Jordan University of Science and Technology
Faculty of Agriculture
Department of Nutrition and Food Technology
Semester 2007

Course Information	
Course Title	Food Technology
Course Number	NF 375
Prerequisites	NF 275
Course Website	
Instructor	Dr. Taha Rababah
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Teaching Assistant	

Course Description

NF 375 Principles of Food Processing is designed to give students an overview of the unit food processing operations common to all types of food processing plants. Examples will be drawn from national and international food processing operations that process fruits, vegetables, poultry and meats, oil seeds and cereal grains. The course emphasis is on developing basic skills expected of all food scientists. Focus is on oral communications and critical thinking skills.

Text Book	
Title	Principles of Food Processing
Author(s)	Dennis Heldman & Richard Hartel
Publisher	
Year	1999
Edition	
Book Website	
References	**Books**: Rick Parker. (2003). Introduction to Food Science. Food Chemistry 3rd edition by Fennema, O., 1996. Marcel Dekker, N.Y. Food Science. Potter & Hotchkiss. 5th edition. Introduction to food Eng. 3rd edition.2001. R Paul singh and Dennis R Heldman. **Journals** 1- J Food Sci 2- Journal of Food Technology 3- Food Engineering 4- Poultry Sci 5- Meat Sci 6- J Agri Food Chem

Assessment Policy		
Assessment Type	**Expected Due Date**	**Weight**
First Exam		30%
Second Exam		30%
Final Exam		40%
Assignments		

Course Objectives	Weights
1. Develop a processing sequence of unit operations and make initial suggestions on equipment, machinery and quality parameters for a wide-variety of processed foods	20%
2. Students will be able to explain the interaction among the influences on the processing requirements of individual foods.	25%
3. Students will have hands-on experience working with industrial associates to develop the skills they will need to work in the food industry. These include, but are not limited to: thermal processing calculations, heating characteristics, thermal death times, retort operations, can tear-down, quality evaluations of a wide-variety of food products.	15%

Learning Outcomes: Upon successful completion of this course, students will be able to		
Related Objective(s)		Reference(s)
1		Chapter 2 and Handouts
1,2		
1-6		
3,4		
5,6		
6		
5		

Course Content		
Week	**Topics**	**Chapter in Text (handouts)**
1	Introduction	
	Energy and mass balance	
	Thermal Processing principles	
	Pasteurization & Blanching	
	Commercial Sterilization	
	Refrigerated Storage	
	Freezing and Frozen-Food Storage	
	Liquid Concentration	
	Dehydration	
	Food Extrusion	