

BIOLOGY

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Biology: Associate in Science for Transfer (AS-T)

Associate in Science in Biology for Transfer (AS-T) 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:

- 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:

A solid background in the life sciences is required for many careers, including work in the allied health professions, biotechnology, horticulture, land management, and education.

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).

Core Requirement Courses (10 units):

	Units
BIO 001A General Biology: Cells -OR-	5.0
BIO 001AH General Biology: Cells - Honors	5.0
BIO 001B General Biology: Organisms	5.0

List A. (19-20 units):

	Units
CHM 001A General Chemistry I -OR-	5.0
CHM 001AH General Chemistry I - Honors	5.0
CHM 001B General Chemistry II -OR-	5.0
CHM 001BH General Chemistry II - Honors	5.0
MAT 003A Analytic Geometry and Calculus I	5.0
PHY 002A General Physics - Mechanics and Thermodynamics	5.0
PHY 004A Engineering Physics-Mechanics	5.0
PHY 002B General Physics - Electricity, Magnetism and Optics	5.0
PHY 004B Engineering Physics-Electricity and Magnetism	4.0

Required Units for the Major:

34.0-35.0

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

Total Required Units:

60.0