

Department of ...Food Technology..... College ofAgricultural Engineering Science..... University of ...Salahaddin..... Subject:Practical organic chemistry.... Course Book – *year 2* Lecturer's name MrS. Sawen Manaf Ezzalddin Academic Year: 2023/2024

1.Course name	Practical Organic chemistry
2.Lecturer in	Assistant lecture :Sawen Manaf Ezzalddin
charge	
3.Department/	Food Technology/College of Agriculture Engineering Sceince
College	
4.Contact details	Email:sawen.ezzalddin@su.edu.krd
5. Time (in hours)	Theory:2
per week	Practical :3
6. Office hours	Monday (8:00 AM-2:30PM)
7. Course code	
8. Teacher's	Bsc:in food technology in 2010,in food chemistry in 2019
academic	
9. Keywords	Boling point,Caffien,asprine , soap
10. Course overview:	
Organic chemistry lab it's the magnificent way to understanding students from	
hand working in laboratory and we learn various properties of the	

compounds, thier chemical behaviors and predict the mechanism of various

reaction and we also different method for purification ,extraction and preparation of various compound. However in practical organic chemistry understanding students numerous applications in our lives like caffeine extraction in tea, in addition, cleaning product like soaps ofen come from organic material.

11. Course Objectives:

The general objective of the course is to acquaint the student with the basic roles of organic chemistry, At the end of the course, the student will be able to:

(1) Define and differentiate boiling point and melting point.

(2) Describe purification of Solid and liqud Organic Compounds .

(3) Define distillation and study type of distillation.

(4) Explain the importance of caffeine and extraction from tea .

(5) Study the method for Preparation of Aspirin.

12. Student's obligation

I will have written the name of student absences and it have the degree. After that they dress lab coat and his palm and every week they have quiz and report and in the end the students have exam by monthly and finally.

13. Forms of teaching

I use sheets and white board and data show.

14. Assessment scheme

%35=%25 exam ,%1 absent, %5 quiz, %1 lab coat %3 practical working activity

15. Student learning outcome:

This is a list of very specific learning objectives for organic chemistry lecture. The lab will also provide hands-on opportunities to develop and apply this knowledge. If a specific objective is also partially addressed with an experiment,

then the experiment number has been included in parenthesis.

16. Course Reading List and References:

John Wiley and Sons.2000.Labrotary manual for principles of general chemistry 6th edition .ISBN 0-471-31452-8.

Francis A.Carey .2006.organic chemistry 6th edition .

Reinhart keese, M.P.Brandle and T.P.Toube.2006.Practical organic synthesis :a students guide.1th edition.ISBN-13:978-0470029664.

17. The Topics: Lecturer's name

18. Practical topice:

1.Purification of Solid Organic Compounds by Recrystallization

2. Purification of liquid organic compounds by Distillation

3. Extraction by active organic solvent

4. Extraction of Caffeine from Tea

5. Preparation of Acetic acid

6. Preparation of Aspirin (Acetyl Salicyclic Acid)

7.Preparation of Esters R-COOR

8. Preparation of Soap

9. Preparation of fertilizer

19.Examination Q1/ Define the following:

recrystalization, caffeine

Q2/ What are the differences between products with a boiling point and melting point?

Q3/ Write whether these statements are true (T) or False (F) and correct the each false.

Q4/ Enumerate the following: 1- Disadvantage of ether 2-Type of distillation

Q5/ Choose the correct answer:

1- The symbol of Partition coefficient

a- C b- D c- P

2- the process used in the separation of orange oil a- Simple distillation b- Steam distillation c- vacuum distillation

3- Simple distillation is used for separation of liquid organic compounds having difference in boiling points by

a- 55°C b-45°C c-43°C