

## Course Syllabus

1	<b>Course title</b>	Current Developments in Food Science
2	<b>Course number</b>	0603427
3	<b>Credit hours (theory, practical)</b>	3
	<b>Contact hours (theory, practical)</b>	Theory
4	<b>Prerequisites/corequisites</b>	--
5	<b>Program title</b>	Food Science and Technology
6	<b>Program code</b>	42
7	<b>Awarding institution</b>	The University of Jordan
8	<b>School</b>	Agriculture
9	<b>Department</b>	Nutrition and Food Technology
10	<b>Level of course</b>	BSc
11	<b>Year of study and semester (s)</b>	
12	<b>Final Qualification</b>	BSc
13	<b>Other department (s) involved in teaching the course</b>	--
14	<b>Language of Instruction</b>	English
15	<b>Date of production/revision</b>	2021

### 16. Course Coordinator:

Office number: 22426  
 Office hours:  
 E-mail address: [misaleh@ju.edu.jo](mailto:misaleh@ju.edu.jo)

### 17. Other instructors:

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### 18. Course Description:

Extending student skills by studying and highlighting certain recent developments related to food science and technology which are not covered in other courses of the study plan.

**19. Course aims and outcomes:**

<p>A- Aims:</p> <ul style="list-style-type: none"> <li>- Describe and identify the major research focus areas in food science and technology.</li> <li>- Discuss how to critically evaluate a food processing and or products including the impacts of food processing on food physicochemical properties.</li> <li>- Study the relationship between food composition and its functional properties.</li> <li>- Study the relationship between foods processing on food properties.</li> <li>- Advances in quality management systems in relation to food quality and safety.</li> </ul>
<p>B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to:</p> <p><b>A. Knowledge and Understanding:</b> Student is expected to</p> <p><b>A1-</b> Describe and identify the major research focus areas in food science and technology.</p> <p><b>A2-</b> Describe the influence of processing steps on food physicochemical properties..</p>
<p><b>B. Intellectual Analytical and Cognitive Skills:</b> Student is expected to</p> <p><b>B1-</b> Critically evaluates food processes.</p> <p><b>B2-</b> Understanding the basic features of food processing and products.</p> <p><b>B3-</b> Understanding relationship between food composition and functionally.</p>
<p><b>C. Subject- Specific Skills:</b> Students is expected to</p> <p><b>C1-</b> Explain the relationship between the particular process or treatment and its effect on food properties.</p> <p><b>C2-</b> Explain processing and preservation potential to improve food safety, quality and shelf life.</p>
<p><b>D. Transferable Key Skills:</b> Students is expected to</p> <p><b>D1-</b> Outline the basic approaches to utilize the new methods of food preservation to produce food.</p> <p><b>D2-</b> State the important functional properties of food components in the related products.</p>

**20. Topic Outline and Schedule:**

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Biological aspects of flavor perception and structure-activity relationships	(wk 1-2)		A-1,A2	Exams & Quizzes	
Genomics and biotechnology	(wk 3)		A-2,B1	Exams & Quizzes	

Flavors generated by enzymes and biological systems	(wk 4)		C-2, B-2	Exams	
Key aroma and taste components	(wk 5)		A-4, B-3, C-2	Exams & Quizzes	
Flavor changes in food production and storage	(wk 6)		D-1,B-3,C2	Exams & Quizzes	
Flavors generated by thermal processes	(wk 7-8)		A-2,D-2,B-3	Exams & Quizzes	
Retention and release	(wk 9-10)		A-1,B-2,C-2	Exams & Quizzes	
Sensory— instrumental relationships	(wk 11-13)		C-2, D-1	Exams & Quizzes	
Advanced instrumental analyses	(wk14- 16)		C-2,B-3,D-1	Exams & Quizzes	

## 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:	
<b>ILO/s</b>	<b>Learning Method</b>
A. Knowledge and Understanding (A1-A..)	Lectures and Discussions
B. Intellectual Analytical and Cognitive Skills (B1-B..)	Lectures and Discussions
C. Subject Specific Skills (C1-C....)	Lectures and Discussions
D. Transferable Key Skills (D1-D3...)	Project & presentation

## 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

ILO/s	Evaluation Method
A. Knowledge and Understanding (A1-A..)	Exams
B. Intellectual Analytical and Cognitive Skills (B1-B..)	Exams
C. Subject Specific Skills (C1-C....)	Exams
D. Transferable Key Skills (D1-D3...)	Projects presentation and homework assignments.

## 23. Course Policies:

- A- Attendance policies:
- B- Absences from exams and handing in assignments on time:
- C- Health and safety procedures:
- D- Honesty policy regarding cheating, plagiarism, misbehaviour:
- E- Grading policy:
- F- Available university services that support achievement in the course:

## 24. Required equipment: (Facilities, Tools, Labs, Training....)

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## 25. References:

1. Current Developments in Food and Nutrition Research, Editor(s): Celile Aylin Oluk and Oya Berkay Karaca, 2020
2. Flavor Science; Recent Advances and Trends Edited by Wender L.P. Bredie, Mikael Agerlin Petersen (2006)
3. Trends in Food Science & Technology Journal, Various volumes

## 26. Additional information:

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Name of Course Coordinator: **Prof. Mohammed Saleh**      Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----