



**Faculty of Science
Department of Chemistry**

**Organic Chemistry for
Non-chemistry Majors (30206221)**

Lecturer:
Dr. Da'san M. M. Jaradat; Dr. Wajdi Tokan

Credit Hours:

3 hours (2 Lec. and 3 Lab)

Prerequisites:

General chemistry (2) (30206103)

Course Objectives

This course aims at introducing the students to the basic concepts of organic chemistry. It is designed for students who will not major in Chemistry, but whose main interest requires some knowledge of organic chemistry, such as Agriculture, Medical Analysis, Biology, Medicine, Pharmacy, Nursing, Health Sciences, and Engineering.

Textbook

Hart, Craine, Hart and Hadad, Organic Chemistry, A Short Course, 13th Edition (Brooks/Cole, Cengage Learning, CA 94002-3098 USA, 2012).

Grading System

Laboratory: 25%
Midterm Exam: 40%
Final Exam: 35%

Course Outline (Theoretical Part)

Chapter	Number of Lectures
1: Bonding and Isomerism	
2: Alkanes and Cycloalkanes ; Conformational and Geometric Isomerism	
3: Alkenes and Alkynes	
4: Aromatic Compounds	
5: Stereoisomerism	
6: Organic Halogen Compounds	
7: Alcohols, Phenols & Thiols	
8: Ethers and Epoxides	
9: Aldehydes and Ketones	
10: Carboxylic Acids and Their Derivatives	
11: Amines and Related Nitrogen Compounds	



**Faculty of Science
Department of Chemistry**

**Lab. of Organic Chemistry for
Non-chemistry Majors (30206221)**

Instructor:
Dr. Da'san M. M. Jaradat; Dr. Wajdi Togan

Course Objectives

This course aims at introducing the students of non-chemistry majors to the basic concepts of experimental organic chemistry. This course is divided into two parts; (1) Basic Techniques and (2) Chemistry of some functional groups.

Textbook

Abdelnour; Qasem; Zahra., Selected Experiments In Organic Chemistry (second edition), Jordan University Press.

Grading System

Reports & behavior	10 %
Final exam	15 %

Experiment Outline

Experiment No.	Experiment Title
1	Melting point
2	Boiling points, simple and fractional distillation
3	Recrystallization
4	Extraction: Separation of a two-component mixture
5	Steam distillation
6	Chromatography
7	Dehydration of Alcohols
10	Electrophilic Aromatic Substitution (Nitration of Bromobenzene)
12	Oxidation of Alcohols: Preparation of Adipic acid
13	Aldehydes and Ketones
15	Esterification of Alcohols and Phenols (Preparation of Aspirin)