

SYLLABUS

11:709:255:02 Nutrition and Health - Fall 2018
Tuesdays and Fridays, 10:55 – 12:15 PM
103 Cook/Douglass Lecture Hall (CDL-103)

SAKAI Site: NUTRITION AND HEALTH 02 F18

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Office Hours: Tuesdays, 1:15 – 3:00 PM, and by appointment

Overview: This course is for the purpose of giving the student an introduction and firm foundation in the science of nutrition, and it emphasizes how nutrition influences health and wellbeing. Those who take the course are from varied backgrounds. Some take the class because they are majoring in nutrition, biology, or other science or health-related discipline. Others take the course because they have an interest in nutrition (as all should!), but only have a limited science background (e.g. high school chemistry and biology). This represents a challenge in teaching the class. In order to provide a deep enough foundation for the nutrition and science majors, we do touch on aspects of chemistry, biochemistry, and physiology. However, this should not deter the non-science majors! There are no prerequisites of college level science courses for the class, and aspects of chemistry, biochemistry, and physiology will be presented at a level that both majors and non-majors can understand. It is our experience that students who attend lectures and read the text on a consistent basis, more often than not, receive a “good” grade. By the end of the course, it is our goal that students will not only understand basic nutritional concepts and issues, but will begin to be able to understand the scientific basis for those concepts.

Required Textbook:

McGuire M and Beerman KA. Nutritional Sciences: From Fundamentals to Food, Enhanced Edition, 3rd Edition, ISBN-10: 1-337-56533-4; ISBN-13: 978-1-337-56533-2.

We will be using the **MindTap Ebook** version of the textbook from Cengage Publishers. The MindTap version of the text book is less than half the cost of the print version, and has many extra functions that we will use in the class. Of special interest is that you can download it on your mobile phone and can use the out load reading function to listen to the chapters. There are two options for purchasing the Ebook:

- MindTap Ebook - \$113.00
- MindTap Ebook Plus loose leaf printed version - \$159.65

To purchase the **Ebook**, go to the Rutgers Bookstore webpage: <https://rutgers.bncollege.com/> Then, select the “Textbooks” drop down menu and click on “Find Textbooks”. Enter the Department Code (709), Course Code (255), and Section Code (02). You will then be able to select and purchase the version of the Ebook that you want.

Required App: For Attendance and In Class Quizzes and Exams

TopHat (you will receive an e-mail invitation to purchase the App)

- Option 1: \$26/semester + \$10 for the online quiz and exam function (\$36 total)
- Option 2: \$38/year + \$10 for the online quiz and exam function (\$48 total)
- Option 3: \$75/lifetime + \$10 for the online quiz and exam function (\$85 total)

Grading: Grades will be calculated on a point system

Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Final Exam (not comprehensive)	100 points
Dietary Assignment	30 points
Physical Activity Assignment	20 points
<u>Online Quizzes</u>	<u>50 points</u>
Total Points	500 points

Final Grade Allocation: There will be NO negotiating of grades. All final grade percentages will be rounded up to the higher whole number (e.g. “90.1%” will be rounded up to “91%”, but “90.0%” will remain “90%”). Final grade ranges are as follows:

A = 91-100%	C = 71-75%
B+ = 86-90%	D+ = 66-70%
B = 81-85%	D = 61-65%
C+ = 76-80%	F <61%

Online Quizzes: On weeks when there is not an exam, online quizzes will be assigned. These quizzes will be made available on Friday afternoons after class (i.e. sometime after 12:30 PM). You will have until 10:45 AM on the following Tuesday to complete the quiz. They will be administered through the class SAKAI site “quiz” feature. They will be multiple-choice questions and are designed to motivate you to review the lectures and read the assigned textbook chapters. The quizzes are open book and are graded pass/fail. They are worth 5 points each. Also, many quiz questions will appear on exams. The rationale is that by seeing the same questions more than once, your retention will be better.

Exams: All exams are mandatory – no exceptions! There will be 3 mid-term exams and a final exam.

- Exam 1 will cover all materials (lectures, readings, and online quizzes) from the 1st day of class to the day of exam 1.
- Exam 2 will cover all materials since exam 1 to the day of exam 2.
- Exam 3 will cover all materials since exam 2 to the day of exam 3.
- The final exam will cover all materials since exam 3 to the last day of classes (i.e. it is NOT comprehensive).

All exams will be closed book, closed notes, and will be conducted online through the TopHat App. You will be allowed to use a laptop, tablet, or phone for the exams, but will not be allowed to access notes, powerpoints, websites, etc... during the exam. There will be NO make-up exams without an official doctor's note (on office or hospital letterhead) or a note from

the Dean's office of your school. You must bring a student ID to all exams. Your exam will NOT be accepted if your student ID is not presented. All exams will be given in CDL-103 including the final exam. Dates for the 3 mid-term exams and the final exam are listed in the course schedule. The day/time of the final exam is Friday, Dec. 21, 8:00-11:00 AM.

Dietary and Physical Activity Assignments: Instructions and due dates for the dietary assignment will be provided in class and on the SAKAI site.

Academic Integrity: The 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 (11:709:255): After completing this course, the student will:

1. Be familiar with research methods in nutritional sciences
2. Have a working knowledge of dietary guidelines, methods of dietary assessment, and nutritional 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 their 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 and the world
8. Be familiar with the sources and functions of vitamins and 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

School of Arts and Sciences Learning Goals:

1. 21st Century Challenges [21C]:
 - a) Analyze the degree to which forms of human difference shape a person's experiences of and perspectives on the world.
 - c) Analyze the relationship that science and technology have to a contemporary social issue.
2. Areas of Inquiry: Natural Sciences [NS]:
 - e) Understand and apply basic principles and concepts in the physical or biological sciences.

- f) Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.

2017 Core Knowledge for the RDN (KRDN) – Standards for Didactic Programs in

Dietetics: Rutgers University Department of Nutritional Sciences undergraduate Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). The following ACEND Core Knowledge aptitudes are included within the curriculum of this course:

1. KRDN 1.2: Use current information technologies to locate and apply evidence-based guidelines and protocols (i.e., online USDA food intake data spreadsheets; graph and evaluate data for individual commodities).
2. KRDN 1.3: Apply critical thinking skills (i.e., report on assessment of dietary intake using USDA Supertracker website; evaluate values for nutrients in diet and determine if meeting requirements).
3. KRDN 2.1: Demonstrate effective and professional oral and written communication and documentation (i.e., dietary intake assessment report; exercise report; USDA commodity tracking report)
4. KRDN 3.5: Describe basic concepts of nutritional genomics (i.e., lecture on nutritional genomics assessed via mid-term exam and online quiz).
5. KRDN 4.6: Analyze data for assessment and evaluate data to be used in decision-making for continuous quality improvement (i.e., report of dietary intake assessment; evaluate values for nutrients in diet and determine if meeting requirements).