

ASSOCIATE IN SCIENCE IN BIOLOGY FOR TRANSFER (AS-T)

Students completing the Associate in Science in Biology for Transfer Degree will be able to seamlessly transfer into the CSU system to pursue a baccalaureate degree in biology. Students completing the Biology (AS-T) degree will have an introductory foundation for the field of Biology through the study of Biomolecules, cells, heredity, evolution, and ecological principles. Students will acquire skills and abilities in the scientific method, experimental procedures, data analysis and critical thinking.

Program Outcomes

- Design, implement and analyze the results of experiments utilizing the scientific method as measured by the scientific method rubric.
- Infer the role of evolution at the molecular, cellular, population or ecological level of biology as measured by the evolution rubric.

Career Opportunities

This Associate in Science in Biology for Transfer (AS-T) Degree is intended to meet the lower division requirements for biology for all CSU campuses. Students planning to transfer to institutions other than the CSU are encouraged to consult ASSIST.org (<http://www.assist.org>) and a COS counselor for program planning and course selection. Most common career opportunities with a baccalaureate degree include: Laboratory technician, teaching, and research scientist.

Program Requirements

Code	Title	Units
GENERAL EDUCATION		31-33

Select one of the following General Education patterns:

California State University General Education (CSU-GE) *

Intersegmental General Education Transfer Curriculum (IGETC-CSU) **

Note: Due to the high unit requirement for this major the 31 unit IGETC for STEM Majors and the 33 unit CSU GE for STEM Majors GE patterns have been approved by the Chancellor's Office to allow compliance with the 60 unit AS-T program maximum. One less course (3 units) is required in AREA 3/C (Arts and Humanities) and one less course (3 units) is required in AREA 4/D (Social and Behavioral Sciences).

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REQUIRED MAJOR COURSES		24

BIOL 001	Principles of Biology 1 *	5
BIOL 002	Principles of Biology 2	5
CHEM 001	General Chemistry 1 *	5
CHEM 002	General Chemistry 2	5
MATH 065	Calculus 1 *	4

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REQUIRED PHYSICS COURSE SEQUENCE		8-10

Complete one of the following physics course sequences:

PHYS 020 & PHYS 021	General Physics 1 and General Physics 2 *	10
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OR		
PHYS 055 & PHYS 056	Physics 1: Mechanics & Waves and Physics 2: E&M and Heat *	8
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ELECTIVES		2-7
Select additional transferable courses numbered 1-199 to achieve 60 units		
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TOTAL		60

* Course(s) meets General Education requirement and 9 units may be double counted above in 1A (CSUGE).

** 10 units in 1B may be double counted above in 1B (IGETC). IGETC-CSU requires completion of IGETC AREA 1C.

The Associate in Science Degree for Transfer requirements include completion of the 60 unit program defined above with at least 12 units taken in residence at College of the Sequoias with a "C" (2.0) average and a "C" or better grade in all required major and restricted electives courses (see Transfer Information and Requirements (<https://catalog.cos.edu/transfer-information-requirements/>) for additional details).