

## 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

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

### 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