

**FOOD RESOURCES and SOCIETY**  
**3 credits (3,0)**  
Summer 1 2009  
**COURSE DESCRIPTION AND OBJECTIVES**

Description

FDSC 214 is a basic food composition, food safety, and food preservation course that elucidates impacts and interactions these three basic areas of food science with society. The main objective of the course is to introduce students to the basics of food science and also show how advances in food science have paralleled societal advances and also created social controversy.

Instruction Objectives and Course Goals

- (a) To identify major food components (proteins, carbohydrates, fats, water) and structures comprising these components (amino acids, fatty acids, simple sugars).
- (b) To understand factors affecting food safety and quality.
- (c) To understand the principles of food preservation with an emphasis on refrigeration, freezing, heating, dehydration, irradiation and fermentation.
- (d) To consider the relationship between advances in food preservation and production methods and the development of human societies.
- (e) To examine the responsibility of the food industry for the obesity epidemic in today's society.
- (f) To assess the societal effects of foodborne illness.

**INSTRUCTOR**

Dr. Paul L. Dawson is a Professor of Food Science. He received his undergraduate degree from Salisbury University, his M.S. from the University of Florida, and his Ph.D. from North Carolina State University. After a two-year post-doctorate at NCSU, he joined the Food Science and Human Nutrition Department at Clemson University. He has worked for Perdue Farms (MD) and has focused on Food Safety/Quality Research at Clemson, including bio-based and active packaging films, meat safety and quality, and animal co-product safety. He also teaches two graduate courses; FDSC 811 Physical & Thermophysical Properties of Foods, and FDSC 810 Chemical & Biochemical Aspects of Foods.

**REFERENCE INFORMATION**

Section Number 01,  
Online Class

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**Course Text: Understanding Food Science. 2001. Murano, P. Wadsworth/Thompson Learning, Belmont, CA**

**Supplemental reading: Guns, Germs, and Steel: The Fates of Human Societies. 1999. Diamond, J., W.W. Norton & Company, NY, NY.**

Required Reading Materials: Students may also be assigned selective journal or technical articles for reading. Due to copyright laws, the student will have to assume responsibility for any personal copying from the reference source.

## Grading

	<u>APPROXIMATE Percentage of total grade</u>
a. 2, 2.5 hour Examinations	40% (20% for each examination)
b. Quizzes and Class Assignments	20%
(Note: Materials not submitted by deadline dates and times receive the grade of F).	
c. Final Examination	20%
d. Food Item PowerPoint report	20%

Final grades will be tabulated based on the total points for the course accumulated from all grades (3 exams, quiz/assignments and food item PowerPoint report). Each exam or assignment will have a point value and these points will be totaled and the percentage of the points accumulated will be used to tabulate the midterm and final grade. Students will be able to check their grade status at anytime on the Blackboard grade book.

A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = <60%

## ACADEMIC INTEGRITY

As member of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a high seminary of learning. Fundamental to this vision is the mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

## FDSC 214 FOOD RESOURCES &amp; PRESERVATION

2009 Summer I TENTATIVE SCHEDULE

<u>Day</u>	<u>Date</u>	<u>Power Point Lecture</u>	<u>Assignment</u>	<u>Book Chapter(s)</u>
Tue	May 19	Introduction		1
Wed	May 20	None READ G,G,&S		Guns Germs & Steel
Thurs	May 21	Carbohydrates 1	Quiz 1	5,
Fri	May 22	Carbohydrates 2	Quiz 2	5, Chewing Gum History
Mon	May 25	Lipids 1		5 Unhappy meals
Tue	May 26	Lipids 2/chocolate	Quiz 3	5
Wed	May 27	Proteins		5, NY Times-Sweet Relief
Thurs	May 28	Alternative sweet/fat	Quiz 4	pages 79-80
Fri	May 29	Obesity		
<b>Food Topic Assigned</b>				
Mon	June 1	EXAM 1		
Tues	June 2	How food spoils		6
Wed	June 3	Water activity	Quiz 5	pgs.103-104,168, 215, 285
Thurs	June 4	Dehydration		13.5
Fri	June 5	Refrigeration/Freezing	Quiz 6	8.1
Mon	June 8	Therm Pro (D, Z value)		13.1 8.2, 8.3
Tues	June 9	Therm Pro (process calc)	Quiz 7	13.1 8.2, 8.3
Wed	June 10	No Lecture Read Stefansson		
Thurs	June 11	EXAM 2		
Fri	June 12	Organic foods		
Mon	June 15	Food Micro & Fermnt	<b>Food Topic PP due</b>	10
Tues	June 16	Food Safety	Quiz 8	11
Wed	June 17	Food Toxins		12
Thurs	June 18	Food poisoning readings	Quiz 9	
Fri	June 19	Other readings		
Mon	June 22	Food Item PowerPoint review		
Tues	June 23	FINAL EXAM		
Thurs	June 25	9:00 AM deadline to submit all grades		

**All Quizzes will be open for 24 hours on the date shown and students will have 1 hour to complete the quiz. Power Point lectures shown on the same day as the quiz will be included on that quiz except for quiz 1 which will not include Carbohydrates 1. You will be able to back track on questions for quizzes.**

**Exam 1 and 2 will be open for 24 hours on the date shown and students will have 2.5 hours to complete the exam. You will not be able to back track on question for the exams.**

**The Final exam will be open for 24 hours on June 23<sup>rd</sup> and students will have 3 hours to complete the exam once they open it.**

**All quizzes and exams will be open notes.**

**The primary source of information will be from the power Point presentations however, the reading assignments are required and will supplement the PowerPoint lectures.**

**Your food topic PowerPoint report will be approximately 20% of your grade.**

## First Summer Session 2009 Academic Calendar

### May

- 18 Mon Late enrollment
- 19 Tues Classes begin; \$50 late enrollment fee applies
- 20 Wed Last day to register or add a class
- 22 Fri Last day to drop a class or withdraw from the University without a W grade

### June

- 2 Tues Last day for instructors to issue midterm evaluations
- 4 Thurs Last day to drop a class or withdraw from the University without final grades
- 8 Mon Last day to order diploma for August graduation
- 23 Tues Examinations
- 25 Thurs 9:00 A.M.--Deadline to submit all grades

**Extended Academic Calendar.** The academic calendar through spring 2009 is on the Web at [http://www.registrar.clemson.edu/html/acad\\_cal.htm](http://www.registrar.clemson.edu/html/acad_cal.htm).

**Late Registration.** Late registration is 8:00 A.M.-12 noon and 1:00-4:30 P.M. on Monday, May 18. Students can use TigerWeb (<http://tigerweb.clemson.edu>) to enroll in courses. Students who are unable to register for a desired course should contact the teaching department.

**Reminder.** Students registering in both Maymester and first summer session are not permitted to enroll in two classes with overlapping class times. Students should be directed to drop one of the courses. Questions should be directed to Registration Services (656-2305) in E-205 Martin Hall.

**Payment.** Students use SISweb (<http://tigerweb.clemson.edu>) to see their bill for tuition and fees, payment instructions, and payment deadlines. Paper bills are not mailed to students.

**Course Cancellation for Non-Payment.** Registration requires prompt payment of academic fees. Registration in a first summer session course will be cancelled if payment has not been received by 4:30 P.M. Monday, May 18.