CHEM 333 Syllabus

Course Code	Course Name	Credits	Prerequisite(S)		Classification	
CHEM 333	Spectroscopy of Organic Compounds	3	CHEM 232		Department Requirement	
Course Description	Teaching the methods of spectroscopic analysis and their applications in organic chemistry. Scientific contents for this course are:					
	Learning how to use and apply electronic spectroscopy, Infrared spectroscopy, nuclear magnetic resonance spectroscopy and mass spectroscopy.					
	Employing these spectroscopic methods to determine the structural and stereo formulas of organic compounds.					
Class Scheduling	Classes are held 2 times/week each for 50 minutes. Labs are held 1 time/week for 150 minutes.					
Textbook	Introduction to spectro	scopy, D.L.Pa	ıvia, G.M.Lampma	n, G.S.Kri	z, 3rd Ed., 2000.	
	Spectroscopic analysis In Organic Chemistry, M. Abdul-Mogeeb, T. Sobahi, S. Basaif and A. Asiri, 1 st Ed., 2004					
	Prof Taria R. Sobabi					
Course	Prof. Tariq R. Sobahi					
Coordinato	Prof. Tariq R. Sobahi Dr. Hajer Alorfi					
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Coordinato r Relationship	Dr. Hajer Alorfi	2 3	4	5	6	
Coordinato r	Dr. Hajer Alorfi	2 3 X	4	5 X	6	
Coordinato r Relationship to SOs	Dr. Hajer Alorfi Dr. Nahed Bawakid	X			6	
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UV spectroscopy	2
R infrared spectroscopy	2
NMR Nuclear magnetic resonance spectroscopy	5
Mass spectroscopy	2
Applications and analysis of organic compounds spectra	1
General Revision & Quizzes	2
Total	15
Laboratory Section:	
Calculate Un # of M.F of organic compounds.	
R Spec, Identification of functional groups bands of aliphatic olefinic, aromatic andcarbonyl compounds, ¹ HNMR spectroscopy,	
Factors effecting chemical shift of 1H NMR Spectroscopy, Splitting signals spectra, (n+1) rule, Determination of structural formula of organic compounds by R and NMR spectra, ¹³ CNMR spectroscopy, mass spectroscopy, Problems of MS Spectra of organic compounds,	15
Applications and problems of IR ,1HNMR 13C NMR and Ms spectroscopy.	