

## Course Specifications

|   |                |
|---|----------------|
| Programme(s) on which the course is given | M.SC.Chemistry |
| Major or Minor element of programmes      | major          |
| Department offering the programme         | chemistry      |
| Department offering the course            | chemistry      |
| Academic year / Level                     |                |
| Date of specification approval            | 2012           |

### A- Basic Information

|                                   |                     |                |
|-----------------------------------|---------------------|----------------|
| <b>Title: Alicyclic chemistry</b> | <b>Code: CH6415</b> |                |
| <b>Credit Hours: 2</b>            | <b>Lecture:1</b>    |                |
| <b>Tutorial: 1</b>                | <b>Practicals:0</b> | <b>Total:2</b> |

### B- Professional Information

#### 1 – Overall Aims of Course

- Understanding the principle of nomenclature of cycloalkanes and bicycloalkanes.
- Understanding the confirmation of substituted cycloalkanes and understanding different methods of preparation of alicyclic compounds.

#### 2 – Intended Learning Outcomes of Course (ILOs)

##### a- Knowledge and Understanding:

*After completing the course the student should be able to*

- a1- Know the a1knowledge of nomenclature
- a2- confirm the alicyclic compounds
- a3- Study different methods of preparation of alicyclic compounds

##### b- Intellectual Skills

- b1-** Predict the reaction mechanism of cyclo and bicycle alkanes.
- b2 -** Differentiate between the different methods of preparation of alicyclic compounds.

##### c- Professional and Practical Skills

- c1-**Be familiar with has been written on the improvement and applications of alicyclic compounds.

##### d- General and Transferable Skills

- d1-Enhance the written and oral communicatipons capability**

### - 3- Contents

| Topic  | No. of hours | Lecture | Tutorial/Practical |
|--|--------------|---------|--------------------|
| Introduction to alicyclic with examples        | 2            | 2       | -                  |
| Nomenclature of spiro and bicyclic preparation | 10           | 10      | -                  |
| applications                                   | 8            | 8       | -                  |
| Methods of alicyclic preparation               | 8            | 8       | -                  |

#### 4- Teaching and Learning Methods

4.1-lectures

#### 5- Student Assessment Methods

5.1 **written exam** to assess the understand, performance and scientific thinking.

#### Assessment Schedule

Assessment 1 short exam (class activities) Week every week  
Assessment 2 mid-term (written) Week 7  
Assessment 3 final-term (written) Week 14

#### Weighting of Assessments

Mid-Term Examination 20%  
Final-term Examination 60%  
Semester Work 20%  
Total 100%

#### 6- List of References

*Reinhard Bruckner*, Advanced Organic Chemistry, Reaction Mechanisms, Elsevier, 2002

#### 7- Facilities Required for Teaching and Learning

Overhead projector

**Course Coordinator: Dr. Farag Elessawy**

**Head of Department: Prof. Ahmed Abd-Elmgd**

**Date: / /**