The Hashemite University		**Approval date:**
Faculty of App. Med. Sci.		**Issue:**
Department of Clinical Nutrition and Dietetics		**Credit Hours 3 hrs**
The academic year 2021/2022	**Course Syllabus**	**Bachelor**

Course information

Course#	Course title		Prerequisite
140502220	**Introduction to food science**		**140502210 or 1905021211**
Course type		**Class time**	**Room #**
☐ University Requirement ☐ Faculty Requirement ☒ Major Requirement ☐ Elective ☒ Compulsory		**9-10 Sun, Tue, Thur**	**مجمع قاعات ابن خلدون م.غ.1**

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail
Buthaina Alkhatib				**bkhatib@hu.edu.jo**

Course Delivery Method

Course Delivery Method		
☐ **Physical**	☐ **Online**	☒ **Blended**

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.

Course Learning Outcomes

Number	Outcomes
	Knowledge
K1	Knowledge and Understanding: The student is expected to: 1. Define the scope of food science and technology 2. Describe food categories and their characteristics. 3. Understand the chemistry of food components and their effects on their quality.
K2	Intellectual Analytical and Cognitive Skills: The student is expected to: 1. Explain reasons why foods are processed. 2. Explain how food spoilage occurs and its causes.
	Skills
S1	1. Explain the principles of the food preservation methods

	2. Explain the components of food quality and the different quality factors. 3. Explain food package types and differences.
S2	Understand some new concepts in food science i.e. GMO, food toxicants, food security, etc.
S3	1. Food laws and regulations in Jordan. 2. Food inspection systems in Jordan. 3. Status of food processing in Jordan
Competencies	
C1	-

Learning Resources

Course textbook	1. Potter, N. and Hotchkiss, J. (1995). Food Science, 4th edition. Chapman and Hall. 2. Murano, P.S. (2003). Understanding Food Science and Technology. Thomson, Australia.
Supporting References	Lecture notes, handouts & articles
Supporting websites	www.JFDA.gov
Teaching Environment	☒**Classroom** ☐ **laboratory** ☒**Learning platform** ☐**Other**

Meetings and subject's timetable

Week	Topic	Learning Methods	Tasks	Learning Material
1	1. Introduction			Chapter 1, 2 Potter and Hotchkiss (19-95)
2-4	2. Food Science and Technology: principles 3. Food selection	Lecture		Understanding food science and Technology Morano (2003)
5-7	4. Chemistry of food components. 5. Causes of food spoilage	Lecture	Assignment	Potter (1995)
First-hour exam 3/4/2022				
8-10	6. Food quality factors and Their measuring methods.	Flipped class	Report	Morano (2003)
11-12	7. Food preservation	Lecture	Short exam	Morano (2003)
13-14	8. Food evaluation	Collaborative learning	Quiz	Morano (2003)
Second-hour exam 8/5/2022				
15	9. Food operation	Lecture		
16	10. Food packaging	Lecture	Short exam	Food science Potter (1995)
Final Exam				

* Includes: Lecture, flipped Class, project-based learning, problem-solving based learning, collaborative learning

Course Contributing to Learner Skill Development

Using Technology
Using different scientific websites to collect data about nutrient requirements
Communication skills

Prepare a report about food composition and analysis and make a presentation
Application of concepts learned
Calculation of food composition components

Assessment Methods and Grade Distribution

Assessment Methods	Grade Weight	Assessment Time (Week No.)	Link to Course Outcomes
First-hour Exam	**25%**	**6th week**	**K1, K2**
Second-hour Exam	**25 %**	**12th week**	**K1, S2**
Various Assessments *	**10%**	**Continuous**	**K1, K2, S1**
Final Exam	**40%**	**16th week**	**K1, K2,S1, S2,S3**
Total	**100%**	**100%**	

* includes a quiz, in-class and out-of-class assignment, presentations, reports, videotaped assignments, group or individual projects.

Alignment of Course Outcomes with Learning and Assessment Methods

Number	Learning Outcomes	Learning Method*	Assessment Method**
Knowledge			
K1	Knowledge and Understanding: The student is expected to: 1. Define the scope of food science and technology 2. Describe food categories and their characteristics. 3. Understand the chemistry of food components and their effects on its quality.	Lecture	**Assignment**
K2	Intellectual Analytical and Cognitive Skills: The student is expected to: 1. Explain reasons why foods are processed. 2. Explain how food spoilage occurs and its causes.	Flipped class	**Quiz + Assignment**
Skills			
S1	1. Explain the principles of the food preservation methods 2. Explain the components of food quality and the different quality factors.	Lecture	**Quiz**
S2	Understand some new concepts in food science i.e. GMO, food toxicants, food security, etc.	Lecture	**Quiz**
S3	1. Food laws and regulations in Jordan. 2. Food inspection systems in Jordan. 3. Status of food processing in Jordan	Lecture	**Report**
Competencies			
C1	**-**	-	**-**

* Includes: Lecture, flipped Class, project-based learning, problem-solving based learning, collaborative learning

** includes a quiz, in-class and out-of-class assignment, presentations, reports, videotaped assignments, group or individual projects.

Course Polices

Policy	*-- Policy Requirements
Passing Grade	The minimum passing grade for the course is (50%) and the minimum final mark recorded on the transcript is (35%).
Missing Exams	• Missing an exam without a valid excuse will result in a zero grade to be assigned to the exam or assessment. • A Student who misses an exam or scheduled assessment, for a legitimate reason, must submit an official written excuse within a week from an exam or assessment due date. • A student who has an excuse for missing a final exam should submit the excuse to the dean within three days of the missed exam date.
Attendance	The student is not allowed to be absent more than (15%) of the total hours prescribed for the course, which equates to six lectures days (M, W) and seven lectures (S,T,R). If the student misses more than (15%) of the total hours prescribed for the course without a satisfactory excuse accepted by the dean of the faculty, s/he will be prohibited from taking the final exam and the grade in that course is considered (zero), but if the absence is due to illness or a compulsive excuse accepted by the dean of the college, then withdrawal grade will be recorded.
Academic Honesty	Philadelphia University pays special attention to the issue of academic integrity, and the penalties stipulated in the university's instructions are applied to those who are proven to have committed an act that violates academic integrity, such as cheating, plagiarism (academic theft), collusion, and violating intellectual property rights.

Assessment Rubric of the Program Learning Outcome

It will be introduced to the students for all required task