



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

CHEM104 Organic Chemistry

Summer Semester 2019-2020

**Course Catalog**

2 Credit Hours. This course aims to teach students the basic principles of organic chemistry. The first part of the course will cover the fundamental aspects of structural organic chemistry to familiarize the students the main families of organic chemistry functions as well as the 3D structure of organic molecules. The basics of reactivity will also be covered using the mechanisms. The course will be frequently illustrated with examples linked to other scientific disciplines, in particular to the field of life sciences.

**Text Book**

<b>Title</b>	Fundamentals of Organic Chemistry
<b>Author(s)</b>	John McMurry
<b>Edition</b>	5th Edition
<b>Short Name</b>	text
<b>Other Information</b>	

**Instructor**

<b>Name</b>	<b>Mr. Ayman Amrat</b>
<b>Office Location</b>	N1 L-1
<b>Office Hours</b>	
<b>Email</b>	ahamrat6@just.edu.jo

**Class Schedule & Room**

**Section 1:**

Lecture Time: Sun, Mon, Tue, Wed : 08:30 - 09:30

Room: منصة الكترونية

**Section 3:**

Lecture Time: Sun, Mon, Tue, Wed : 10:30 - 11:30

Room: منصة الكترونية

**Section 4:**

Lecture Time: Sun, Mon, Tue, Wed : 12:30 - 13:30

Room: منصة الكترونية

**Tentative List of Topics Covered**

<b>Weeks</b>	<b>Topic</b>	<b>References</b>
Week 1	Structure & Bonding	<b>Chapter 1</b> From <b>text</b>
Weeks 2, 3	The Nature of Organic compounds: Alkanes	<b>Chapter 2</b> From <b>text</b>
Week 4	The Nature of Organic compounds: Alkenes	<b>Chapter 3</b> From <b>text</b>
Week 5	Reactions of Alkenes and Alkynes	<b>Chapter 4</b> From <b>text</b>
Week 6	Aromatic compounds	<b>chapter 5</b> From <b>text</b>
Weeks 7, 8	Stereoisomerism	<b>Chapter 6</b> From <b>text</b>
Weeks 9, 10	Alkyl Halides	<b>Chapter 7</b> From <b>text</b>
Weeks 11, 12	Alcohols, Phenols, and Ethers	<b>Chapter 8</b> From <b>text</b>
Week 13	Aldehydes and Ketones	<b>Chapter 9</b> From <b>text</b>
Week 14	Carboxylic Acids and Derivatives	<b>Chapter 10</b> From <b>text</b>

<b>Mapping of Course Outcomes to Program Student Outcomes</b>	<b>Course Outcome Weight (Out of 100%)</b>	<b>Assessment method</b>
Understand the structural organic chemistry for main families of organic chemistry [1c, 1d]	30%	
Understand the 3D structure of organic molecules [1a, 1b, 1h]	25%	
Manipulate the basic of reactivity and the mechanisms [1a, 1b, 1c]	30%	
Manipulate the functional groups transformations [1a, 1j]	15%	

Relationship to Program Student Outcomes (Out of 100%)										
a	b	c	d	e	f	g	h	i	j	k
25.83	18.33	25	15				8.33		7.50	

Evaluation	
Assessment Tool	Weight
first exam	30%
second	30%
final	40%

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