Cellular, and Animal Biology	5
BIO 9B	Ecology, Evolution, and Plant Biology	5
CHEM 1A	General Chemistry I	5
CHEM 1B	General Chemistry II	5
MATH 5A	Analytic Geometry and Calculus I	5
PHYS 2A	General Physics I	4
	<b>and</b>	
PHYS 2B	General Physics II	4
	<b>or</b>	
PHYS 4A	Physics for Scientists and Engineers I	5
	<b>and</b>	
PHYS 4B	Physics for Scientists and Engineers II	5

*All Core courses are also general education courses.*

*\*Students who previously completed the CABRILLO BIO 1ABC series, may substitute that series for BIO 9AB for this degree.*

### LIST B - Courses which may be required by the transfer institution, but are not required for the degree

**Units**

BIO 6	Microbiology	4
CHEM 12A	Organic Chemistry I	3
CHEM 12AL	Organic Chemistry Laboratory I	2
CHEM 12B	Organic Chemistry II	3
CHEM 12BL	Organic Chemistry Laboratory II	2
MATH 5B	Analytic Geometry and Calculus II	5

MATH 12	Elementary Statistics	5
MATH 12H	Honors Elementary Statistics	5
PSYCH 1	General Psychology	3
PSYCH 1H	Honors General Psychology	3
PSYCH 4	Introduction to Biological Psychology	3

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**Total Units**

**60**

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