



CHEM 111 - Introduction to Organic & Biological Chemistry

Course Outline

Approval Date: 03/16/2018

Effective Date: 06/01/2018

SECTION A

Unique ID Number CCC000105777

Discipline(s) Chemistry

Division Science and Engineering

Subject Area Chemistry

Subject Code CHEM

Course Number 111

Course Title Introduction to Organic & Biological Chemistry

TOP Code/SAM Code 1905.00 - Chemistry, General / E - Non-Occupational

Rationale for adding this course to the curriculum The COR must be updated to conform to CID. The textbooks also need to be updated. These changes are non-substantive.

Units 4

Cross List N/A

Typical Course Weeks

Total Instructional Hours

Contact Hours

Lecture 54.00

Lab 54.00

Activity 0.00

Work Experience 0.00

Outside of Class Hours 108.00

Total Contact Hours 108

Total Student Hours 216

Open Entry/Open Exit No

Maximum Enrollment

Grading Option Letter Grade or P/NP

Distance Education Mode of Instruction

SECTION B

General Education Information:

SECTION C

Course Description

Repeatability May be repeated 0 times

Catalog Description An introduction to the important principles, compounds and reactions of organic and biological chemistry with an emphasis on biochemical behavior of the molecules. Laboratory includes an introduction to the basic techniques of organic and biological chemistry. For students pursuing nursing and allied health careers who need a year of chemistry that includes an introduction to organic and biological chemistry. CHEM 110 (or CHEM 120) and CHEM 111 will fulfill that requirement.

Schedule Description

SECTION D

Condition on Enrollment

4. Methods of Instruction:

Lab:

Lecture:

Other: Lectures. Chemical demonstrations. Video presentations. Individual and group problem solving in the classroom. Individual and group laboratory experiments. Peer oriented guided instruction where the students help one another under the guidance of an instructor.

5. Methods of Evaluation: Describe the general types of evaluations for this course and provide at least two, specific examples.

Typical classroom assessment techniques

Exams/Tests -- Three mid term exams will be given along with a final exam. All exams will be fill in, multiple choice, true/false, and short answer, and will be graded on a point scale (100 pts for a mid term, 200 pts for the final). A sample question may be, What is the empirical formula of a compound that is 75% carbon and 25% hydrogen? or Please indicate the number of terpene units in the following compound, or perhaps, How many ATP are produced during the glycolysis of ribose? Exam grades are based on the sum of the points gained out of the total number of points available for the exam (100 to 200 pts). Grades are awarded as 100%-90% A, 89%-80% B, 79%-70% C, 69%-60% D, less than 60% F.

Quizzes -- Weekly quizzes will be given. Quizzes will be fill in, multiple choice, true/false, and short answer, and will be graded on a point scale. A sample question may be, What is the empirical formula of a compound that is 75% carbon and 25% hydrogen? or Please indicate the number of terpene units in the following compound, or perhaps, How many ATP are produced during the glycolysis of ribose? Quiz grades are based on the sum of the

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Additional assessment information:

Regular attendance in the laboratory is required. All labs will be checked off by the instructor prior to the student leaving the lab.

The final grade is based on the sum of the points gained out of the total number of points available for the class (about 700 pts). Grades are awarded as 100%-90% A, 89%-80% B, 79%-70% C, 69%-60% D, less than 60% F.

Letter Grade or P/NP

6. Assignments: State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.

A. Reading Assignments

Author: Timberlake
Title: General, Organic, and Biological Chemistry: Structures of Life
Publisher: Pearson
Date of Publication: 2014
Edition: 12th
Manual #1:
Author: R. LaRue
Title: Introductory General, Organic, and Bioche2.72 reW*n /P #MC123a a4rg;