

CHEM 263, Organic Chemistry II

3 credits, 3 hours lecture, 3 hours lab

Course Description

Chemistry 263 continues the study of molecular structure and reactivity of organic compounds with oxygen containing functional groups, conjugated dienes and aromatic compounds, amines and molecules of biological importance. The course includes an introduction to the use of organic spectroscopy in the determination of molecular structure.

Pre and Co-requisites

Prerequisite: CHEM 164 or CHEM 261

Course Learning Outcomes (CLOs)

Upon successful completion of the course, the student shall be able to:

CLO1 Perform many organic chemistry laboratory techniques, such as refluxing, distillation, recrystallization, melting point determination, and use safety procedures to ensure a safe working environment for all students.

CLO2 Understand organic spectroscopy (with an emphasis on proton NMR) and correlate organic structures with spectroscopic features.

CLO3 Create organic synthesis pathways of obtaining one compound from another, by applying a logical understanding of organic reactions and mechanisms.

CLO4 Understand important organic chemistry mechanisms, such as allylic/benzylic radicalic substitution, electrophilic aromatic substitution, nucleophilic addition for carbonylic compounds (aldehydes and ketones), nucleophilic addition - elimination for carboxylic acids and derivatives.

CLO5 Correlate typical mechanisms that appear in organic chemistry with the reactivity of biochemical compounds (carbohydrates, lipids, and proteins).

Evaluation

Assessment Type	Percentage
Assignments	15%
Laboratory	25%
Midterm Exam	25%
Final Exam	35%

Course Completion Requirements

Minimum passing mark of D or 50% is required.

Grading Scale

4.0 Grade Scale	Alpha Grade	Percentage Grade
4.0	A+	93-100
4.0	A	85-92.9
3.7	A-	80-84.9
3.3	B+	77-79.9
3.0	B	74-76.9
2.7	B-	70-73.9
2.3	C+	67-69.9
2.0	C	64-66.9
1.7	C-	60-63.9
1.3	D+	55-59.9
1.0	D	50-54.9
0.0	F	0-49.9

Land Acknowledgement

We respectfully acknowledge that Keyano College is located on Treaty 8 territory, the traditional & contemporary meeting grounds and gathering places of the Denesuline, Cree and Métis Peoples of this region. Our name, Keyano (kiyânaw in nêhiyawêwin - Cree language), translates to “we, us, our” and speaks to the connection we have as a community and our commitment to being in right relationships with the First Peoples of these lands.

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