

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

<b>Course Information</b>	
<b>Course Title</b>	Dairy Processing
<b>Course Number</b>	NF 479
<b>Prerequisites</b>	NF 374
<b>Course Website</b>	---
<b>Instructor</b>	Dr Reyad Shaker
<b>Office Location</b>	C2L3
<b>Office Phone</b>	22110
<b>Office Hours</b>	
<b>E-mail</b>	reyadrs@just.edu.jo
<b>Teaching Assistant</b>	
<b>Course Description</b>	

<b>Text Book</b>	
<b>Title</b>	Milk and Milk products
<b>Author(s)</b>	Narnam, A.H. and J.P. Sutherland
<b>Publisher</b>	Chapman and Hall, UK.
<b>Year</b>	1996
<b>Edition</b>	
<b>Book Website</b>	
<b>References</b>	

<b>Assessment Policy</b>		
<b>Assessment Type</b>	<b>Expected Due Date</b>	<b>Weight</b>
<b>First Exam</b>		25%
<b>Second Exam</b>		25%
<b>Final Exam</b>		40%
<b>Lab</b>		10%

<b>Course Objectives</b>	<b>Weights</b>
The purpose of Dairy Processing course is to provide information on the process of milk and milk products and their relation to processing and the key roles of processing	%

### Teaching & Learning Methods

Through the course, the students will be working on the chemical, physical and microbiological analysis of milk in the lab. Also they will be trained on the manufacture of different types of dairy products, the training part will be conducted in the dairy plant of the department.

It is important that the students should visit one of the local dairy plants, which produce milk and milk products to get the information and knowledge from the plant.

**Learning Outcomes:** Upon successful completion of this course, students will be able to

Related Objective(s)		Reference(s)
1	The basic steps of the manufacture of milk and milk products	
2	The defects of dairy products	
3	Chemical, physical and microbiological analysis of milk in the laboratory	

### Useful Resources

Geoff, G. (1995). Dairy Science and Technology  
(from the internet)  
<http://www.foodsci.uoguelph.ca/dairyedu/home.html>.

### Course Content

Week	Topics	Chapter in Text (handouts)
1	Introduction to dairy processing and course outline	
2	Manufacture of liquid milk	
3	Manufacture of fermented dairy products (yogurt, labneh and jammed)	
4	Manufacture of cheese (different types)	
5	Manufacture of ice cream	
6	Manufacture of milk powders	
7	Ultrafiltration process (UF)	
8	Whey processing	

### Additional Notes

<b>Workload</b>	
<b>Graded Exams</b>	
<b>Participation</b>	
<b>Laboratory</b>	10%
<b>Projects</b>	