

نموذج توصيف مقرر
Course Description Form

Name of College\Faculty : Science

Name of Department: Chemistry

اسم الكلية:

اسم القسم العلمي:

Course Name	Organic Chemistry (III)	اسم المقرر
Course No.	CHEM 355	رقم المقرر
No. of Credits	3	عدد الوحدات
Theoretical Hours	2	عدد الساعات النظرية
Practical Hours	3	عدد الساعات المحلّية
Course topics		مواضيع المقرر
Reactions at the α-carbon of carbonyl compounds (enolate chemistry). Oxidation-reduction reactions. More about amines and heterocyclic compounds. Pericyclic reactions. Practical organic synthesis including multistep organic synthesis. Synthetic polymers.		
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)
R. M. Silverstein, F. X. Webster, D. J. Kiemle, Spectrometric Identification of Organic Compounds, Earliest + Latest Edition.		

Prerequisites		متطلبات المقرر			
CHEM 257 + CHEM 258					
	Exams		%		الاختبارات
	Quizzes		%		امتحانات قصيرة
	H.W.		%		واجبات

Grading	Project (field study)		%		مشاريع (دراسة ميدانية)	آلية رصد المقرر
	Final		%		الاختبار النهائي	
	%					

Chapters included:

Chapter	Topic	Sections Included	Sections Excluded
CH.18	More About Oxidation-Reduction Reactions BRUCE, 8 th edition	1-19	10, 11
CH.17	Reactions of the α -Carbon	1-19	20-22
CH.19	More About Amines – Reactions of Heterocyclic Compounds	1-6	7, 8
CH.27	Synthetic Polymers	1-6 & 8	7, 9-14
CH.28	Pericyclic Reactions	1-5	6, 7

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 chemistry at the α -carbon.			X	
2	To introduce the chemistry of α,β -unsaturated carbonyl compounds.		X		
3	To study oxidation–reduction reactions in organic chemistry and designing organic synthesis.		X		
4	To introduce the chemistry of amines and heterocyclic compounds.			X	



5	To introduce the theory of orbital symmetry and pericyclic reactions.				
6	To demonstrate experimentally some topics in this course.				
Fields					
Skills					
Coordinator (Name and Rank) :	Convener of the organic chemistry				
Signature and stamp :					
Date:	11\ 11 \2025				