



Jordan University of Science and Technology
Faculty of Agriculture
Nutrition & Food Technology Department

NF378 Cereals Processing And Products

First Semester 2021-2022

Course Catalog

3 Credit Hours. Technical principles related to the production and commercial processing of legumes and cereal foods. The use of wheat, milling methods. Production of bread and wheat products

Text Book

Title	Kent's Technology of Cereals
Author(s)	Rosentrater, K. A and Evers, A.D.
Edition	5th Edition
Short Name	Ref #1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref #2	Cereal Grains: Properties, Processing, and Nutritional Attributes	Serna-Saldivar, S. O. (3rd Edition	2010

Instructor

Name	Radwan Ajo
Office Location	-
Office Hours	
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Class Schedule & Room

Section 1:

Lecture Time: Mon : 14:30 - 16:00

Room: قاعة الغزالي

Section 2:

Lecture Time: Wed : 14:30 - 16:00

Room: قاعة الغزالي

Prerequisites

Line Number	Course Name	Prerequisite Type
633750	NF375 Food Technology	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Introduction to cereals and pseudocereals	From Ref #1 , From Ref #2
Week 2	Botanical Aspects	From Ref #1 , From Ref #2
Week 3	Physical Properties of Grains and Grading	From Ref #1 , From Ref #2
Weeks 4, 5	Structure and Chemical Composition of Cereal Grains	From Ref #1 , From Ref #2
Week 6	Storage of Cereal Grains	From Ref #1 , From Ref #2
Week 7	Wheat Processing: Milling Operations	From Ref #1 , From Ref #2
Week 8	Manufacturing of Bakery Products	From Ref #1 , From Ref #2
Week 9	Manufacturing of Bakery Products: Pasta	From Ref #1 , From Ref #2
Weeks 10, 11	Manufacturing of Breakfast Cereals	From Ref #1 , From Ref #2
Weeks 11, 12	.Industrial Production of Modified Starches and Syrups	From Ref #1 , From Ref #2
Weeks 13, 14, 15	Functionality Tests for Wheat Flours	From Ref #1 , From Ref #2

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Identify the different cereal grains produced and used worldwide for the production of human foods with special emphasis on cereal grains produced/ utilized [1SLO1]	15%	
Characterize the chemical composition of edible cereal grains in relation to nutritional values and functional properties. [1SLO1, 1SLO3]	15%	
Understand the theory of storage of cereal grains in relation to maintaining grain quality and maximizing profits. [1SLO1, 1SLO3]	15%	
Understand the processes of dry and wet milling and recognize the end? products of this process and the use of these products in manufacturing human foods [1SLO1, 1SLO3]	15%	
Understand properties of ingredients used in baking of breads and reactions of these ingredients during processing into baked products. [1SLO1, 1SLO3]	10%	
Classify and understand the ingredients and processes used for manufacturing of today? s cereal grain?based food products (other than breads) such as cookies, cakes, breakfast cereals, pasta, noodles, flat breads, cereal?based snacks such as corn chips, etc [1SLO1, 1SLO3]	15%	
Understand the functionality tests for wheat flours [1SLO1]	15%	

Relationship to Program Student Outcomes (Out of 100%)				
SLO1	SLO2	SLO3	SLO4	SLO5
65		35		

Policy	
Attendance	Consistent with Jordan University of Science and Technology guidelines, students absent from regularly scheduled examinations because of authorized University activities will have the opportunity to take them at an alternate time. No make-up exams will be given for unexcused absences.
Withdraw	Consistent with Jordan University of Science and Technology guidelines

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