MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Organic Chemistry II**			**Module Delivery**	
Module Type	**Core**			☒ **Theory**	
Module Code	**Che-24122**			☒ **Lecture**	
ECTS Credits	**6**			☒ **Lab**	
SWL (hr/sem)	**150**			☐ **Tutorial**	
				☐ **Practical**	
				☐ **Seminar**	
Module Level	2	**Semester of Delivery**	4		
Administering Department	Chem	**College**	CoS		
Module Leader	Wassan Baqir Ali	**e-mail**	dr.wassan976@uodiyala.edu.iq		
Module Leader's Acad. Title	Assistant Professor	**Module Leader's Qualification**	Ph.D.		
Module Tutor	Name (if available)	**e-mail**	E-mail		
Peer Reviewer Name	Name	**e-mail**	E-mail		
Scientific Committee Approval Date	01/06/2023	**Version Number**	1.0		

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

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	Preparing specialists who are familiar with the basics of chemistry, theoretically and practically, who are able to meet the needs of the labor market, in addition to teaching chemistry to students of other departments in the Faculty of Science and some other faculties at the university. Conducting scientific research and trying to keep pace with the scientific development of chemistry. Cooperating with state institutions and the private sector by providing advice and scientific advice and conducting chemical analyzes.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Enable students to gain knowledge and understanding of the intellectual framework of chemistry, enable students to acquire knowledge and understanding of international chemical standards, enable students to acquire knowledge and understanding of the laws of chemistry ,enable students to acquire knowledge and understanding of chemical analysis standards, enabling students to obtain knowledge and understanding of the law of the wrong use of chemicals . skills goals special to the programme scientific skills , reminding and analyzing skills and uses , development skills .
Indicative Contents المحتويات الإرشادية	Preparation of alkanes and their properties , Reactions of Alkanes , Nomenclature of alkenes and properties , Alkynes , Dienes, structure and synthesis and stabilization

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Clarification and explanation of the study materials by the academic staff through the blackboard, smart board and computer. Providing students with knowledge through homework assignments for academic vocabulary Asking students to visit the library to obtain additional knowledge of the study materials .Improving students' skills by visiting websites to obtain additional knowledge of the study subjects .

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	79	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	71	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**150**		

Module Evaluation
تقييم المادة الدراسية

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

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Aliphatic cyclic compounds, structure and physical properties, synthesis, and reactions

Week 2	Aromaticity, structure, and stability of benzene
Week 3	The Hückel 4n + 2 rule, synthesis and electrophilic aromatic substitution
Week 4	Electrophilic aromatic substitution of aromatic compounds
Week 5	Arenes, structure, synthesis, and reactions
Week 6	Alkyl halide, structure and physical properties, synthesis of alkyl halides
Week 7	reactions SN1 , Reactions and mechanism of SN2
Week 8	**Midterm Exam**
Week 9	Reactions and mechanism of E1
Week 10	Reactions and mechanism of E2
Week 11	Alcohols, structure and physical properties
Week 12	synthesis, and reactions of Alcohols
Week 13	Ethers, structure and physical properties
Week 14	synthesis and reactions of Ethers
Week 15	Final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Detection of nitrogen in organic chemical compounds
Week 2	Detection of nitrogen in organic chemical compounds
Week 3	Detection of sulfur in organic chemical compounds
Week 4	Detection of sulfur in organic chemical compounds
Week 5	Detection of halogens in organic chemical compounds
Week 6	Detection of halogens in organic chemical compounds
Week 7	Preparation and detection of CH4 methane, Study the properties and interactions of alcohols

Week 8	Preparation and detection of CH4 methane, Study the properties and interactions of alcohols
Week 9	Conducting an experiment to detect alcohols in general and especially to find out primary, secondary or tertiary alcohol using chemicals
Week 10	Conducting an experiment to detect alcohols in general and especially to find out primary, secondary or tertiary alcohol using chemicals
Week 11	Detection of iodoform , properties of alkyl halides , Preparation of alkyl halide
Week 12	Detection of iodoform , properties of alkyl halides , Preparation of alkyl halide
Week 13	Alcohols, structure and physical properties , synthesis, and reactions of Alcohols
Week 14	Alcohols, structure and physical properties , synthesis, and reactions of Alcohols
Week 15	Exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Organic chemistry, Morrison and Boyd (1)	Yes
Recommended Texts	Organic Chemistry, Clayden J., Creeves N., Warren S and Wother P., Oxford, 2001	No
Websites	www.chemicalprocessing.com	

Grading Scheme

مخطط الدرجات

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