

Course Syllabus

1	Course title	Food Processing
2	Course number	643345
3	Credit hours (theory, practical)	3 (2+1)
	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	603220
5	Program title	Food science and technology
6	Program code	042
7	Awarding institution	University of Jordan
8	School	Agriculture
9	Department	Nutrition and Food Technology
10	Level of course	3 rd and 4 th year
11	Year of study and semester (s)	1 st semester 2019/2020
12	Final Qualification	B.Sc.
13	Other department (s) involved in teaching the course	–
14	Language of Instruction	English
15	Date of production/revision	2019

16. Course Coordinator:

Dr Basem Al-Sawalha

Office numbers, office hours, phone numbers, and email addresses should be listed.
22407 Basem@ju.edu.jo

17. Other instructors:

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

18. Course Description:

As stated in the approved study plan.

Study of processing of food commodities including fruits and vegetables, beverages, sugar, chocolates and confectionary, meat, dairy, fats and oils and cereals.

19. Course aims and outcomes:

A- Aims:

At the end of the course, students are expected to:

- Explain reasons why foods are processed, including their freshness, nutritional value and to extend shelf life.
- Discuss how unit operations guide the processing of the wide variety of foods.
- Provide flowcharts to indicate the steps required to process foods.
- List the sequence of steps required to produce a specific processed food.
- Explain the steps in various types of food processing.
- Discuss the key processing aspects of the foods covered in the course.
- Discuss the effect of various processing methods on food products.
- Define technical terms related to food processing.
- Specify the ingredients used in food formulas and their processing functions..

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to:

A. Knowledge and Understanding: Student is expected to

A1- Explain reasons why foods are processed, including their freshness, nutritional value and to extend shelf life.

A2- Define technical terms related to food processing

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

B1- Discuss the key processing aspects of the foods covered in the course

B2- Discuss the effect of various processing methods on food products.

C. Subject- Specific Skills: Students is expected to

C1 -Discuss how unit operations guide the processing of the wide variety of foods.

C2 -Provide flowcharts to indicate the steps required to process foods.

D. Transferable Key Skills: Students is expected to

D1 -List the sequence of steps required to produce a specific processed food.

D2 -Specify the ingredients used in food formulas and their processing functions.

20. Topic Outline and Schedule

Topic	No. of lecture (s) /Week	Sources	ILOs
<ul style="list-style-type: none"> Introduction 	(wk 1)	Chapter 1 (Fellows)	A-1
<ul style="list-style-type: none"> Raw material preparation: Cleaning Sorting Grading peeling 	(wk 2-7)	Chapter3 (Fellows)	A-2
<ul style="list-style-type: none"> Size reduction 	(wk 8-9)	Chapter4 (Fellows)	C-2, C-3, B-2
<ul style="list-style-type: none"> Mixing and forming 	(wk 10)	Chapter5 (Fellows)	A-4, B-1, C-2
<ul style="list-style-type: none"> Bakery product processing 	(wk 11)	Chapter9 (smith&Hui)	A-2, B-1, C-1, D-1, D-2
<ul style="list-style-type: none"> Carbonated beverages 	(wk 12)	Chapter10 (smith&Hui)	C-1. C-2, B-1
<ul style="list-style-type: none"> Fruit Processing Vegetable processing 	(wk 13)		D-1, D-2,C-1
<ul style="list-style-type: none"> Cereal grains and pasta products processing Fat and oil processing 	(wk 14)	Chapter12 (smith&Hui)	D-1, C-2,C-1
<ul style="list-style-type: none"> Dairy products processing 	(wk 15)	Chapter16& 17 (smith&Hui)	C-1, D-1, C-2
<ul style="list-style-type: none"> Meat products processing Fish products processing 	(wk 16)	Chapter22& 23 (smith&Hui)	D-1, D-2,C-1

21. Teaching Methods and Assignments:

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

The course will be structured in lectures and discussions. The course comprises overviews, from general understanding to expert knowledge on key topics, and learning based on lectures as well as independent learning. A presentation project is also included in the evaluation process.

22. Evaluation Methods and Course Requirements:

ILO/s	Learning Methods	Evaluation Methods
A- Knowledge and Understanding (A1-A4)	Lectures and Discussions	Exams & Quizzes
B- Intellectual Analytical and Cognitive Skills (B1-B2)	Lectures and Discussions	Exams
C. Subject Specific Skills (C1-C3)	Lectures and Discussions	Exams
D-Transferable Key Skills (D1-D2)	Project & presentation	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, misbehavior:

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:

Required book (s), assigned reading and audio-visuals:

Smith, J. S. and Hui, Y. H. 2004. Food Processing: Principles and applications. Oxford, Blackwell Publishing.

Recommended books, materials, and media:

1-Fellows, P. 2000. Food Processing Technology. Boston, CRC Press.

2-Murano, P.S. 2003. Understanding Food Science and Technology. London, Thomson.

3- Food processing websites, Internet

26. Additional information:

Name of Course Coordinator: **Prof.Dr.Basem Al-Sawalha** Signature: ----- Date: -----

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

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

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

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