

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Republic of Iraq

The Ministry Of Higher Education  
& Scientific Research



University: Baghdad

College: Science for Women

Department: chemistry

Stage: Fourth year

Lecturer name: molecular  
spectroscopy

Qualification: PhD in physical  
chemistry

## Syllabus Form

Instructor Name	Dr. Sameer H. Kareem				
E-mail	<a href="mailto:Sameer-k-1960@yahoo.com">Sameer-k-1960@yahoo.com</a>				
Course Title	Molecular spectroscopy				
Course Coordinator	Molecular spectroscopy				
Course Objectives	To teach the principles of molecular spectroscopy				
Course Description	The course includes, the electromagnetic radiation and the rotational ,vibrational,electronic , NMR, and ESR spectroscopy				
Textbook	A. A. Alhassum, "Physical Chemistry" first edition, (1986) (in Arabic)				
References	C. N. Banwell, "Fundamentals of molecular spectroscopy" second edition, McGraw-Hill, (1972).				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As(40%)	-----	----	----	As(60%)
General Notes					



**Half – year break**

1	<b>18/2/2016</b>	Electromagnetic Radation		
2	<b>25/2/2016</b>	Microwave spectroscopy : Di atomic molecules		
3	<b>3/3/2016</b>	Microwave spectroscopy: poly atomic molecles		
4	<b>10/3/2016</b>	Vibration spectroscopy: harmonic oscillation		
5	<b>17/3/2016</b>	Vibration spectroscopy: An –harmonic oscillation		
6	<b>24/3/2016</b>	Application of IR		
7	<b>31/3/2016</b>	Examination		
8	<b>7/4/2016</b>	Uv- Visible spectroscopy		
9	<b>14/4/2016</b>	Spectroscopy of organic compound		
10	<b>21/4/2016</b>	Application of Uv- Visible spectroscopy		
11	<b>28/4/2016</b>	Nuclear magnetic resonance : principles		
12	<b>5/5/2016</b>	Nuclear magnetic resonance : Applications		
13	<b>12/5/2016</b>	Electron spin resonance : Principles		
14	<b>19/5/2016</b>	Electron spin resonance : Applications		
15	<b>26/5/2016</b>	Examination		

**Instructor Signature:****Dean Signature:**