



Course Description:

BIOL-001 - General Principles of Biology Units: 5

Biology 1 is the introductory course to a three-term sequence for students exploring a career in the life sciences, teaching, medicine, or biochemistry. This lecture and laboratory course emphasizes fundamental biological principles and the process of science. During the first half of the term, students will learn about the cell, focusing on its chemistry, structure, energetics, and reproduction. The remainder of the course will provide the student with a strong foundation in genetics, evolution, and ecology. Field trips may be required.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Recommended: A strong High School Biology course or completion of General Biology (BIOL021A) or similar course. Knowledge of basic mathematics (Math 310) and a good command of the English language, particularly reading and writing.

CAN: BIOL 4; BIOL SEQ A = BIOL 1+2+3

Advisory Level: Read: 2 Write: 2 Math: 1

Transfer Status: CSU/UC Degree Applicable: AA/AS

CSU GE: B2,B3 District GE: BL IGETC: 5B

Learning Outcomes:

1. Employ the scientific method, to pose testable hypotheses and predictions.
2. Design and implement controlled experiments and/or observational studies to test predictions.
3. Collect, quantify, summarize, interpret, and present biological data.
4. Assess the reasonableness of biological arguments.
5. Use computers to access multimedia lessons and conduct mini-searches via the internet for information on biological phenomena.
6. Write papers and laboratory reports in an appropriate scientific style.
7. Explain and apply general biological principles.
8. Utilize a dichotomous key to distinguish between different kingdoms of organisms.
9. Utilize a strong biological vocabulary.
10. Describe the importance of evolution as a guiding principle in biology.