



Department of Food technology

College of Agriculture Engineering sciences

University of Salahaddin- Hawler

Subject: Food packaging technology

(Theoretical & Practical)

Course Book – 4rd Year students- Second semester

Lecturer's name Dr. Rozhgar Kamal Mohammed

M.Sc. Evan Butrus Ilia

Academic Year: 2022/2023

Course Book

1. Course name	Food packaging technology
2. Lecturer in charge (theoretical) (practical)	Dr. Rozhgar Kamal Mohammed M.Sc. Evan Butrus Iliia
3. Department/ College	Food technology- University of Salahaddin
4. Contact	e-mail: rozhgar.Mohammed1@su.edu.krd e-mail : evan.ilia@su.edu.krd
5. Time (in hours) per week	Theory : 2
6. Office hours	Sunday 12-30 2-30 Tuesday : 8:30-11:30 ,11:30 – 14:30
7. Course code	
8. Teacher's academic profile	I have over ten years experience in the food technology. After MSc. Courses, working as a lecturer at my department and other departments at the subjects of (Principle of dairy science- fat oils,- Butter & ice cream- Food safety –Food quality control- Food packaging-Dairy microbiology – food processing – principles of food science) for introducing students to a practical field in real life by standing cooperation with public and private sectors by visiting factories in Erbil .
9. Keywords	Packaging materials - scavenger - intelligent packaging
10. Course overview:	Characteristics, dividing, types and properties of packaging and packaging materials. Barrier effects of packaging. Active and intelligent packaging. Modified atmosphere packaging. Edible and biodegradable packaging. Food packaging systems.

11. Course objective:

- To impart comprehensive overview of the scientific and technical aspects of food packaging.
- To instil knowledge on packaging machinery, systems, testing and regulations of packaging.
- To understand the reason(s) why the use of food packaging has increased.
- To identify the aims of packaging food.
- To understand the importance of food labelling.
- To identify common examples of food packaging.

12. Student's obligation

The topics of syllabi will be distributed for students, and the students recommended studying all topics in the lectures at home before lecture time, and having quiz.

This course will benefit those who wish to gain a better understanding of food packaging technology."

13. Forms of teaching

After preparing the lectures and printing it, data show and power point is used for expressing the subject, solving and discussing mathematical problems will be done on white board.

14. Assessment scheme

45 MARK FOR EXSAM +5 MARK STUDENT ACTIVITY LIKE COUISE TEST REPORT =50 MARK

Two Examinations will be done at the whole course, presence and the absence of the students recorded by the lecturer and returns to themselves and the menace of the absence articulated at the beginning of the course, because the time-generally- do not help the lecturers and the halls are not standardized therefore I see that the verbal quizzes can be performed within the students share at the lectures.

15. Student learning outcome: Agricultural(food technology) subjects especially the subjects that has practical parts needs adequate time to perform what you want to give you students , within the lectures the students will participate at translating the theoretical information to a practical sides. The level of the benefits depends upon the number of the instruments and the time for working and training on them.

16. Course Reading List and References:

▪Key references:.

1. Coles R, McDowell D and Kirwan MJ, Food Packaging Technology, CRC Press, 2003
2. Robertson GL, Food Packaging – Principles and Practice, CRC Press Taylor and Francis Group, 2012.
3. Food packaging Central Campus of Technology Hattisar, Dharan
Sandesh Paudel
4. Food Packaging: Principles and Practice, Third Edition ,
Gordon L. Robertson

▪Useful references:

- 1- Jenkins WA and Harrington JP, Packaging Foods with Plastics, Technomic Publishing Company Inc., USA, 1991
- 2- Paine FA and Paine HY, A Handbook of Food Packaging, Blackie Academic and Professional, 1992

17. The Topics: theory

Lecturer's name

No.	Title of the Subject	ex:(2 hrs per week)
Week 1	Introduction to Food Packaging	
Week 2	The value of packaging to society	
Week 4	Packaging Functions and Requirements	
Week 4	Packaging specification and standard	
Week 5	Active packaging	
Week6	Active packaging	
Week7	Active carbon dioxide scavenger	
Week8	Modified atmosphere packaging	
Week9	Modified atmosphere packaging	
Week10	Packaging of different food	

Week11	Packaging of different food	
Week12	Intelligent packaging	
Week13	Types of scavenger	
Week14	The future of packaging	
Week 15	Exam	
18. Topics	Practical	(3 hrs)
Week 1	Packaging materials	
Week 2	Metal packaging	
Week 3	Metal packaging	
Week 4	Plastics packaging	
Week 5	Plastics packaging	
Week 6	Glass packaging	
Week 7	Glass packaging	
Week 8	Paper and paperboard packaging	
Week 9	Paper and paperboard packaging	
Week 10	Wood and shipping containers	
Week 11	Evaluation of packaging materials	
Week 12	Evaluation of packaging materials	
Week 13	Evaluation of packaging materials	
Week 14	Evaluation of packaging materials	
Week 15	Exam	
19. Examinations:		
Q1/ Define the following:		

Q2/ Write differences between:

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

Q4/ Explain why?

Q5/ Fill the following table with appropriate words or term (matching):

Q6/ Fill the blanks with the suitable word or phrase.

20. Extra notes:

5 MARK STUDENT ACTIVITIES LIKE COUISE TEST REPORT.