School of Environmental & Biological Sciences 11:709:201 Intro to Foods and Nutrition, 3 cr. Term Outline Spring, 2017 Barbara L. Tangel Office: Davison Hall, Rm. 229B Phone: (848) 932-0982 email: bltangel@rci.rutgers.edu Office Hours: T, Th 10:45-12 and by arrangement

Nutritional needs of the family. Consumer aspects of food selection and meal preparation.

Required text: Brown, Amy, *Understanding Food Principles and Preparation*, 5th ed., Cengage Learning, 2015. ISBN: 13:978-1-133-60715-1.

## COURSE OBJECTIVES:

After completing the learning experiences in this course, the student will:

- 1. Understand the physical, economic, sociological, and psychological factors, which influence individual and group food choices of food.
- 2. Understand the physical properties of food and food products.
- 2. Know the effects of preparation, storage, and service of food on the nutritional value and organoleptic qualities of food.
- 4. Practice safe food handling and are familiar with the microbiological hazards inherent in the food supply.
- 5. Know the legal controls of the food supply and understand the functions of labels on foods.
- 6. Know the nutritional properties of food and the influence of food processing and food preparation on the availability of nutrients from foods.
- 7. Understand the science of food preparation.

## The student is responsible for bringing a No. 2 pencil to each examination.

*PowerPoint presentations of each lecture will be available at sakai.rutgers.edu.* This service is available through the student's email account.

## **Course Evaluation Guidelines:**

- a. Grades for this course are based upon a maximum of 250 points. There will be 2 hourly exams for 75 points each, and the final exam of 100 points. All students are expected to take exams during the assigned time in class. Makeup exams will only be given at the discretion of the instructor, with appropriate written documentation of the reason for missing the scheduled exam. Under no circumstances will makeup exams be given later than the week following the scheduled exam.
- b. There will be unannounced in-class quizzes, which will provide an opportunity for students to earn points to add to the total number of points earned during the semester.
- c. Grade feedback will be available online at sakai.rutgers.edu.
- d. Hourly exams will cover lecture material and assigned readings.
- e. Final grade determination: A = 225 points & above, B+ = 217-224, B = 200-216, C+ = 192-199, C = 175-191, D = 150-174, F = 149 & below.

Date	Торіс	Assignment
1/17/17	Introduction, hours, exams, text Human food intake cues.	
1/19, 1/24	Food choices of individuals and groups: Function of the nutrients; Evaluation of food acceptability, organoleptics. The economics of eating.	Ch. 1, 2, 3

Date	Торіс	Assignment
1/26, 1/31	Food Safety: microbiological hazards in food. -The safe food handler.	Chapter 4, 28
2/2	Food Additives: Purpose, use, availability.	
2/7, 2/9 H	Food Legislation: Food Labeling— Ingredient, Nutrition Biotechnology and the food supply	Ch 29
2/14	<b>Dispersions gels, emulsions, sol</b> Gel formation, gelatinization	Chapter 18, pp. 339-341
2/16	<b>Leavening agents</b> : yeast, baking soda, Baking powder, steam, and air. Function of gluten.	Ch. 5
2/21	Hourly Examination	
2/23, 2/28	<b>Digestible and Indigestible</b> <b>Carbohydrates:</b> Functions of flour, Wheat, rice, corn, oats	Ch. 16-17, 19-20, 23
3/2, 3/7	Fresh <b>Fruits</b> and fresh <b>Vegetables</b> Salads, fruit and vegetable juices. Processed fruits and vegetables	Ch. 13-14, pp.332-338
3/9	<b>Complete Protein Alternatives</b> Legumes and Nuts: Use of complementary proteins.	
3/21, 3/23	Meat and Meat Products: Methods of heat transfer in food preparation	Ch. 7
3/28	Poultry	Ch 8
3/30	Eggs	Ch 12
4/4	Hourly Exam	
4/6, 4/11	<b>Dairy Products</b> : pasteurization, Homogenization of milk and milk products. Fat-free and reduced fat milks and cheeses	Ch. 10-11
4/13, 4/18	<b>Fats and Oils:</b> shortening, fat replacement, Fat Substitutes	Ch. 22
4/20	Class Cancelled	
4/25	Marine Products	Ch 9
4/27	Sweeteners: nutritive and nonnutritive	Ch. 21.

Final Exam, Friday, May 5, 2017, from 8 a.m. to 11 a.m. in Loree 022