

Master Syllabus

BIO 1117 - Lab for General Biology I

Division: Science, Mathematics and Engineering

Department: Biology

Credit Hour Total: 0.0

Date Revised: October 2013

Course Description:

The lab for this course is the first in a series of two general education science courses. Covers laboratory exercises relevant to basic chemistry and biochemistry; cellular and molecular biology.

General Education Outcomes:

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

Course Outcomes:

Scientific Methodology

Describe, explain and model the process of science in context with developing observation skills, formulating questions and hypotheses, and interpreting data.

Assessment Method: Locally developed exams

Performance Criteria: At least 60% of total points accumulated at the end of the course

Cell Structure and Function

Describe and differentiate the structure and function of major components relating to prokaryotic and eukaryotic cells.

Assessment Method: Locally developed exams

Performance Criteria: At least 60% of total points accumulated at the end of the course

Inorganic and Organic Molecules

Identify and describe fundamental elements and molecules in context to biologically important structures, chemical reactions, and physiological processes.

Assessment Method: Locally developed exams

Performance Criteria: At least 60% of total points accumulated at the end of the course

Reproduction and Genetics

Describe, explain, and model cell reproduction, eukaryotic cell cycle, patterns of inheritance, and DNA fingerprinting.

Assessment Method: Locally developed exams

Performance Criteria: At least 60% of total points accumulated at the end of the course

Outline:

Scientific Method
Inorganic and Organic Molecules
Microscopy
Cell Structure and Function
Cell Reproduction
Mendelian Genetics
Molecular Genetics