



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

NF375 Food Technology

First Semester 2022-2023

**Course Catalog**

3 Credit Hours. Production of food in the world with emphasis on Jordanian Food. The different methods of home food preservation; fermentation, sugar addition, concentration, and food additives. Food spoilage, pathogens transmitted via foods, toxins, insects, and parasites. Hygiene of processing plants and equipment

**Text Book**

<b>Title</b>	Principles of Food Processing
<b>Author(s)</b>	Dennis Heldman & Richard Hartel
<b>Edition</b>	3rd Edition
<b>Short Name</b>	Principles of Food Processing
<b>Other Information</b>	

**Instructor**

<b>Name</b>	<b>Prof. Taha Rababah</b>
<b>Office Location</b>	C4L3
<b>Office Hours</b>	
<b>Email</b>	trababah@just.edu.jo

**Class Schedule & Room**

Section 1:  
Lecture Time: Tue : 13:30 - 14:30  
Room: A2124

Prerequisites		
Line Number	Course Name	Prerequisite Type
921031	PHY103 General Physics	Prerequisite / Pass
632750	NF275 Principles Of Food Science	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Introduction	From <b>Principles of Food Processing</b>
Weeks 2, 3	Thermal Processing principles	From <b>Principles of Food Processing</b>
Weeks 4, 5	Pasteurization & Blanching	From <b>Principles of Food Processing</b>
Weeks 6, 7, 8	Commercial Sterilization	From <b>Principles of Food Processing</b>
Week 9	Refrigerated Storage	From <b>Principles of Food Processing</b>
Week 10	Freezing and Frozen-Food Storage	From <b>Principles of Food Processing</b>
Week 11	Liquid Concentration	From <b>Principles of Food Processing</b>
Weeks 12, 13	Dehydration	From <b>Principles of Food Processing</b>
Weeks 14, 15	Food Extrusion	From <b>Principles of Food Processing</b>
Week 16	Irradiation	<b>and from internet</b> From <b>Principles of Food Processing</b>

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Set up to learn about the principles of, and equipment for, processing of food with heat addition or removal, with deeper understanding of how different processing conditions and methods can affect the safety and quality of resulting food products. Important thermal food processing and preservation methods will be discussed. [12SLO1, 8SLO2, 5SLO3]	25%	
Identify and define key terms and explain processing and engineering principles related to addition or removal of heat in food and resulting quality. [9SLO1, 5SLO2, 13SLO3, 4SLO5]	30%	
Solve simple numerical problems associated with processing of foods, including thermal death kinetics [2SLO1, 5SLO2, 5SLO3, 4SLO4, 4SLO5]	20%	
Interpret solutions for the thermal and non-thermal processing and using two example of food modern preservation. [8SLO1, 6SLO2, 4SLO3, 7SLO5]	25%	

Relationship to Program Student Outcomes (Out of 100%)				
SLO1	SLO2	SLO3	SLO4	SLO5
30.71	23.84	26.58	4	14.87

Evaluation	
Assessment Tool	Weight
Med term Exam	35%
Final Exam	40%
Laboratory	25%

Policy	
Exams	All exams are closed book and notes. The final exam is comprehensive (covers all the material). Incomplete exams need approval from the dean of agriculture
Attendance	? Attendance at the lectures and laboratory exercises is mandatory. ? Absences should be justified and you should contact me prior the class period you will miss. ? An excessive number of absences will result not only will prevent you to complete this course, but also points deduction on your final grade.
Participation	Is necessary for the extra grades (pones)
Withdraw	According to the University policy.

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