

BIOLOGICAL SCIENCES

missioncollege.edu/depts/biology

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Biological Sciences: Associate in Science (AS)

Associate in Science in Biology for Transfer (AS-T) The Associate in Science in Biology for Transfer (AS-T in Biology) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Biology. California Community College students who are awarded an Associate in Science in Biology for Transfer (AS-T in Biology) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Associate in Science in Biology for Transfer (AS-T in Biology) offered by Mission College is designed to prepare students who successfully complete the coursework outlined below. Through intensive training in organismal, molecular, and environmental biology, students will develop the ability to think critically and abstractly, as well as acquire the problem-solving and laboratory skills necessary for success in any field of biological science. Students completing this program will have a solid foundation in basic biology, evolutionary theory, and the scientific method, as well as strong preparation in the supporting fields of mathematics, chemistry, and physics.

Program Learning Outcomes:

- Students will apply the scientific method to investigate Apply the scientific method to investigate biological questions by collecting and quantitatively analyzing data.
- Identify and apply the central concepts, hypotheses, and theories that comprise the major areas of the biological sciences, including cell and organism structure and function.
- Explain the genetic or evolutionary connections between biological structures and their function, and between organisms and their environment.
- Follow transfers and transformations of energy and matter through biotic and abiotic systems.

Career/Transfer Opportunities:

Students who successfully complete the Associate in Science in Biology for Transfer (AS-T Biology) will be prepared for a seamless transfer to a CSU to pursue a Bachelor's degree in Biology. Through intensive training in organismal, molecular, and environmental biology, students will develop the ability to think critically and abstractly, as well as acquire the problem-solving and laboratory skills necessary for success in any field of biological science. Students completing this program will have a solid foundation in basic biology, evolutionary theory, and the scientific method, as well as strong preparation in the supporting fields of mathematics, chemistry, and physics.

Core Requirements (10 units):

Complete all of the following	Units
BIO 001B General Biology: Organism	5.0
BIO 001A General Biology: Cells - OR-	5.0
BIO 001AH General Biology: Cells - Honors	5.0

Elective (8 units):

Complete a minimum of eight units from the following	Units
ANT 001 Biological Anthropology	.0
BIO 004 Microbiology	5.0
BIO 010 Introduction to Biology	3.0
BIO 010L Introduction to Biology Lab	1.0
BIO 011 Human Biology	4.0
BIO 012 Emerging Infectious Diseases -OR-	3.0
BIO 012H Emerging Infectious Diseases - Honors	3.0
BIO 014 Introductory Neuroscience -OR-	3.0
BIO 014H Introductory Neuroscience - Honors	3.0
BIO 016 Marine Biology	4.0
BIO 017 Genetics and Society -OR-	3.0
BIO 017H Genetics and Society - Honors	3.0
BIO 018 The Biology of Cancer-OR-	3.0
BIO 018H The Biology of Cancer - Honors	3.0
BIO 019 Oceans: Life in the Sea	3.0
BIO 025 Environmental Biology -OR-	.0
BIO 025H Environmental Biology - Honors	3.0
BIO 030 Tropical Ecology	3.0
BIO 030L Tropical Ecology Field Studies	1.0
BIO 032 California Plants and Animals	4.0
BIO 047 Human Anatomy	5.0
BIO 048 Human Physiology -OR-	5.0
BIO 048H Human Physiology - Honors	5.0
CHM 001A General Chemistry -OR-	5.0
CHM 001AH General Chemistry I - Honors	5.0
NTR 015 Human Nutrition -OR-	3.0
NTR 015H Human Nutrition - Honors	3.0
NTR 040 Nutrition and Disease-OR-	3.0
NTR 040H Nutrition and Disease - Honors	3.0

Required Units for the Major: 18.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).