

Fond du Lac Tribal and Community College

3/12/03

COURSE OUTLINE

Date submitted: 11/1/07 Date approved:

Department and Course Number: CHEM 2011

Title of Course: Organic Chemistry II

Number of credits: Lecture 4 Lab 1

Catalog/Course Description:

Chemistry of aliphatic and aromatic hydrocarbons with emphasis on reaction mechanisms and the characteristics of numerous functional groups. Laboratory work consists of standard preparation and purification procedures, organic qualitative analysis, and individual synthesis projects.

Placement for Success prerequisites: (See instruction sheet)

Prerequisites: CHEM 1011 General Chemistry II

Reading: English/Writing: Math:

Recommended course materials and resources, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers. If applicable.

Textbook: To be determined on a yearly basis based on availability and quality of textbooks.

Laboratory experiment guidelines and descriptions will be supplied to students as needed throughout the course. Students will need a separate notebook exclusively for laboratory work. Colored pencils are suggested but not required. A calculator capable of performing scientific notation is recommended.

Further resources for this course will be determined based on administrative financial support for the purchase of new equipment for utilization within the Chemistry Department and its courses.

Relationship of proposed course to the department mission and goals

Provides general education credits suitable for transfer to four-year degree

programs. Serves as a base of knowledge for more advanced studies in the physical and biological sciences.

Laboratory techniques designed to incorporate problem-solving and critical thinking related to topics of chemistry will be employed at all times in an effort to show the everyday importance of chemistry.

Course goals:

Goal: To focus and support inquiries while interacting with students and orchestrate discourse among students about scientific ideas.

Goal: To challenge students to accept and share responsibility for their own learning while recognizing and responding to student diversity by encouraging all students to participate fully in science learning.

Goal: To encourage and model the skills of scientific inquiry, as well as the curiosity, openness to new ideas and data, and skepticism that characterize science.

Learning outcomes: (A minimum of one learning outcome shall be provided for each course goal)

State a minimum of two assessment instruments for each learning outcome.

Outcome: Students will gain the ability to use the scientific method to solve scientific issues and problems.

Assessment: Exams (lecture and laboratory)

Assessment; Attendance

Outcome: Students will be able to define and apply terminology associated with chemistry.

Assessment: Exams (laboratory and lecture)

Assessment: Attendance

Outcome: Students will be able to perform scientific experiments and interpret results.

Assessment: Exams (laboratory and lecture)

Assessment: Attendance

Course content:

(Provide an outline of major topics covered in course)

-Introduction

-Alkanes and Cycloalkanes

-Alkenes

-Alkynes

-Alcohols

-Nucleophilic Substitution and Elimination Reactions
-Ethers and Epoxides

Placement for Success prerequisite

Check one of each area--English, reading, and math

| | |
|-------------------------|---|
| Prerequisite | X |
| English level 1 | |
| English level 2 | |
| no English prerequisite | X |
| Reading level 1 | |
| Reading level 2 | |
| Reading level 3 | |
| no Reading prerequisite | X |
| Math level 1 | |
| Math level 2 | |
| Math level 3 | |
| Math level 4 | |
| no Math prerequisite | X |