

Course Title: Environmental Biology
Prefix and Course Number: BIOL 100

Learning/Performance Expectations (e.g., outcomes, performance objectives, competencies, etc.)
By the end of this course, a student should:

- Understand the nature of science and the scientific method.
- Describe the major characteristics of living organisms.
- Describe the ecological level of biological organization.
- Describe structure and function of the four main biological macromolecules.
- Describe the organization and functioning of ecosystems.
- Explain the significance of energy flow and nutrient cycling in biological systems.
- Describe the interaction between cellular respiration and photosynthesis in nutrient cycles including its biological importance.
- Describe the scientific basis for evolutionary theory.
- Describe the role of natural selection in ecosystem organization.
- Describe the general characteristics of each kingdom in the classification system for biological organisms.
- Describe human impacts on the function and organization of ecosystems.
- Infer plausible, alternative explanations by reasoning from data.
- Evaluate and critique scientific statements.
- Work more effectively in teams.
- Write brief, analytical papers on issues.
- Gain the basic laboratory skill required to conduct experiments and work effectively in a laboratory setting.

Course Outline

- I. Introduction
 - A. Beliefs and origins
- II. Culturally grounded Influences and assumptions
 - A. Perceptions
 - B. Behaviors
- III. Listening/Evaluating
 - A. Student Arguments
- IV. Cultural Inferences