نموذج توصيف مقرر
Course Description Form

Name of College\Faculty : Science **اسم الكلية:**

Name of Department: Chemistry **اسم القسم العلمي:**

Course Name	Organic Chemistry (I)	**اسم المقرر**
Course No.	CHEM 255	**رقم المقرر**
No. of Credits	3	**عدد الوحدات**
Theoretical Hours	3	**عدد الساعات النظرية**
Practical Hours	0	**عدد الساعات المحلية**

Course topics	**مواضيع المقرر**
Electronic structure and bonding. Acids and bases: central to understanding organic chemistry. An introduction to organic compounds: nomenclature, physical properties, structure, and their reactivity toward free-radical substitution reaction. Isomers: the arrangement of atoms in space. Alkenes: structure, nomenclature, and an introduction to reactivity (thermodynamics and kinetics). Reactions of alkenes: stereochemistry of addition reactions. Reactions of alkynes: an introduction to multiple-syntheses. Substitution and elimination reactions of alkyl halides. Reactions of alcohols, ethers, epoxides, amines, and sulfur-containing compounds.	
Text book: (Name, Author , Year , Publisher)	**عنوان الكتاب : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)**
P. Y. Bruice, Organic Chemistry, Prentice Hall International, Latest Edition.	
References: (Name , Author , Year . Publisher)	**عنوان المرجع : (الاسم ، المؤلف ، سنة الطبع ، دار النشر)**
None	

Prerequisites CHEM 102 + CHEM 106					متطلبات المقرر	
Grading	Exams		%		الاختبارات	آلية رصد المقرر
	Quizzes		%		امتحانات قصيرة	
	H.W.		%		واجبات	
	Project (field study)		%		مشاريع (دراسة ميدانية)	
	Final		%		الاختبار النهائي	
	%					

Chapters included:

Chapter	Topic	Sections Included	Sections Excluded
CH.1	Remembering General Chemistry: Electronic Structure and Bonding	1-5, 7-10, 14, 15	6, 11-13
CH.2	Acids and Bases: Central to Understanding Organic Chemistry	1, 3-10, 12	2, 11
CH.3	An Introduction to Organic Compounds: Nomenclature,	1-16	-
CH. 12	Physical properties and structure	1-3	4-12
CH.4	Isomers: The Arrangement of Atoms in space	1-9, 11-16	10, 17, 18
CH.5	Alkenes: Structure, Nomenclature, and an Introduction to Reactivity: Thermodynamics and Kinetics	1-7	8-14
CH.6	The Reaction of Alkenes: The stereochemistry of Addition Reactions	1-13	14-16
CH.7	The Reactions of Alkynes: An Introduction to Multiple Synthesis	1-11	12
CH.9	Substitution and Elimination Reactions of Alkyl Halide	1-16	17

CH.10	Reactions of Alcohol, Ethers, Epoxides, Amines and Sulfur-Containing Compounds	1-4	5-13

Course objectives					
No.	**Course Objectives (Learning Outcomes)**	**Example(s) of relevant (Topics and activities)**	**Recommended Level to satisfy the objectives**		
			High	**Medium**	**Low**
1	To know the electronic structure and bonding in organic compounds.				**X**
2	To introduce the basis of organic chemistry.			**X**	
3	To name organic compounds with various functional groups.		**X**		
4	Understand the preparative methods of organic compounds.			**X**	
5	Understand the reactivity of such compounds toward electrophiles and nucleophiles.		**X**		
6	To demonstrate stereochemistry.		**X**		
7	To understand substitution reactions (SN1/SN2).		**X**		
8	To understand elimination reactions (E1/E2).		**X**		
Fields					
Skills					
Coordinator (Name and Rank) :		**Convener of the organic chemistry**			
Signature and stamp :					
Date:		**11\ 11 \2025**			