

# PROGRAMS

## BIOLOGY AS-T

### Associate in Science in Biology for Transfer

- [Contact the Biology Department](#)
  - [View all Biology courses and degrees](#)
- [Register via Mission Portal](#)

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 biological questions by collecting and quantitatively analyzing data.
- Students will 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.
- Students will explain the genetic or evolutionary connections between biological structures and their function, and between organisms and their environment.

### What is an AA-T?

The Associate in Arts for Transfer (AA-T) is intended for student who plan to transfer and complete a bachelor's degree in a similar major at a CSU campus. Students completing these transfer degrees:

- will earn an Associate's Degree from Mission College;
- are guaranteed admission to a similar major at a campus in the CSU system;
- will be prepared to start upper division coursework at the CSU;
- and will not have to complete more than 60 units after transfer.

A complete and up-to-date listing of the similar CSU majors can be found on the <http://www.adegreewithaguarantee.com/>

### Meet the Following Requirements

1. Completion of the following major courses with grades of C or P or better.
2. Completion 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 for STEM (CSU GE-B for STEM) or the Intersegmental General Education Transfer Curriculum for STEM (CSU IGETC for STEM).
  - For CSU GE-B STEM, 1 course in Area C and 1 course in Area D can be deferred until after transfer.
  - For CSU IGETC STEM, 1 course in Area 3 and 1 course in Area 4 can be deferred until after transfer.

### Please Note

- Completing courses that satisfy CSU's U.S. History, Constitution and American Ideals requirement prior to transfer is highly recommended.
- Requirements here apply to the current catalog year and are subject to change. Visit DegreeWorks in [My Mission Portal](#) to view requirements based your catalog year.

### Required Core Courses

*BIO 001AH can be taken in lieu of BIO 001A*

Code	Class	Units
BIO 001A	General Biology: Cells (3.0 Lecture/2.0 Lab)	5.0
BIO 001B	General Biology: Organisms (3.0 Lecture/2.0 Lab)	5.0

## PROGRAMS

### List A - Complete all Courses Listed (24.0-25.0 units)

CHM 001AH, CHM 001BH and MAT 003AH can be taken in lieu of CHM 001A, 001B and MAT 003A

Code	Class	Units
CHM 001A	General Chemistry (3.0 Lecture/2.0 Lab)	5.0
CHM 001B	General Chemistry (3.0 Lecture/2.0 Lab)	5.0
MAT 003A	Analytic Geometry and Calculus I (5.0 Lecture)	5.0

### And One Physics Sequence

Code	Class	Units
PHY 002A	General Physics - Mechanics and Thermodynamics (4.0 Lecture/1.0 Lab)	5.0
PHY 002B	General Physics - Electricity, Magnetism And Optics (4.0 Lecture/1.0 Lab)	5.0

Or

Code	Class	Units
PHY 004A	Engineering Physics-Mechanics (4.0 Lecture/1.0 Lab)	5.0
PHY 004B	Engineering Physics-Electricity and Magnetism (3.0 Lecture/1.0 Lab)	4.0

### Please Note

It is strongly recommended that course sequences be completed at the same college.

### List B - Complete Listed courses (3.0 Units)

PSY 001H can be taken in lieu of PSY 001

Code	Class	Units
PSY 001	General Psychology (3.0 Lecture)	3.0

### Required Units for the Major

	Units
Required units for the major	37.0-38.0
Required GE and elective units as needed	
Total minimum required units for AS-T	60.0