



Jordan University of Science and Technology
Faculty of Science & Arts
Chemistry Department

CHEM111 Organic Chemistry1 - JNQF Level: 7

Second Semester 2024-2025

Course Catalog

3 Credit Hours. Chem 111 is the first in the three-term undergraduate organic chemistry lecture sequence that includes Chem 111, Chem 212, and Chem 311. It emphasizes on the chemistry of basic principles of organic chemistry, such as structures of different functional groups, naming, physical properties, stereochemistry of organic compounds. The reactions and synthesis of alkanes, alkenes, alkynes and Alkyl Halides will be discussed in details. Moreover, the basics of organic reactions will be covered in this course.

Teaching Method: On Campus

Text Book

Title	Organic Chemistry,
Author(s)	L. G. Wade, Jr., Jan W. Simek,
Edition	9th Edition
Short Name	1
Other Information	

Class Schedule & Room

Section 1:
Lecture Time: Sun, Tue, Thu : 10:00 - 11:00
Room: NG43

Section 2:
Lecture Time: Mon, Wed : 10:30 - 12:00
Room: NG43

Prerequisites		
Line Number	Course Name	Prerequisite Type
911010	CHEM101 General Chemistry (I)	Prerequisite / Pass
821015	HSS101CHEM General Chemistry (I)	Prerequisite / Pass

Tentative List of Topics Covered		
Weeks	Topic	References
	Chapter 1: Structure and Bonding	
	Chapter 2: Acids and Bases: Functional Groups	
	Chapter 3: Structure and Stereochemistry of Alkanes	
	Chapter 4: The Study of Chemical Reactions	
	Chapter 5: Stereochemistry	
	Chapter 6: Alkyl Halides. Nucleophilic Substitution	
	Chapter 8: Reactions of Alkenes	
	Chapter 9: Alkynes	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Discuss the basic concepts of organic chemistry [1PLO1, 1PLO8, 1PLO9] [1L7K1]	30%	
Identify the nomenclature, stereochemistry, physical/chemical properties, and reactivity of organic compounds [1PLO1, 1PLO8, 1PLO9] [1L7K1, 1L7S2]	34%	
Suggest and predict basic reaction mechanisms [1PLO1, 1PLO8, 1PLO9] [1L7S2, 1L7S3]	10%	
Design a reasonable synthetic scheme for simple organic molecules [1PLO1, 1PLO8, 1PLO9] [1L7C3]	26%	

Relationship to Program Student Outcomes (Out of 100%)										
PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
33.33							33.33	33.33		

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S2	L7S3	L7C3
47	22	5	26

Evaluation

Assessment Tool	Weight
Mid-term Exam	35%
Final Exam	50%
Quizzes	15%

Date Printed: 2024-12-31