## **Biology**

## **Biology AS-T**

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.

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer", a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

To earn the Associate in Science in Biology for Transfer Degree, a student must:

- Complete all degree course requirements in the major as outlined below with grades of C or better.
- Complete a minimum of 60 CSU-transferable semester units with a minimum grade point average of 2.0.
- Complete either the CSU General Education Breadth pattern (CSU GE) for STEM which requires a minimum of 33 units, or the Intersegmental General Education Transfer Curriculum (IGETC), which requires 31 units. Double counting of courses is encouraged and permitted.

Course #	Title	Units
Required Core Courses		
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-002A	Mechanics and Thermodynamics	4
PHYSICS-002B	. Electricity, Magnetism, Optics, and Modern Physics	4
Required Major	Courses (as above)	31
CSU-GE or IGE	ETC requirements (double counting allowed)	33-31
Electives (must	be transferable to CSU)	5-8
`	Total	60