

Course Syllabus

1	Course title	Advanced Experimental Organic Chemistry	
2	Course number	0303436	
3	Credit hours	3	
	Contact hours (theory, practical)	(1 h theory, 5 practical)/ week	
4	Prerequisites/corequisites	Pre-requisite 0333336	
5	Program title	B.Sc.	
6	Program code	NA	
7	Awarding institution	The University of Jordan	
8	School	Science	
9	Department	Chemistry	
10	Course level	4 rd Level	
11	Year of study and semester (s)	2022 -2023, 2 nd Semester	
12	Other department (s) involved in teaching the course	B.Sc.	
13	Main teaching language	English	
14	Delivery method	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online	
15	Online platforms(s)	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft <input checked="" type="checkbox"/> Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....	
16	Issuing/Revision Date	20/06/2023	

17 Course Coordinator:

Name: **Prof. Dr. Jalal Zahra**

Contact hours: 13- 14 Theory; 14-18 practical Mo

Office number: 101a

Phone number:22131

Email: musaaz@ju.edu.jo



18 Other instructors:

: Prof. Dr. Amal Alaboudi

Phone number: 22132

Email: alaboudi@ju.edu.jo

Office number: 108

Contact hours: Contact hours: 12:30- 13:30 Theory; 13:30 – 17:30 practical Tu

19 Course Description:

Multistep synthesis of some organic compounds using named synthetic reactions, and confirmation of their chemical structures by different spectroscopic techniques. The course also includes submitting a final report summarizing the methods, results, discussion, and documentation.

20 Course aims and learning outcomes (CLOs):

Course Learning Outcomes: 0333436 Practical Organic Chemistry

Upon successful completion of this course, students will be able to:

CLO-1. acquire advanced practical skills used in chemistry labs.

CLO-2. Apply your knowledge of organic chemistry to prepare organic compounds using a multistep synthesis.

CLO-3. report and communicate experimental results.

CLO-4. work in a team.

CLO-5. appreciate and apply safety rules

B- Students Learning Outcomes (SLOs):

- SO-1. Problem Solving: Graduates will be able to apply mathematical and scientific knowledge to identify, formulate, and solve technical or scientific problems relevant to the discipline of chemistry.
- SO-2. Design: Graduates will be able to use their understanding of chemistry concepts and principles to formulate and design systems, processes, procedures, or programs to meet desired goals and outcomes.
- SO-3. Experimental Skills: Graduates will be able to design, conduct, and analyze experiments or test hypotheses, utilizing appropriate chemical techniques and scientific judgment to draw meaningful conclusions.
- SO-4. Communication: Graduates will be able to communicate scientific information effectively and accurately to a range of audiences, including both technical and non-technical audiences.
- SO-5. Ethics and Global Context: Graduates will understand and apply ethical and professional responsibilities in the context of the impact of technical and scientific solutions on global, economic, environmental, and societal issues.
- SO-6. Teamwork: Graduates will be able to work effectively as part of a team, establishing goals, planning tasks, meeting deadlines, and analyzing risk and uncertainty in the context of chemistry-related projects and initiatives.
- SO-7. Handling Chemicals: An ability to apply the proper procedures for safe handling of chemicals.

0333336 Identification of Organic Compounds

		Student Outcomes (SO)						
		SO-1	SO-2	SO-3	SO-4	SO-5	SO-6	SO-7
Course Learning Outcomes (CLO)	CLO-1	✓	✓					✓
	CLO-2	✓	✓	✓	✓	✓	✓	✓
	CLO-3	✓	✓		✓	✓		
	CLO-4				✓	✓	✓	✓
	CLO-5	✓	✓			✓		✓

21. Topic Outline and Schedule:

Lecture/ Exp.	Topic	SLO	Learning Methods (Face to Face/Blende d/ Fully Online)	Platform	Evaluation Methods	Resources
1						
2						
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22 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Mid exam	20%	Exp. 1-6	SO-1, SO-2, SO-3, SO-4, SO-5, SO-6, SO-7	8 weeks	In the department



Practical evaluation; Reports and quizzes	40%	Exp. 1-12	SO-1, SO-2, SO-3, SO-4, SO-5, SO-6, SO-7		In the department
Final exam	40%	Exp. 1-12	SO-1, SO-2, SO-3, SO-4, SO-5, SO-6, SO-7		In the department

23 Course Requirements

White or smart board, Selected experiments in Organic Chemistry, 2nd edition. Chemicals and equipped laboratory.

24 Course Policies:

A- Attendance policies: A- Attendance policies:

Maximum 15% absence is allowed.

B- Absences from exams and submitting assignments on time:

Incomplete Exams are conducted later after arrangement a new date.

C- Health and safety procedures:

This is a theoretical course.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

The general Jordan University's laws are applied in any case of cheating.

E- Grading policy:

Letters scale is applied.

F- Available university services that support achievement in the course:

Free Internet-access and E-learning.

25 References:



Techniques in Organic Chemistry

[Jerry R. Mohrig](#), [Christina Noring Hammond](#), [Paul F. Schatz](#)

Publisher W. H. Freeman, 2010

26 Additional information:

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Name of Course Coordinator: -----	Signature: -----	Date: -----

Head of Curriculum Committee/Department: -----	Signature: -----	

Head of Department: -----	Signature: -----	
-		
Head of Curriculum Committee/Faculty: -----	Signature: -----	
-		
Dean: -----	Signature: -----	