

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE – VIRGINIA/EVELETH

Course Outline

Course Title: Organic Chemistry II
Semester Course Prefix and Number: CHEM 2513
Old Quarter Course Prefix and Number: CHEM 211 & 212
Submitted By: Gary Norton
Approval Date:
Revision Date: Feb. 2002

Number of Credits: 5
Semester(s) Offered:
Negotiated Class Size:
Number of Lecture Credits: 4
Number of Lab Credits: 1
Number of Lab Hours: 3
Number of Studio/Demonstration/Internship Credits:

Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 4 – Other college course not considered a part of general education (MNTC) e.g. computer science, health, physical education
- 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements.
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:

This course is a continuation in the study of aliphatic and aromatic hydrocarbons with emphasis on reaction mechanisms and the characteristics of numerous functional groups.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): CHEM 2512 (or previous course CHEM 210 and 211)
Reading Prerequisite: None
Composition Prerequisite: None
Mathematics Prerequisite: None

Career Programs and Transfer Majors Accessing this Course:

Chemistry, chemical engineering, professional health majors.

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable: Notes: No more than two goals may be met by any one course. (Curriculum Committee review and the Chief Academic Officer's approval are required).

- 0. None
- 1. Communications
- 2. Critical Thinking
- 3. Natural Sciences
- 4. Mathematical/Logical Reasoning
- 5. History and the Social and Behavioral Sciences
- 6. The Humanities and Fine Arts
- 7. Human Diversity
- 8. Global Perspectives
- 9. Ethical and Civic Responsibility
- 10. People and the Environment

Learning outcomes, including any relevant competencies listed in the Minnesota Transfer Curriculum:

The student will:

- Have certain fundamental concepts, facts, and trends underlying all of organic chemistry and biochemistry
- Be acquainted with several instruments common in organic chemistry
- Be acquainted with scientific literature and its use
- Be able to apply structural organic theory and reactivity principles to biologically important molecules

Student assessment methods:

Nine exams per semester plus a standardized exam

Use of instructional technology (includes software, interactive video and other instructional technologies):

Outline of the major course content:

Topics include conjugated systems, aromatic compounds, spectroscopy, aldehydes, ketones, condensation, carboxylic acids, acid derivatives, amines, phenols, carbohydrates, and lipids.

Additional special information (special fees, directives on hazardous materials, etc.)

Transfer Information: (Please list colleges/majors that accept this course in transfer.)

Approvals:

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Meet and Confer		
Chief Academic Officer		

Distribution: Original – Administrative Office, Library, Learning Center, Records, Student Services, Curriculum Committee Chair