



Associate Degree for TransferSM

BIOLOGY FOR TRANSFER (AS-T)



The Associate in Science in Biology for Transfer presents the diverse, dynamic study of life through a required core of biology and supporting courses. This degree is specifically designed to prepare students for transfer to a California State University, where a baccalaureate degree may be earned in Biological Sciences or a closely related field.

The following is required for the AS-T in Biology for Transfer degree:

1. 60 semester or 90 quarter CSU-transferable units;
2. The Intersegmental General Education Transfer Curriculum (IGETC) for Science, Technology, Engineering and Mathematics (STEM) pattern for the CSU;¹
3. Minimum of 18 semester or 27 quarter units in the major or area of emphasis;
4. Minimum grade point average (GPA) of 2.0;
5. A grade of "C" or higher or "Pass" in all courses required for the major or area of emphasis.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the basic structures and fundamental processes of life at the molecular, cellular, and organismal levels.
- Identify the evolutionary processes that lead to adaptation and biological diversity.
- Describe the relationship between life forms and their environment and ecosystems.
- Collect, organize, analyze, interpret and present quantitative and qualitative data and incorporate them into the broader context of biological knowledge.
- Effectively apply current technology and scientific methodologies for problem solving.
- Find, select and evaluate various types of scientific information including primary research articles, mass media sources and World Wide Web information.
- Communicate effectively in written and oral formats.

Associate in Science for Transfer Degree Requirements

| Code | Title | Units |
|--|--|--------------|
| Required Core | | |
| BIO-230 | Principles of Cellular, Molecular and Evolutionary Biology | 4 |
| BIO-240 | Principles of Ecology, Evolution and Organismal Biology | 5 |
| List A | | |
| CHEM-141 | General Chemistry I | 5 |
| CHEM-142 | General Chemistry II | 5 |
| MATH-180 | Analytic Geometry and Calculus I | 5 |
| Choose one sequence: | | 8-10 |
| PHYC-130 & PHYC-131 | Fundamentals of Physics and Fundamentals of Physics | |
| PHYC-201 & PHYC-202 | Mechanics and Waves and Electricity, Magnetism, and Heat | |
| List B | | |
| MATH-160 | Elementary Statistics | 4 |
| Units for the Major | | 36-38 |
| 10 Double-Counted Units | | |
| Plus General Education Requirements (CSU GE or IGETC-CSU) (https://catalog.gccd.edu/cuyamaca/degree-requirements-transfer-information/) ¹ | | 31 |
| Electives | | 1-3 |
| Total Units | | 60 |

¹ Completion of IGETC-CSU for STEM allows for completion of 6 units of non-STEM GE work after transfer. One Area 3 course (Fine Arts and Humanities) and one Area 4 course (Social and Behavioral Sciences) may be deferred until after transfer.