

BIO 116 - GENETIC, EVOLUTION, ANIMAL BIO

Course Description

The lecture and laboratory portions of this course focus on cell division, classical genetics, evolution and phylogeny as well as the classification and Phyla-level natural history of invertebrate and vertebrate animals. Also, the course covers the anatomy and physiology of organisms found in the Animal Kingdom. The treatment of the topics in this course necessarily assumes a degree of familiarity with the basic biological concepts covered in BIO 115. Students who have not completed BIO 115 should expect to spend extra time reviewing these concepts throughout the course. Group 1 lab course.

Credit Hours

4

Contact Hours

6

Lecture Hours

3

Lab Hours

0

Corequisites

BIO 116L

Recommended Prerequisites or Skills Competencies

BIO 115, ENG 111, MTH 111

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Describe the fundamentals of genetics, evolution, and primarily eumetazoan organisms.
- Summarize biological principles.

Application:

- Use the scientific method to derive conclusions.
- Define the objective of their biological experiments.
- Use standard laboratory procedures to record their results of experiments.

Integration:

- Synthesize scientific principles and generalizations to solve new problems.
- Identify interactions between biology and real-life applications.
- Analyze the results of biological experiments and communicate the results.

Human Dimension:

- Work collaboratively to conduct laboratory experiments.
- Discuss complex biological processes with lay people and peers.

Caring - Civic Learning:

- Identify real-life examples of biology and relate them to the real world.

Learning How to Learn:

- Synthesize complicated conceptual ideas.
- Learn new problem solving skills and strategies.
- Interpret articles from science journals and successfully present this interpretation to others.