Anoka-Ramsey Community College

BIOL 2206: Animal Biology

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 3

OJT Hours/Week: *.*

Prerequisites:
This course requires either of these prerequisites
BIOL 1106 - Principles of Biology I (Minimum grade: 2.0 GPA Equivalent)
A score of 3 on test Advanced Placement Biology

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

(MnTC Goal 3)

Prerequisites (must have a grade of C or better): BIOL 1106

Survey of the major animal phyla and how they solve the central physiological problems necessary for life.

B. COURSE EFFECTIVE DATES: 06/01/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Support and protection systems
2. Movement
3. Thermoregulation
4. Osmoregulation
5. Providing oxygen to cells
6. Providing nutrients to cells
7. Elimination of metabolic wastes
8. Reproduction and development
9. Coordinating/integrating body functions: neural and endocrine activity
10. Major evolutionary relationships via taxonomy
11. Basic anatomy of major phyla

D. LEARNING OUTCOMES (General)

1. Compare and contrast the basic anatomy of the major animal phyla.
2. Demonstrate a knowledge of homeostatic mechanisms animals utilize under different environmental conditions.
3. Discuss the different physiological adaptations found throughout the Animal Kingdom.
4. Predict how animals adapt to changing conditions in new environments.
5. Be able to develop experiments and analyze data related to how different environments affect animal structure and function.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.
2. Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.
3. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
4. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted