KINGDOOM OF SAUDI ARABIA Ministry of Education Al-Imam Mohammad Ibn Saud Islamic University College of Sciences Department of Chemistry



SYLLABUS

Course Code	Course Num.	Course Name	Credit Hours	Lec.	Lab.	Tut.	Private study	Pre-requisites	Course Level	Language
СНМ	203	Organic Chemistry	1	0	3	0	2	СНМ 202	3	English

A. Instructor information

Name	e-mail	Office phone	Office location	Office hours
	@imamu.edu.sa			

B. Course Description

This course is intended to introduce you to major concepts and techniques in organic chemistry through laboratory experiments. The Organic Chemistry Laboratory course will provide training in the techniques of the organic chemistry laboratory, such as carrying out chemical reactions and purification of chemical mixtures. Purification methods such as recrystallization, extraction, distillation, and column chromatography will be utilized. Chemical identification of unknown organic compounds and purity will be determined by assessing data from methods such as chemical tests, thin-layer chromatography (TLC).

C. Course Outcomes

At the end of this course the student will be able to:

- 1. To outline Chemical Behaviors of aliphatic organic compounds.
- 2. describe the theoretical bases of identifications of organic compounds.
- 3. define Structures and Reactivity relation.
- 4. name Organic Compound according to IUPAC system
- 5. define Structures and Reactivity relation.

References:

Required Textbook

- Vogel's' Textbook of Practical Organic Chemistry, Vogel, A.I., Tatchell, A.R., Furnis, B.S., Smith, P.W.G., Longman Group UK Limited, 5th Ed. 1989 ISBN 978-0-582-46236-6
- Organic Chemistry, John E. McMurry. Mary Finch (Cengage Group), 8ed (2012), | ISBN-10: 0495118370 | ISBN-13: 978-0495118374. 2012

Students are required to purchase the textbook/materials (it is an obligation). The book contains the lecture notes as well as activities for the students to take part in; the book serves as a workbook. Other references:

Course Website: Google Classroom Webpage: http://www.imamm.org/

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D. Topics Outline

Topics to be covered (Laboratories)						
Lab. 1	Laboratory Rules and Safety Precautions.					
Lab. 2	Identification of Organic Compounds; Physical Character (Physical Properties).					
Lab. 3	Crystallization, Melting Points, Boiling Points.					
Lab 4	Chromatography (Thin Layer Chromatography).					
Lab. 5	Detection of carbon and Hydrogen, Detection of nitrogen and Sulphur.					
Lab. 6	Detection of Halogens (Chlorine, Bromine, Iodine, Florine).					
Lab. 7 , 8, 9	Full Detection of Nitrogen, Sulfur, and Halogen in an unknown organic Compound Detection of Halogens					
Lab. 10	Classification of organic compounds, identification of aliphatic hydrocarbons					
Lab. 11	Classification of organic compounds, identification of aromatic hydrocarbons	3				
Lab. 12	Identification of Alcohols and Phenols					
Lab. 13	Identification of Carboxylic Acids					
Lab. 14	Revision and Reports Discussion	3				

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E. Exams & Grading System

The semi-official dates of the exams for this course are:

- Lab report: For each lab

- Final exam: 16th weak

	Teaching/learning activities	Contact Hours	Frequency	Total Contact hours	Self- study hours (hrs)	Total self- study hours	Student Learning Time
1	Lecture	0	0	0	0	0	0
2	Tutorial	0	0	0	0	0	0
3	Lab\Practical	3	14	42	0	0	42
4	Lab report	0	10	0	1	10	10
5	Homework	0	0	0	0	0	0
6	Quiz	0	0	0	0	0	0
7	Test (Midterm)	0	0	0	0	0	0
8	Final lab Exam	2	1	2	2	2	4
To	tal	30		16	56		

- Independent self-study = $14/15 \approx 1.1$ hrs per week (as average)

- Your course grade will be based on your semester work as follows:

Midterm 1: 20 %	Midterm 2: 20 %	Final Exam: 40 %	
Laboratory Performance and	Reports: 20 %		

The grading distribution:

A+	Α	B+	В	C+	С	D+	D	F
[95, 100]	[90, 95]	[85, 90)	[80, 85)	[75, 80]	[70, 75]	[65, 70)	[60, 65)	[0, 60)

F. Student Attendance/Absence

Only three situations will be considered as possible excused absences:

- Occurrence of a birth or death in the immediate family will be excused. ("Immediate family" is defined by the University as spouse, grandparents, parents, brother, or sister).
- Severe illness in which a student is under the care of a doctor and physically unable to attend class will be excused. Students are not





excused for a doctor's appointment. Do not make appointments that conflict with rehearsals. Notes from the University Health Center will be accepted.

Executive Rules for Study Regulations and Exams

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