## MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information						
Module Title	Organic Chemistry		Modu	le Delivery		
Module Type	Core				🛛 Theory	
Module Code					⊠ Lecture ⊠ Lab	
ECTS Credits				□ Tutorial □ Practical □ Seminar		
SWL (hr/sem)						
Module Level		1	Semester of Delivery 1		1	
Administering Department		Type Dept. Code	College	Type C	Type College Code	
Module Leader	Dr. Taghreed S	Sabah Hussein	e-mail	<u>Ted384</u>	Ted38456@gmail.com	
Module Leader's Acad. Title		Lecturer	Module Lea	Leader's Qualification Pl		Ph.D.
Module Tutor	r Name (if available)		e-mail	E-mail		
Peer Reviewer Name		Name	e-mail	E-mail		
Scientific Committee Approval Date		01/06/2024	Version Nu	lumber 1.0		

Relation with other Modules					
العلاقة مع المواد الدراسية الأخرى					
Prerequisite module	None	Semester			
Co-requisites module	None	Semester			

Modu	le Aims, Learning Outcomes and Indicative Contents
	أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية
<b>Module Objectives</b> أهداف المادة الدراسية	<ol> <li>Description of the basics and principles of organic chemistry, the quality of chemical compounds, and the basis for their formation and composition</li> <li>Knowledge and application of traditional methods of chemical organic preparation depending on the nature and conditions of the chemical reaction</li> <li>Understanding organic chemical experiments and their steps</li> <li>Understanding the formation of hydrocarbon chains, types of organic classes, types of organic active groups, chemical interaction</li> <li>Knowledge of the theoretical foundations of the sections and branches of organic chemistry, and the steps of reactions and preparation in the laboratory or laboratory</li> <li>Industry and methods of reactions available for the manufacture of organic compounds and the catalyst and its mechanism</li> </ol>
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<ol> <li>That the student be able to define organic chemistry and its divisions</li> <li>That the student be able to describe the sections and categories of organic chemistry</li> <li>That the student be able to understand the principles, types and theoretical basis for each type of organic compounds</li> <li>To be able to apply chemical reaction conditions such as heat or pressure to prepare the organic compound</li> <li>Describe the steps of an organic reaction and study it from the point of view of spontaneous or non-spontaneous occurrence</li> <li>How to explain the presence of the catalyst and the effect of the presence of active groups for each organic variety</li> </ol>
Indicative Contents المحتويات الإرشادية	<ul> <li>Part I: <ol> <li>Introduction to Chemistry</li> </ol> </li> <li>Introduction to periodic table <ul> <li>Basic of bonding which occurs to form the molecules and study its properties.</li> </ul> </li> <li>Main definition of some terms <ul> <li>Introduction to Organic Chemistry</li> </ul> </li> <li>Part II: Nomenclature, Preparation and reaction of: <ul> <li>Acyclic saturated hydrocarbon compounds</li> <li>Cyclic saturated hydrocarbon compounds</li> <li>Acyclic unsaturated hydrocarbon compounds part I</li> <li>Cyclic unsaturated hydrocarbon compounds part I</li> <li>Cyclic unsaturated hydrocarbon compounds part II</li> <li>Acyclic unsaturated hydrocarbon compounds part II</li> <li>Acyclic unsaturated hydrocarbon compounds part II</li> <li>Cyclic unsaturated hydrocarbon compounds part II</li> <li>Other Organic Compounds (Carboxylic acids, Ethers, Phenols, Amines)</li> <li>Reactions of Benzene and Substituted Benzenes</li> </ul> </li> </ul>

Part III:
14. Physical Properties of Organic Compounds
Boiling Points, Solubility and other properties

Learning and Teaching Strategies						
استراتيجيات التعلم والتعليم						
	1. Method of lecturing					
	2. Student Center					
	3. Team Project					
Stratogias	4. Work Shop					
Strategies	5. Scientific trips to monitor environmental pollution					
	6. Learning Technologies on Campus					
	7. Experiential Learning					
	8. Application Learning					

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا					
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا			
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا			
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل					

Module Evaluation							
تقييم المادة الدراسية							
Time/Number			Weight (Marks)	Week Due	Relevant Learning		
		inic, italisei		Week Due	Outcome		
	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11		
Formative	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7		
assessment	Projects / Lab.	1	10% (10)	Continuous	All		
	Report	1	10% (10)	13	LO #5, #8 and #10		
Summative	Midterm Exam	2hr	10% (10)	7	LO #1 - #7		
assessment	Final Exam	3hr	50% (50)	16	All		
Total assessment			100% (100 Marks)				

Delivery Plan (Weekly Syllabus)				
المنهاج الاسبوعي النظري				
	Material Covered			
Week 1	Introduction to Chemistry			
Week 2	Introduction to Organic Chemistry			
Week 3	Acyclic saturated hydrocarbon compounds			
Week 4	Cyclic saturated hydrocarbon compounds			
Week 5	Acyclic unsaturated hydrocarbon compounds part I			
Week 6	Cyclic unsaturated hydrocarbon compounds part I			
Week 7	Exam 1			
Week 8	Acyclic unsaturated hydrocarbon compounds part II			
Week 9	Cyclic unsaturated hydrocarbon compounds part II			
Week 10	Alcohol			
Week 11	Aldehydes			
Week 12	Ketones			
Week 13	Other Organic Compounds (Carboxylic acids, Ethers, Phenols, Amines)			
Week 14	Reactions of Benzene and Substituted Benzenes			
Week 15	Physical Properties of Organic Compounds			
Week 16	Preparatory week before the final Exam			

Delivery Plan (Weekly Lab. Syllabus)					
المنهاج الاسبوعي للمختبر					
	Material Covered				
Week 1	Lab 1: Determination of melting point				
Week 2	Lab 2: Determination of boiling point				
Week 3	Lab 3: Purification of solid organic compounds				
Week 4	Lab 4: Purification of liquid organic compounds-simple distillation				
Week 5	Lab 5: Purification of liquid organic compounds-fractional distillation				
Week 6	Lab 6: Differential Extraction				
Week 7	Lab 7: Chromatography				

Learning and Teaching Resources					
مصادر التعلم والتدريس					
	Text Available in the Library?				
<b>Required Texts</b>	Bruice, P. Y., Organic Chemistry, 7th Edition, 2014, Pearson Education, Inc.	No			
Recommended Texts	Bruice, P. Y., Organic Chemistry, 7th Edition, 2014, Pearson Education, Inc.	No			
Websites					

Grading Scheme					
		. الدرجات	مخطط		
Group	Grade	التقدير	Marks %	Definition	
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance	
	<b>B</b> - Very Good	جيد جدا	80 - 89	Above average with some errors	
	<b>C</b> - Good	جيد	70 - 79	Sound work with notable errors	
	<b>D</b> - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings	
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria	
Fail Group (0 – 49)	<b>FX</b> – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded	
	<b>F</b> – Fail	راسب	(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.