Course Specifications

Programme(s) on which the course is given
B.SC.Chemistry
Major or Minor element of programmes **major**
Department offering the programme **chemistry**
Department offering the course **chemistry**
Academic year / Level **Third**
Date of specification approval **2013**

A- Basic Information

Title: Alicyclic chemistry **Code: CH347**

Credit Hours: 2 Lecture:1.5
Tutorial: 1 Practicals: 2 Total:2

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%

6.1 List of References

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

6.2 **A rapid, convenient, solventless green approach for the synthesis of oximes using grindstone chemistry**
Lakhinath Saikia, Jejiron Maheswari Baruah… in *Organic and Medicinal Chemistry Letters* *(2011)*

7- Facilities Required for Teaching and Learning

Overhead projector

Course Coordinator: Prof. Dr. / Mohamed Taha

Head of Department: Prof. Dr. / Adel Nassar

Date: / / 2013