



SYLLABUS

A. Course Description

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

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).

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

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

B. References: Required Textbook & Internal Website

I shall use

- 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:

Google Classroom Webpage: <http://www.imamm.org/>

C. Topics Outline

Disclaimer: this is a very fast-paced course. There will be little time—if any—for review. What follows is an approximate outline of the pace of the course. We may go faster or slower, contingent on the class response. The tentative list of topics to cover:

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, Fluorine).
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
Lab. 12	Identification of Alcohols and Phenols
Lab. 13	Identification of Carboxylic Acids
Lab. 14	Revision and Reports Discussion

Exams & Grading System

The semi-official dates of the exams for this course, with all the caveats, that the word “semi-official” entails, can be found here:

- **Midterm 1:** 6th or 7th week & **Midterm 2:** 11th or 12th week
- **Quizzes & Homeworks: During the semester**

Your course grade will be based on Final Exam, Midterms, Homework, Quizzes, Participation, Attendance and Project.

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

Grading distribution:

A⁺: [95, 100], **A:** [90, 95), **B⁺:** [85, 90) , **B:** [80, 85), **C⁺:** [75, 80), **C:** [70, 75), **D⁺:** [65, 70), **D:** [60, 65), **F:** [0, 60).

D. 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](#)

goo.gl/ykm7t3

Copy short URL

