



Department of Food Technology

College of Agriculture

University of Salahaddin

Subject: Principles of Food Sciences (Practical)

Course Book – 1st Year students

Lecturer's name: M.Sc. Srwa Ramadhan Hamza

Academic Year: 2022/2023

Course Book

1. Course name	Principles of Food Sciences (Practical)		
2. Lecturer in charge	M.Sc. Srwa Ramadhan		
3. Department/ College	Food Technology – Agriculture		
4. Contact	e-mail: srwa.hamza@su.edu.krd		
5. Time (in hours) per week	Practical: 6		
6. Office hours	Sunday: 8:30 – 11:30 and 11:30-2:30		
7. Course code			
8. Teacher's academic profile			
<u>Academic achievements and Qualifications: (starting from the most recent degree)</u>			
From- To	Degree	College-University	Country
2007 to date	M. Sc. in Food Technology	College of Agriculture - University of Musl	Iraq
1997	B.Sc. Biology , Department of Biology	College of Education - University of Salahaddin	Iraq
<u>Experiences: (starting from the most recent position), please mention Year, Position and Place</u>			
<u>1- Assignments and Posts:</u>			
From- To	Post	Department -College	University
2007 to date	Assistant Lecture	Food Technology Department - College of Agriculture	Salahaddin University
<u>2- Teaching Activities</u>			
From- To	Subject	Stage-College	University
			Salahaddin University
			Salahaddin University
9. Keywords	Food, Science, Technology		

10. Course overview:

Food Sciences is the application of food science (science and engineering) to the selection, packaging, distribution, preservation, processing and use of safe, nutritious, and wholesome food. Therefore, many food technologists are food scientists rather than engineers.

The course includes different ways for the preparation of solutions in addition to the food technology experiments (preservation of foods using different methods).

11. Course objective:

The students are required to do at least two closed exam through the semester for practical course besides other assignments. All exams have 4 marks which meaning summation of it equal to 8 marks, 2 marks on the absence and eventually 2 marks on the quizzes and homework.

12. Student's obligation

Each student at the end of the course must be preparing a report.

13. Forms of teaching

Data show and white board

14. Assessment scheme

The students are required to do two closed exams during the course period. All exams have 20% marks; the quiz tests have 5% marks, the attendance, classroom, activities, absence count 5% marks. So that the final grade will be based upon the following criteria:

Exams (closed): 10%

Classroom participation and assignments: 5%

Practical exams: 10%

Quiz tests: 5%

Final Exam: 60% which include 40% for theoretical and 20% for practical.

15. Student learning outcome:

Students should know the basic principles and have actual practice with the operational techniques of a wide variety of principles of food sciences.

16. Course Reading List and References:

The student can find additional information and examples in the following references:

- 1) Food Processing Technology; Principles and Practice / Second Edition; p. Fellows.
- 2) Preservatives in Food and Food Examination; John C. Thkesh, and Aethuk E. Poktek

17. The Topics:	Lecturer's name
Preliminary Concept of Food Technology, Common Apparatus and Basic Techniques	M.Sc. Srwa Practical: 3 hrs
Solutions	Week 1
Preparation of Solution	Week 2
Preparation of solution by Person Square	Week 3 Week 4
Methods used for the determination of solutions concentration	Week 5
First Closed Exam	Week 6
Food Preservation (using low temperature) – Freezing	Week 7
Food Preservation by Drying	Week 8
Preservation of Food by Fermentation (Alcoholic Fermentation)	Week 9
Fruit juices and syrup	Week 10
Preservation of food by adding sugar (Jam)	Week 11
Enzyme activity	Week 12
Food Irradiation	Week 13
Second Closed Exam	Week 14
18. Practical Topics (If there is any)	
19. Examinations:	
20. Extra notes:	
21. Peer review	