

BIO 112 GENERAL BIOLOGY II

COURSE DESCRIPTION:

Prerequisites: BIO 111 with a C or better

Corequisites: None

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. Laboratory exercises include microscope observations and dissections to reinforce topics discussed in lecture. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.* Course Hours Per Week: Class, 3. Lab, 3. Semester Hours Credit, 4.

LEARNING OUTCOMES:

After completion of this course, the student will demonstrate basic knowledge in each of the following:

- a. Characteristics of the phyla in the kingdoms Monera, Protista, Fungi, Plantae, and Animalia
- b. Comparative plant anatomy and physiology
- c. Comparative animal anatomy and physiology
- d. Ecological principles and applications

OUTLINE OF INSTRUCTION:

- I. Taxonomy
 - A. Principles of Taxonomy.
 - B. Five major Kingdoms.
- II. Kingdom Animalia
 - A. Animal diversity and evolution.
 - B. Comparative Anatomy: animal tissues and organ systems.
- III. Kingdom Plantae
 - A. Plant diversity and evolution.
 - B. Structure of vascular plants.
 - C. Plant Physiology.
- IV. Ecology
 - A. Population Ecology.
 - B. Community Ecology.
 - C. Ecosystem Ecology.
 - D. The Biosphere Ecology.

REQUIRED TEXTBOOKS:

To be selected by Instructor/Discipline Chair.