

MODULE DESCRIPTION FORM

Module Information			
Module Title	Organic chemistry		Module Delivery
Module Type	Basic		Theory ✓ Lab ✓ Tutorial ✓ Seminar ✓
Module Code	MPH203		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	2
Administering Department	Medical Physics	College	College of Sciences
Module Leader	Mohammed Abbas	e-mail	Mohammed.jebur@uowa.edu.iq
Module Leader's Acad. Title	Assistant Prof. Dr.	Module Leader's Qualification	Assist. Prof. Dr.
Module Tutor	Ashraf Hussain Saleh	e-mail	mailto:ashraf.h@uowa.edu.iq
Peer Reviewer Name	Ashraf Hussain Saleh	e-mail	mailto:ashraf.h@uowa.edu.iq
Scientific Committee Approval Date	1-02-2026	Version Number	V 1.0

Relation with other Modules			
Prerequisite module	No	Semester	/
Co-requisites module	No	Semester	/




 د. شياب حسين نوني
 ٢٠٢٦ - ٢٠٢٥



Department Head Approval

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	<ul style="list-style-type: none"> - Teaching the students organic chemical reactions, chemical structures, knowing the form of organic compounds, and how to - Clarifying the mechanics of organic reactions and their practical applications aimed at developing and keeping pace with scientific development. For organic chemistry. <p>Teaching and educating students on all the necessary and necessary information related to organic chemistry, qualifies them to work and research in all areas of organic chemistry</p>
Module Learning Outcomes	<ol style="list-style-type: none"> 1- Students will be able to obtain knowledge and understanding of organic chemistry. 2- Students will be able to obtain knowledge and understanding of structures. 3- Students will be able to obtain knowledge and understanding of pile mechanics. 4- Students will be able to obtain knowledge and understanding of the functional communication of organic chemistry. 5- Students will be able to obtain knowledge and understanding of classical and modern methods of extraction. 6- Students will be able to obtain knowledge and understanding the research through analyzing the published research papers and writing mini-research from them.
Indicative Contents	<ol style="list-style-type: none"> 1- Introducing students to organic chemistry and its importance in our lives 2- Introducing students to hydrocarbons and their types. (Alkanes, alkenes and alkynes). 3- Introducing the student to methane gas and the method of its preparation. 4- Introducing students to alkanes and their properties. 5- Introduce students to the interactions of alkanes. 6- Defining and unsaturated hydrocarbons and their types. 7- Introducing the student to alkenes, naming them and their characteristics. 8- Introducing students to the methods of preparing alkenes. 9- Introducing the student to the reactions of alkenes. 10- Familiarizing students with the detection of alkenes. 11- Introducing the student to the entities and their characteristics and naming them 12- Introducing the student to the interactions of alkynes 13- Introduce the student to the reactions of aliphatic cyclic compounds 14- Identification, description and naming of aromatic compounds. 15- Introducing the student to the reactions of aromatic compound.

Learning and Teaching Strategies

Strategies	1- Following Lecture method and the use of the interactive whiteboard
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	<p>2- Explanation and clarification Providing students with the basics and additional topics related to the outputs of chemical thinking and analysis organic.</p> <p>3- Forming discussion groups during lectures to discuss organic chemistry topics that require thinking and analysis</p> <p>4- Asking students a set of reflective questions during the lectures, such as what, how, when and why for specific topics</p> <p>5- Giving students homework that requires self-explanations in causal ways</p>
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Student Workload (SWL)			
Structured SWL (h/sem)	87	Structured SWL (h/w)	5.8
Unstructured SWL (h/sem)	85	Unstructured SWL (h/w)	5.6
Total SWL (h/sem)	172 + 3 final = 175		

Module Evaluation							
		Time/Number		Weight (Marks)		Week Due	Relevant Learning Outcome
		TH	LAB	TH	LAB		
Formative assessment	Quizzes	2	2	4	10	5 and 11	3,7
	Homework assignment	2	1	4	10	6and 13	1,8
	Onsite Assignments	-	-	-	-	Continuous	All
	Projects	1	7	2	10	14	All
Summative assessment	Midterm Exam	1		10		7	
	Final Exam	3hr		50		15	
Total assessment				100 Marks			

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	General Principles in Organic Chemistry.
Week 2	Saturated Aliphatic Hydrocarbons.
Week 3	Aliphatic Cyclic Compounds.
Week 4	Alkanes Concept.
Week 5	Alkanes Concept.
Week 6	Alkanes Concept.
Week 7	Organic Halides.
Week 8	Mid-term exam.
Week 9	Ethers Concept.
Week 10	Alcohols Concept.
Week 11	Aldehydes and ketones.
Week 12	Carboxylic Acids.
Week 13	Introduction to Amines.
Week 14	Ammonium Compounds.
Week 15	Final exam

Delivery Plan (Weekly Lab. Syllabus)

	Material Covered
Week 1	Laboratory safety and Acquaintance with glassware and apparatus in the organic chemistry laboratory
Week 2	Exp1: Determine the melting point by means of a capillary tube for some organic substances and using the point m device.
Week 3	Exp2: Analyzing the melting of some solids and choosing the appropriate solution for recrystallization.
Week 4	Exp3: Determine the boiling point by means of a capillary tube for some organic substances and using the point m device.
Week 5	Discussion for the reports of experiment 1, 2 and 3.
Week 6	Discussion of Project-1
Week 7	Ex4: Extraction (base acid extraction).
Week 8	Ex5: Crystallization Filtration Types
Week 9	Discussion for the reports of experiment 4 and 5.
Week 10	Discussion of Project-2
Week 11	Ex6: Application of some methods of separation of sublimated organic compounds.
Week 12	Ex7: TLC Extraction
Week 13	Discussion for the reports of experiment 6 and 7.
Week 14	Discussion of Project-3
Week 15	Final Exam

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	1- Organic chemistry, Morrison and Boyd. 2- Chemistry, Clayden J., Creeves N., Warren S and Wothers P., Oxford, 2001.	No
Recommended Texts	Organic Chemistry	No
Websites	https://en.wikipedia.org/wiki/Organic_chemistry	

Grading Scheme

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	Excellent	90 - 100	Outstanding Performance
	B - Very Good	Very Good	80 - 89	Above average with some errors
	C - Good	Good	70 - 79	Sound work with notable errors
	D - Satisfactory	Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	Fail	(45-49)	More work required but credit awarded
	F – Fail	Fail	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.