

11:709:255 Nutrition and Health
Fall, 2009
W 12:35-1:55
F 2:15-3:35
22 Loree

Instructor

Joseph L. Dixon, PhD
132 Thompson Hall
dixon@aesop.rutgers.edu
732-932-9039

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Office Hours: JLD-Fridays 10:00 - 11:30 am and by appointment

Required Text: McGuire & Beerman, 1st Edition, Thomson-Wadsworth, 2007

ISBN-13: 978-0-534-53717-3

ISBN-10: 0-534-53717-0

The text is now available at the Cook/Douglass Co-op bookstore. If buying the text on the Internet, check the publisher for the correct ISBN codes because there is some confusion about the correct number.

Also Required: Diet Analysis+ 9.0 software. Note: Diet Analysis Software is bundled with the text (it added only \$10 additional cost)! If you buy the text on the Internet you are still responsible for having access to the software. Release 9.0 is new this year!

Overview: This course is for the purpose of giving the student a firm foundation in the science of nutrition, and it emphasizes how nutrition influences health and wellbeing. The students in this class are from different grade levels and have different backgrounds in science. In fact, there are nutrition and biology majors in this class as well as students who have not taken a science course at the college level. Because of the diverse background of the students, I have to walk the fine line between providing the nutrition majors with a deep enough foundation in nutrition and presenting concepts that can be easily grasped by non-majors. As with any class, exams cover material that is presented in lecture and in the textbook. The number one question that I am asked is, can I do well in this class without having college and/or organic chemistry (which are not prerequisites for this class)? My answer is always the same: Many non science majors have done very well in this class, but at points in the class students will need to open their minds to remember fairly basic chemical principles that each of you had in high school chemistry. I try my best to help the non-majors at these times. If students attend lecture and read the text on a consistent basis (especially the Nutrition Matters sections!), more often than not, students receive a “good” grade. By the end of the course, it is my goal to have each student be able to evaluate his or her own diet, and to know what is required in the diet to attain a long and healthy life.

Grades: Grades will be calculated on a point system.

Exam 1	100 points
Exam 2	100 points
Comprehensive Final Exam	150 points
Diet Evaluation Project	100 points
<u>Quizzes & Written Summaries</u>	<u>50 points</u>
Total Points	500 points

The quizzes and written summaries can have variable points. Usually, there are about 7-10 quizzes or summaries during the course of the whole semester. They are graded very leniently and are for the purpose of assessing attendance and providing feedback from the class.

Final grade allocation:

A= 91-100%, B+ = 86-90%, B= 81-85 %, C+ = 76-80%, etc.

Exam Policy

Exam 1 will cover all material covered in class from the first day of class until the day of the exam.

Exam 2 will cover all material covered in class since the first exam through the indicated class meeting before the second exam and all assigned readings.

Final Exam will be comprehensive. It will be held on Monday, December 21 (8 AM-11 AM) in 22 Loree (same room as the lecture hall). There will questions from the Diet assignment on the Final Exam!!

All exams will be closed book, closed notes. There will be **NO** make-up exams without an official Doctor's note (on Office or Hospital letterhead). You must bring a student ID and a number 2 pencil to all exams. Your exam will **NOT** be accepted if your student ID is not presented.

Diet Evaluation Project

This assignment provides an opportunity for you to calculate your nutrient intake, identify strengths and weaknesses in your diet, and devise a plan to improve your diet. You will be required to keep a diet and activity diary for 3 days. The original diary is due on October 23rd ahead of the full report. The full report is due on November 13th. It is very important to construct the report in the exact order asked for (See assignment). The diet assignment is 100 points and provides a chance to improve your grade. The report must be your own work. Please contact me if you have any questions concerning the project. Late projects will **NOT** be accepted. There will questions from the Diet assignment on the Final Exam!!

Academic Integrity

The new Rutgers Academic Policy states, "Students are responsible for understanding the principles of academic integrity fully and abiding by them in all their work at the University. Students are also encouraged to report alleged violations of academic integrity to the faculty member teaching the course in which the violation is alleged to have occurred."

