

**Course Description:**

**BIOL-002 - Organismal Biology Units: 5**

Biology 002 is the second course in a three term sequence for students exploring a career in the sciences, teaching, medicine, or biochemistry. This lecture and laboratory course emphasizes plant and animal organismal biology, with central themes of homeostasis, integration, and structure. The first third of the course considers higher plant anatomy and physiology, the second third addresses animals, reproduction, and the introduction to the concept of homeostasis, while the last third considers the structure and control mechanisms of human organ systems.

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

Prerequisite: BIOL 001 and (CHEM 001A or CHEM 015), with C or better

Corequisite: Or BIOL 001 with C or better and concurrent enrollment in CHEM 001A or CHEM 015.

Recommended: Completion of Engl 102 or READ 101 and ENGL (092 or 104). A solid command of the English language, particularly strong reading and writing skills, is recommended.

CAN: BIOL 6; BIOL SEQ A = BIOL 2+1+3

Advisory Level:      Read: 3      Write: 3      Math: 3

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

CSU GE: B2,B3      District GE: None      IGETC: None

**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 and other available technology to access multimedia lessons, and conduct associated searches via the internet for information on biological phenomena, current research and related topics;
6. compose papers and laboratory reports in an appropriate scientific style;
7. explain and integrate biological principles and organismal biology;
8. integrate the concepts and systems of homeostasis;
9. demonstrate the appropriate use of a strong biological science vocabulary;
10. describe, compare and contrast the cells, tissues, organs, and organ systems of plant and animal organisms.