



06-09-05

Common Course Number: BSC-2010

Course Title: Principles of Biology I

Catalog Course Description:

This is the first in a sequence of two courses that deal with the principles of modern biology. It covers scientific process, the chemistry of life, the basics of metabolism, cell theory, cellular respiration, photosynthesis, classical, and molecular genetics.

Credit Hours: 3

Prerequisite: ENC 1101

Pre- or Corequisites: BSC 2010L, CHM 1045

Course Competencies:

Competency1: Upon successful completion of this course, the student will demonstrate knowledge of the scientific process and the nature of biology by:

- a. identifying the components of the scientific process and recognizing that testable hypotheses form the basis for all scientific inquiry.
- b. describing the hierarchical nature of life, from atoms to ecosystems and explaining the idea that each level of life has emergent properties.
- c. recognizing the cell as the basic unit of all life and that DNA is the molecule responsible for the continuity of life.
- d. explaining the idea that structure and function are correlated at all levels of biological organization.
- e. explaining that all living things interact both with the living and the non-living components of their environment.