بسم الله الرحمن الرحيم

Republic of Iraq

The Ministry Of Higher Education

& Scientific Research



University:Baghdad College:Science for Women Department:Chemistry Stage : Fourth Lecturer name:Dr.Abdel-Amir M. Fenjan Qualification: Assistant Professor

Place of work

Syllabus Form

| Instructor Name | Asst.Prof.Dr.Abdel-Amir Mutlak Fenjan | | | |
|--------------------|---|---------|---------|------------|
| E-mail | amirfenjan@yahoo.com | | | |
| Course Title | Organic Chemistry | | | |
| Course Coordinator | Organic Spectroscopy | | | |
| | Identification of the functional groups and structures of Organic, | | | |
| Course Objectives | Organometallic compounds . | | | |
| Course Description | It was including identification of various organo functional groups using various physical techniques like :FT-IR , ¹ H-NMR , ESR , Mass spectra and microelemental analysis C.H.N.S . | | | |
| | Identification of Organic comp. by Silverstein , 4 th edition , 1987 . | | | |
| Textbook | | | | |
| References | Elementary Organic Spectroscopy , Y.R. Sharma , 2010 Fundamental of molecular spectroscopy by Banwell , 1972 | | | |
| Course Assessments | Term Tests Laboratory | Quizzes | Project | Final Exam |
| | As(18%) As(20%) | As(2%) | - | As(60%) |
| General Notes | Type here general notes regarding the course | | | |

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Course Weekly Outline

| Week | Date | Topes Covered | Lab. Experiment Assignments | Notes |
|----------|------|--------------------------------------|--------------------------------|-------|
| 1 | | | | |
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| | I | Half – year bre | | |
| 17 | | Introduction into I.R | Electromagnetic | |
| | | spectrum | Spectrum | |
| 18 | | Stretching and bending | | |
| | | vibrations | Fourier transform | |
| 19 | | Linear and non-linear | infrared | |
| | | molecules | spectroscopy | |
| 20 | | Wave number for functional | (FTIR) | |
| - 04 | | groups and applications | | |
| 21 | | Introduction into ¹ H-NMR | Unknown | |
| | | spectrum | | |
| 22 | | Chemical shift, J-J coupling | Unknown | |
| 23 | | Splitting pattern systems | Unknown | |
| 24 | | Electrical quadruple | Unknown | |
| 25 | | moment system | Evon | |
| 25 26 | | Applications | Exam | |
| 20 | | Introduction into ESR | Unknown | |
| 27 | | spectrum | Unknown | |
| | | Applications | | |
| 28 | | Introduction into mass | Unknown | |

| | spectrum | | |
|----|------------------------|---------|--|
| 29 | Evaluation %M+1 , %M+2 | Unknown | |
| 30 | Application and C.H.N. | Exam | |
| | analysis | | |
| 31 | Exam | | |

Instructor Signature:

Dean Signature:

Asst.Prof.Dr. Abdel-Amir M. Fenjan

Prof. Dr. Ahlam Mohammad Farhan