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: Second level Date of specification approval: 2013 A- Basic Information Title: Aliphatic organic chemistry Code: CH245

Credit Hours: 2 h Lecture: 1.5

Tutorial: 1Practical: 2Total: 2

- **B-** Professional Information
 - 1 Overall Aims of Course
 - Introduce the basic concepts of aliphatic chemistry.
 - Enable the graduate to distinguish between the different types of reagents and reactions.
 - Study the factors affecting the rate of free radical mechanism.
 - Enable the graduates to investigate the reaction mechanism of aliphatic reactions.
 - 2 Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding: After the completing the course the graduates should be able to

a1- Synthesis and reaction of aliphatic compounds.

a2- Nomenclature of all aliphatic compounds.

a3- Study as well as understanding the reactions of each compound towards oxidation, reduction and other types of reaction.

b- Intellectual Skills

b1- Apply a suitable preparation method to prepare a desirable aliphatic compound.

b2- Suggest an appropriate mechanism for a reaction.

b3- Predict products of a hypothetical reaction.

- c- Professional and Practical Skills
 - c1- Teach the graduates the nomenclature of all different classes according to the IUPAC system.
 - c2- Distinguish between different classes of aliphatic compounds.

d- General and Transferable Skills

d1- Improve the mode of thinking and self confidence to all the graduates.

3- Contents

Торіс	No. of	Lecture	Tutorial/Practical
	hours		
Nomenclature	2	1	-
Alkane	2	1	-
Alkene	2	1	-
Alkyne	2	1	-
Alchols	4	2	-
Acids	4	2	-
Aldehyds and	4	2	-
ketones			
Amines	4	2	-

4– Teaching and Learning Methods 4.1-lectures

5- Graduate Assessment Methods

5.1 written examination to assess the understanding Assessment Schedule

Assessment 1 short exam (class activities) Every two weeks

- Assessment 2 mid-term (written) Week 8
- Assessment 3 final-term (written) Week 14

Weighting of Assessments

Mid-Term Examination 20%

d2- Increase the ability to face and solve any problem in the field of the course.

Final-term Examination	60%
Semester Work	20%
Total	100%
6- List of References	
6.1- Course Notes	
Prepared in the formed b	book authorized by the
department.	
6.2- Recommended Book	S
Aliphatic chemistry book	IS .

7- Facilities Required for Teaching and Learning Overhead projector.

Course Coordinator: Prof. Dr. / Ahmed Abdel-meged

Head of Department: Prof. Dr. / Adel Nassar

Date: / /