Please read the Rutgers University Interim Academic Integrity Policy, Effective September 2, 2008 (and still in force), at <http://academicintegrity.rutgers.edu/integrity.shtml>

Student Learning Outcomes for Nutrition and Health (709 255). After completing this course, the student will:

1. Be familiar with the research methods in nutritional sciences
2. Understand the definitions of dietary reference standards, and correctly read and interpret food labels
3. Be familiar with the digestive system and the roles of other important organs in the regulation of nutrient utilization
4. Have foundational and discerning knowledge of protein, carbohydrate and fat metabolism
5. Utilize food composition tables and nutrition software to calculate the nutrient intake and adequacy of your diet
6. Have foundational knowledge of how the body utilizes macronutrients to produce useable energy
7. Recognize the complexities of weight gain and loss and the magnitude of the obesity problem in the US
8. Be familiar with the most important trace and major minerals
9. Know which and under what circumstances dietary supplements are recommended
10. Understand the nutritional needs of individuals during different stages of life
11. Have a foundational knowledge of the role of nutrition in the development and treatment of chronic diseases
12. Be able to actively and effectively participate in the debate on food choices in society
13. Be familiar with current issues and research topics in health and nutritional sciences

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Day	Date	Topic	Readings
Wednesday	September 2	Introduction to course; Science of Nutrition	Chapter 1
Friday	September 4	Biology & Chemistry in Nutrition Assessing Nutritional Status Ch2 is presented later	Chapter 3
Wednesday	September 9	Digestion (read & cover on your own for now); Carbohydrates; Also overview of Carbohydrates, Protein, and Fat	Chapter 4 Chapter 5
Friday	September 11	Finish Carbohydrates Nutrition & Diabetes	Chapter 5 Nutrition Matters P161-171
Wednesday	September 16	Protein	Chapter 6
Friday	September 18	Protein	Chapter 6
Wednesday	September 23	Lipids	Chapter 7
Friday	September 25	Lipids Nutrition & Cardiovascular Disease	Chapter 7 Nutrition Matters p259-267
Wednesday	September 30	Exam 1	
Friday	October 2	Energy Metabolism	Chapter 8
Wednesday	October 7	***Diet Assignment Given out Nutrition & Physical Activity	Chapter 8 Nutrition Matters P305-317
Friday	October 9	Energy Balance & Body Weight Regulation	Chapter 9
Wednesday	October 14	Eating Disorders	Chapter 9 Nutrition Matters P361-375
Friday	October 16	Water Soluble Vitamins	Chapter 10
Wednesday	October 21	Alcohol	Chapter 10 Nutrition Matters P419-433
Friday	October 23	Fat Soluble Vitamins ***Diet and Activity Diary Due	Chapter 11
Wednesday	October 28	Fat Soluble Vitamins Nutrition & Cancer Review for Exam	Chapter 11 Nutrition Matters P467-479
Friday	October 30	Exam 2	

Wednesday	November 4	Assessing Nutritional Status	Chapter 2
Friday	November 6	Trace Minerals	Chapter 12
Wednesday	November 11	Major Minerals & Water Nutrition & Bone Health	Chapter 13 Nutrition Matters P544-552
Friday	November 13	Review Exam ***Diet Assignment Due	
Wednesday	November 18	Life Cycle Nutrition Pregnancy & Lactation; Infancy	Chapter 14
Friday	November 20	Childhood & Adolescence	Chapter 14
Wednesday	November 25	NO CLASS: Thanksgiving Break	
Thursday	November 26	Thanksgiving	
Friday	November 27	No Class	
Wednesday	December 2	Special Topics	
Friday	December 4	Review Diet Assignment	
Wednesday	December 9	Special Topics	
Friday	December 11 Last Day of Classes	Review for Final Exam	
Monday	December 21 8-11 AM	FINAL EXAM (includes questions from diet assignment)	Place: Same room as Lecture