

University Benha

Faculty Science

### Course specifications

Programme (s) on which the course is given Chemistry – Appl chem.- **Chem/phy-**

Major or minor element of programmes **Major**

Department of offering the programme Chemistry

Department offering the course **Chemistry**

Academic year /Level **2<sup>nd</sup> year / 1<sup>st</sup> term**

Date of specification approval **2008**

### A – Basic information

Title : **Organic Chemistry (1).** Code : **231 CH/Phy**

Credit Hours : Lecture : **3hour / week**

Tutorial : 1 hour/week Practical : **Total : 4 hour /week**

### B – Professional Information

#### 1- Overall aims of course At the end of this course the students able to:

- a- Have knowledge specialized organic chemistry
- b- Understand of important basic principle rule of organic chemistry.
- c- Know classes of organic chemistry
- d- Know method of treatment of theoretical and practical organic chemistry

#### 2- Intended learning outcomes of course (ILOS)

##### a- Knowledge and understanding:

- a1-** classify of organic compounds
- a2-** Name of complex organic compounds
- a3- Know** basic principles of organic compounds
- a4 – Treat physical and Chemical reaction of organic compounds
- a5 – Prepare of organic compounds

##### b-Intellectual skills

- b1-** Exercise on naming organic compounds
- b2-** Classify organic compounds
- b3- Make the different mechanisms of organic reactions
- b4- solve problems of naming and make conversions between related topics**

##### c-Professional and practical skill:

**c1-** Collect knowledge about naming, physical and chemical reactions of organic compounds

**c2-** Prepare organic compounds

**c3-** Convert between different classes of organic compounds

**d- General and transferable skills:**

**d1-** Make work shop in training of preparation of organic compounds

**d2 –** Solve problems of organic compounds

**d3-** Suggest the mechanism of any organic reactions

**3- Contents**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial</b>
Classification of organic compounds	4	3	1
Hybridization of organic compounds	8	6	2
Preparation and reactions of:			
alkanes	4	3	1
alkenes	4	3	1
alkynes	4	3	1
Alkyl halides	4	3	1
Alcohols	4	3	1
Aldehydes and ketones	8	6	2
Amines	4	3	1
Acids acid anhydride	4	3	1
Esters	4	3	1
<b>Total</b>	<b>52</b>	<b>13</b>	<b>13</b>

**4-Teaching and Learning methods**

**4.1- Lecture**

**4.2- Oral discussion**

**5-Student assessment methods**

**5.1-** Quiz exam (writing and oral during lecture time)

**5.2** writing exam to assess the knowledge and understanding

**5.3** Oral discussion **to assess the skills**

**5.4 Final exam to assess overall the course**

**Assessment Schedule**

Assessment Discussion.....week	3
Assessment Mid term .....	week 7
Assessment oral.....week	6
Assessment Final exam.....after week	14

### Weighting of assessments

Mid term examination	10%
Final term examination	80%
Oral examination	5%
Semester work	%
Other types of assessment	5 %
Total	100%

Any formative only assessments

### 6- List of references

#### 6.1- Course notes

Text notebook

#### 6.2-Essential books (text books)

- Solomons, graham – “fundamentals of organic chemistry”. 2003
- Francis A. Carey; Organic Chemistry, John Wiley & Sons, Inc. 2002
- Basic training in organic chemistry Steven L. Hoening 2002

#### 6.3- Recommended books

Organic chemistry Fifth Edition Jonh McMurry 1999

#### 6.4- Periodical web sites ... etc.

Science direct, google.com; Chemweb.com

### 7-Facilities required for teaching and learning

...Projector -data show.....

#### Course coordinator:

**Prof. Dr. Mohamed Helmy Arief.**

#### Head of Department:

Date: 10 / 10 /2007

