

## Master Syllabus

### BTN 1130 - Biological Reagents Preparation

**Division:** Science, Mathematics and Engineering

**Department:** Biotechnology

**Credit Hour Total:** 3.0

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

**Prerequisite(s):** AND MAT 1470 AND CHE 1111 OR CHE 1211 BTN 1120

**Other Prerequisite(s):** AND Restricted to Majors

**Date Revised:** December 2015

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### Course Description:

Basic understanding and overview of chemical grades of reagents used in biological research with an emphasis on chemical formulas and preparation of biological media and reagents. Two classroom, three lab hours per week.

### General Education Outcomes:

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

### Course Outcomes:

#### Reagent Tracking System

Prepare a variety of reagent solutions and use the developed tracking system for assessing reagent use and replenishment.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

60% or higher of available exam points

#### Commercial Chemicals Used in Biological Applications

Evaluate the different grades of chemicals available in the market and the application of each.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

60% or higher of available exam points

#### Reagent Solutions

Prepare a variety of reagent solutions used in the laboratory setting.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

60% or higher of available exam points

### Outline:

Molarity  
Chemical Formulas  
Record Keeping Procedures  
Problem-solving Methods