



Course Outline
CHM 2211C
Organic Chemistry II

General Course Information

Common Course Number: CHM2211C

Course Title: Organic Chemistry II

Prerequisite(s): Minimum grade of C in CHM2210C

Co-requisite(s): None

Contact Hour Breakdown: CR 4 CLASS 3 LAB 3

Discipline: Chemistry

Catalog Description: Prerequisite: Minimum grade of C in CHM 2210C. Continuation of CHM 2210C with laboratory devoted to multistep synthesis. (Special Fee: \$131.00)

Major Topics/ Concepts/ Skills/ Issues

- Nomenclature of functional groups
- Reactions and mechanisms of functional groups
- Instrumental analysis of functional groups
- Preparation and reactions of functional groups

Major Learning Outcomes with Evidence, Core Competencies and Indicators

Students will be able to understand the nomenclature of functional groups.	
Corresponding Evidence of Learning	
<ul style="list-style-type: none"> • Student will be able to Students will successfully name compounds in all functional groups on a written exam or quiz. • Student will be able to During laboratory experiences, students will be able to recognize a variety of compounds by their written and symbolic forms. 	
Core Competency: Think	
Indicators	Assessments
<ul style="list-style-type: none"> • analyze data, ideas, patterns, principles, perspectives 	<ul style="list-style-type: none"> • Locally developed exam/objective • Problem-solving quiz
Core Competency: Communicate	
Indicators	Assessments
<ul style="list-style-type: none"> • employ methods of communication appropriate to your audience and purpose 	<ul style="list-style-type: none"> • Locally developed exam/objective • Problem-solving quiz • lab reports
Core Competency: Act	
Indicators	Assessments
<ul style="list-style-type: none"> • implement effective problem-solving, decision-making, and goal-setting strategies 	<ul style="list-style-type: none"> • Locally developed exam/objective • Problem-solving quiz • lab reports
Students will be able to know the mechanisms and reactions of the functional groups.	
Corresponding Evidence of Learning	
<ul style="list-style-type: none"> • Student will be able to On exams and quizzes, students will be able to write the proper reactions and mechanisms of the functional groups. • Student will be able to During the laboratory write-up, the students will be able to include proper mechanism for that experiment along with any chemical reactions needed. 	
Core Competency: Think	
Indicators	Assessments
<ul style="list-style-type: none"> • analyze data, ideas, patterns, principles, perspectives 	<ul style="list-style-type: none"> • Locally developed exam/objective • Problem-solving quiz

	<ul style="list-style-type: none"> lab reports
Core Competency: Communicate	
Indicators	Assessments
<ul style="list-style-type: none"> employ methods of communication appropriate to your audience and purpose 	<ul style="list-style-type: none"> Locally developed exam/objective Problem-solving quiz lab reports
Core Competency: Act	
Indicators	Assessments
<ul style="list-style-type: none"> implement effective problem-solving, decision-making, and goal-setting strategies 	<ul style="list-style-type: none"> Locally developed exam/objective Problem-solving quiz lab reports
Students will be able to identify compounds by use of data collected through Infrared Spectroscopy, Mass Spectrometry, Ultraviolet Spectroscopy, and Nuclear Magnetic Resonance Spectroscopy.	
Corresponding Evidence of Learning	
<ul style="list-style-type: none"> Student will be able to On exams and quizzes, students will be able to use instrumental analysis to identify organic compounds. Student will be able to In laboratory experience, students will be able to analyze product outcomes through the use of Infrared Spectrometer, Gas Chromatograph, Refractometer, and Ultraviolet Spectrometer. 	
Core Competency: Think	
Indicators	Assessments
<ul style="list-style-type: none"> analyze data, ideas, patterns, principles, perspectives 	<ul style="list-style-type: none"> Locally developed exam/objective Problem-solving quiz lab reports
Core Competency: Communicate	
Indicators	Assessments
<ul style="list-style-type: none"> employ methods of communication appropriate to your audience and purpose 	<ul style="list-style-type: none"> Locally developed exam/objective Problem-solving quiz lab reports
Core Competency: Act	
Indicators	Assessments
<ul style="list-style-type: none"> implement effective problem-solving, decision-making, and goal-setting strategies 	<ul style="list-style-type: none"> Locally developed exam/objective Problem-solving quiz lab reports
Students will be able to write reactions involving the preparation and reactions of functional groups.	
Corresponding Evidence of Learning	
<ul style="list-style-type: none"> Student will be able to Students will successfully write equations for the preparation and reactions of functional groups on exams and quizzes. Student will be able to During laboratory write-ups, students will be able to write the proper equations for preparations and reactions of functional groups covered in all related experiments. 	
Core Competency: Communicate	
Indicators	Assessments
<ul style="list-style-type: none"> employ methods of communication appropriate to your audience and purpose 	<ul style="list-style-type: none"> Locally developed exam/objective Problem-solving quiz lab reports

Addenda

- [CHM2211C SYLLABUS](#)

[College Curriculum Committee Website](#)

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