

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

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