



### Course Syllabus

1	Course title	Principles of Food Science
2	Course number	633220
2	Credit hours (theory, practical)	2
3	Contact hours (theory, practical)	2
4	Prerequisites/corequisites	
5	Program title	BSc. in Food Science and Technology
6	Program code	042
7	Awarding institution	The University of Jordan
8	School	Agriculture
9	Department	Nutrition and Food Technology
10	Level of course	BSc., second year
11	Year of study and semester (s)	First semester
12	Final Qualification	BSc
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	2019

#### 16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed. Prof. Ghadeer F. Mehyar, 11:00-12:00 Sunday, Tuesday and Thursday 10:00-11:00 & 12:00 :14:00 Monday and Wednesday g.mehyar@ju.edu.jo

### 17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed. Non

### 18. Course Description:

Main definitions and principles of food science and technology; the composition of foods and their role in food processing; the influence of processing on food attributes; causes of food spoilage and an introduction to the principles of food preservation methods.

#### 19. Course aims and outcomes:

#### A- Aims:

- \* Define the scope of food science and technology.
- \* Describe food categories and their characteristics.
- \* Understand the chemistry of food components and their effects on its quality.
- \* Explain reasons why foods are processed.
- \* Explain how food spoilage occurs and its causes.
- \* Explain the principles of the food preservation methods.
- \* Explain the components of food quality and the different quality factors.
- \* Food laws and regulations in Jordan.
- \* Food inspection systems in Jordan.
- \* Status of food processing in Jordan.
- \* Understand some new concepts in food science i.e. GMO, food toxicants, food security, etc.
- B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to
- **A1-** Define the scope of food science and technology
- **A2-** Describe food categories and their characteristics.
- A3- Understand the chemistry of food components and their effects on its quality.

## B. Intellectual Analytical and Cognitive Skills: Student is expected to

- **B1** Explain reasons why foods are processed.
- **B2** Explain how food spoilage occurs and its causes.

### C. Subject- Specific Skills: Students is expected to

- C1- Explain the principles of the food preservation methods
- C2- Explain the components of food quality and the different quality factors.
- C3- Understand some new concepts in food science i.e. GMO, food toxicants, food security, etc.

### **D. Transferable Key Skills:** Students is expected to

- **D1** Food laws and regulations in Jordan.
- **D2** Food inspection systems in Jordan.
- D3- Status of food processing in Jordan.

### 20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction	1	Prof. Ghadeer Mehyar	A-1	Exams & class participation	Chapter 1, 2 Food science potter and Hotchkiss(199 5)
- Food science and technology: The profession. -Food categories.	2 -4	Prof. Ghadeer Mehyar	A-2	Exams & class participation	Understanding Food Science and Technology. Murano (2003)

Chemistry of food components.	5-7	Prof. Ghadeer Mehyar	C-2, C-3, B-2	Exams & class participation	Food science potter (1995)
food spoilage					
Food quality factors and their measuring methods.	8 -10	Prof. Ghadeer Mehyar	A-3, B-1, C-2	Exams & class participation	Understanding Food Science and Technology. Murano (2003).
Food preservation by heat treatment.	11	Prof. Ghadeer Mehyar	A-3, B-1, C-1, D-1,	Exams & class participation	Understanding Food Science and Technology. Murano (2003)
Food presentation at low temperature	12-13	Prof. Ghadeer Mehyar	C-1. C-2, B-1	Exams & class participation	Understanding Food Science and Technology. Murano (2003)
-Food preservation by lowering water Activity -Food Evaporation.	14	Prof. Ghadeer Mehyar	A-3, D-2	Exams & class participation	-JISM -JFDA
Food regulations and inspection in Jordan.	15	Prof. Ghadeer Mehyar	A-4, D-1	Exams & class participation	Understanding Food Science and Technology. Murano (2003)
Food Additives	16	Prof. Ghadeer Mehyar	A-1, A-3, A-4, B-1, C-1	Exams & class participation	Understanding Food Science and Technology. Murano (2003).

# 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods: Lectures and student participation

## 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods
and requirements:
Students outcome grades
Students evolutions
Course evaluation
Course evaluation
23. Course Policies:
A. Attendance policies:
In case if the absence exceeded 15%, the student will automatically will fail the course.
B- Absences from exams and handing in assignments on time:
Makeup exam will be assigned. Postponing the assignment delivery time could be provided.
C- Health and safety procedures:
Are instructed from the beginning of the course.
D- Honesty policy regarding cheating, plagiarism, misbehavior:
Withdrawal of the exam
E- Grading policy:
It is given to the students from the beginning of the course.
F- Available university services that support achievement in the course:
Labs are well equipped for this purpose.
<b>24. Required equipment:</b> (Facilities, Tools, Labs, Training)
25. References:
Required book (s), assigned reading and audio-visuals:
Potter, N. and Hotchkiss, J. (1995). Food Science, 4th edition. Chapman and Hall.
Recommended books, materials, and media:
Murano, P.S. (2003). Understanding Food Science and Technology.
Thomson, Australia.
26. Additional information:
Non

Name of Course Coordinator:Prof. Ghadeer F. N	MehyarSignature: Date: 28th Nov 2019
Head of curriculum committee/Department:	Signature:
Head of Department:	Signature:
Head of curriculum committee/Faculty:	Signature:
Dean:	Signature: