

Department of ... General Science.

College ofBasic Education.

University ofSalahaddin

Subject:Organic Chemistry.

Course Book: (3- stage)

Lecturer's name. MSc. Snowber M. Ahmed

Academic Year (2023–2024)

Course Book

1. Course name	Organic Chemistry
2. Lecturer in charge	L. Snowber M. Ahmed
3. Department/ College	General Science / Basic education collage
4. Contact	e-mail: snowber.ahmed@su.edu.krd
	Tel: 0754026887
5. Time (in hours) per	Theory: 2
week	Practical: 3
6. Office hours	10 hrs
7. Course code	
8. Teacher's academic	In 1997 graduated from chemistry department in
profile	Education college / Salahaddin University ,in 2004
	I started worked in Koya Technical Instituted as
	assist lecturer after qualify master's degree in
	Biochemistry from Baghdad University Ibn-
	Alhaitham college, in 2009 I was admission to
	academic staff of general science department from
	basic education college.

9. Keywords: Alkanes, Alkenes, alkynes, Aromatics

10. Course overview:

- This course will exposing the light on the organic molecules in chemistry. This course discuss the nature of carbon atom and the ability of its orbital to receive additional electrons.

The importance of organic compounds and the methods used in their preparation.

The types of reactions involved in organic molecules and the reasons of differences.

11. Course objective:

To distinguish between the organic and inorganic molecules, the effect of bond type in determining the type of reaction in organic molecules.

In addition the types of groups existing in an aromatic ring in determining the type of substitution ortho, para, or meta.

12. Student's obligation

The role of students and their obligation throughout the academic year are the Attendance and completion of all tests, examinations, and homework's.

13. Forms of teaching

- white board
- hand out
- data show

14. Assessment scheme:- there is two main exams

1- May

Theory (15 marks) **Practical** (35 marks) 2- Final exam (50marks)

(100%)Total marks:

15. Student learning outcome:

The student will have the experience with the different organic molecules and the methods available in carrying out them in addition he will learn the methods of preparation and the type of reactions used to these Alkanes, Alkenes, Alkynes......etc

16. Course Reading List and References:

1. General organic chemistry

2. Advanced organic chemistry

17. The Topics:	Lecturer's name		
 The specifications of carbon atom Alkanes, specifications and their nomenclature. Preparation of alkanes Reactions of alkanes 	(1 st week) (2 nd week) (3 rd week) (4 th week)		

Ministry of Higher Education and Scientific research	
Alkenes, specifications, activity and nomenclature.	(1 st week)
Preparation of alkenes, Reactions of alkenes	(2 nd week)
Some important mechanisms in alkenes reactions.	(3 rd week) (4 th week)
Acetylenes; activity, nomenclature and specifications	(1 st week)
Preparation of acetylene, Reactions of acetylene.	(2 nd week)
Aromatic compounds: Formula and nomenclature	(3 rd week)
,Ortho , Para, and Meta directory groups	(4 th week)
Alcohols: Structure & nomenclature	
Preparation of alcohols, Reactions of alcohols.	
Carboxylic acids: introduction and nomenclature	
Special methods for synthesis of carboxylic acids.	
Chemical reactions of carboxylic acids.	
Dicarboxylic acids: formula and nomenclature	
Reactions of benzene ring.	
Amines: types & nomenclature	
Preparation & Reactions of Amines	
18. Practical Topics (If there is any)	
· · · · · · · · · · · · · · · · · · ·	Dr. Bakhtiar Kakel
Method of purification	Snowber M. Ahmed
Distillation – normal distillation	
Fractional distillation	(3 hrs)
Vacuum distillation	
Sublimation	
Recrystallization	
Extraction	
➤ Soup	
> Aspirin synthesis	
Synthesis of polymer	

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