

Master Syllabus

BIO 1211 - General Biology II

Division: Science, Mathematics and Engineering

Department: Biology

Credit Hour Total: 4.0

Lecture Hrs: 3.0 **Lab Hrs:** 2.0

Prerequisite(s): BIO 1111

Date Revised: June 2014

Course Description:

This course is designed as the second in a series of two general education science courses. Covers evolution, biodiversity and ecology. Three classroom, two lab hours per week.

General Education Outcomes:

- ▣ Oral Communication Competency
- ▣ Written Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Information Literacy Competency

Course Outcomes:

Mechanisms of Evolution

Identify and explain mechanisms of evolution within populations; explain origin of species and modes of speciation; describe the major evolutionary events related to history of life on Earth; and discuss evidence of evolution.

Assessment Method: Locally developed exams

Performance Criteria: Accumulate a minimum total of 60% of the available points in the course (Lecture exams, Quizzes, and Lab Tests)

Evolution of Biodiversity

Describe and discuss the evolutionary history of biological diversity between and within the domains Bacteria, Archaea, and Eukarya.

Assessment Method: Locally developed exams

Performance Criteria: Accumulate a minimum total of 60% of the available points in the course (Lecture exams, Quizzes, and Lab Tests)

Phylogenetics and Systematics

Interpret and discuss evolutionary relationships depicted in phylogenies; explain the relationship of phylogeny to taxonomy; and examine the role of evolution as the major unifying theme of biology.

Assessment Method: Locally developed exams

Performance Criteria: Accumulate a minimum total of 60% of the available points in the course (Lecture exams, Quizzes, and Lab Tests)

Ecology and Environmental Biology

Describe and discuss the interrelationships which exist within and between populations, communities and ecosystems; examine human impact on the environment and assess ecological effects.

Assessment Method: Locally developed exams

Performance Criteria: Accumulate a minimum total of 60% of the available points in the course (Lecture exams, Quizzes, and Lab Tests)

Outline:

Evolution of Populations Speciation Paleontology Phylogeny and Systematics Evolution of Biodiversity Ecology and Environmental Biology