

The Associate in Science in Biology for Transfer degree (AS-T in Biology) is a 60 unit program which provides students the lower division coursework required for transfer to a CSU institution for the major in Biology. Students must complete the following requirements: 1. A minimum of 60 semester or 90 quarter CSU-transferable units 2. The California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. 3. A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district. 4. Obtainment of a minimum grade point average (GPA) of 2.0. 5. Earn a grade of "C" (or "P") or better in all courses required for the major or area of emphasis.

Upon successful completion of this program a student will be able to:

- Set up of experiments implementing the scientific method
- Communicate core biological principles both orally and in writing
- Use critical thinking and observational skills when applying knowledge of biological principles and concepts to novel problems
- Apply the procedures of the scientific method,
- Collect and analyze data, identify of sources of errors, and interpret results
- Present the results of experiments, and their analysis of biological problems
- Demonstrate an understanding of how principles of evolution by natural selection impact living systems and how information stored in DNA is transmitted and expressed in biological systems
- Demonstrate an understanding of how conversion of matter and energy are fundamental in living systems
- Demonstrate knowledge of the relationship between structure and function in biological systems
- Acquire laboratory competence by developing and refining technical and analytical skills.
- Use critical thinking and observational skills when applying knowledge of biological principles and concepts to novel problems.
- Communicate core biological principles both orally and in writing.
- Formulate and test hypotheses employing the scientific method, design or implement controlled experiments or observational studies, and collect, interpret and present biological data.
- Explain the significance of fundamental biological processes and phenomena including biological chemistry and enzymes, cell morphology, DNA replication, cell division, gene expression, photosynthesis, cellular respiration, metabolic pathways, conservation of matter and energy, and homeostasis.
- Describe the principles of evolution by natural selection and explain how they impact living systems.
- Demonstrate the relationship between structure and function in biological systems.
- Apply ecological principles to explain the interconnectedness of organisms in the environment.
- Describe and identify key shared characteristics and taxonomic classifications of representative specimens and discuss their phylogenetic modifications.

