

نموذج توصيف مقرر
Course Description Form

Name of College\Faculty : Science

Name of Department: Chemistry

اسم الكلية:

اسم القسم العلمي:

Course Name	Organic Chemistry (II)	اسم المقرر
Course No.	CHEM 256	رقم المقرر
No. of Credits	3	عدد الوحدات
Theoretical Hours	3	عدد الساعات النظرية
Practical Hours	0	عدد الساعات المحلّية
Course topics		مواضيع المقرر
Reactions of alcohols, ethers, epoxides, amines, and sulfur-containing compounds. Organometallic compounds. Delocalized electrons: their effect on stability, pKa, and reaction products. Aromaticity and electronic effects: an introduction to the reactions of benzene. Reactions of benzene and substituted benzene. Reactions of carboxylic acids and their derivatives. Reactions of aldehydes and ketones: more reactions of carboxylic acid derivatives.		
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 255			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.10	Reactions of Alcohol, Ethers, Epoxides, Amines and Sulfur-Containing Compounds	5-7, 9, 10	1-4, 8, 11-13
CH.11	Organometallic Compounds	1-5	-
CH.8	Delocalized Electrons: Their Effect on Stability, pKa, and the Products of a Reaction: Aromaticity and Electronic Effects: An Introduction to the Reactions of Benzene	1-7, 9-12, 14-18, 20, 21	8, 13, 19, 22
CH.18	Reactions of Benzene and Substituted Benzene	1-22	-
CH.15	Reactions of Carboxylic Acids and Carboxylic Acid Derivatives	1-18	19
CH.16	Reactions of Aldehydes and Ketones: More Reactions of Carboxylic Acid Derivatives	1-16	17

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 introduce the reactions of alcohols, ethers, epoxides, and amines.			X	
2	To introduce the reactions of organometallic compounds.			X	
3	To introduce the principles of resonance, aromaticity, and their importance in organic chemistry due to their effect on stabilization.		X		
4	To introduce the reactions of benzene and its derivatives, including electrophilic and nucleophilic reactions and those involving benzyne and diazonium ions.		X		
5	To introduce the nucleophilic acyl substitution reactions in carboxylic acids and acid derivatives.		X		
6	To introduce the nucleophilic acyl addition and nucleophilic acyl substitution.		X		
7	To introduce the nucleophilic addition to α,β -unsaturated aldehydes and ketones and carboxylic acid derivatives.		X		
Fields					
Skills					
Coordinator (Name and Rank) :		Convener of the organic chemistry			
Signature and stamp :					
Date:		11\ 11 \2025			