

Full Syllabus for Spring 2023 Nutrition and Health

11:709:255:01

Updated: January 18, 2023

Section 01 Index: 10003

All lectures will be in Hickman 138:

Monday 12:10 PM – 1:30 PM

Thursday 12:10 PM – 1:30 PM

Attendance quizzes will be given in class (See section on quizzes below)

Final Exam: To be Announced

See exact Schedule of Classes on Canvas (Topics and readings)

Instructor

Joseph L. Dixon, PhD, Office: Room 167, Foran Hall (on the Cook campus). Please use this Class Email for all course related questions: joedixon709255@gmail.com

Rutgers Email: dixon@sebs.rutgers.edu (For on-line appointments)

Phone: (email best!) The course email works best as your emails will not become mixed in with my regular work emails. If you do not hear from me within a day, email me again – I don't mind! I get about 100 emails a day on my Rutgers email and sometimes I miss one or two.

TA: Nicholas Amado, Email: nja50@sebs.rutgers.edu Nick is great TA and is very helpful – especially with assignments!

Office Hours: For usual types of questions, email me! For more specific questions and discussions – We can arrange a meeting during Office hours (To Be Announced) or at another time. **Hint: After class I walk back from Hickman Hall to Foran Hall (about 10 min). This is a great time to ask me questions while we walk.**

Required Texts: See last 2 pages

My recommendation is that you read all assigned chapters and sections in the Textbook to obtain a good grade!

SAS Learning Goals addressed in the course are:

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.

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.

Diversity Statement:

It is our (Joe Dixon, Nick Amado) intention that students of all backgrounds will be well served by this course. We will work to create an environment of inclusion which respects and affirms the inherent dignity, value, and uniqueness of all individuals, communities and perspectives. We are lucky to have a diverse university. Diverse voices and life experiences enhance the learning process and we welcome students to share their personal experiences. We will not tolerate disrespectful language or behavior against any individual or group. If you feel as though you have been disrespected or treated unfairly by the instructors or any other individual, please let us know. You may speak with the instructors in person, over email or report anonymously via the Office of Academic Programs. In addition, you may also report bias to the Rutgers Diversity and Inclusion initiative using this link: <http://inclusion.rutgers.edu/report-bias-incident/>

Additionally, the topics that we're covering in this class are occasionally difficult, not just intellectually but emotionally. While I expect there to be rigorous discussion and even disagreement in the course of our class discussions, I ask that you engage in discussion with care and empathy for the other members in the classroom.

Appropriateness of This Class to Both Science and Non-Science Majors: 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 lectures 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.

11:709:255 Nutrition and Health is the first required course in the Rutgers Dietetics Program.**2022 Core Knowledge for the RDN (KRDN) – Standards for the 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 (**11:709:255 Nutrition and Health**):

KRDN 1.1: Demonstrate how to locate, interpret, evaluate, and use professional literature to make ethical, evidence-based practice decisions (i.e., report on dietary intake assessment). For this Core Knowledge goal students are shown how to evaluate DRI using the USDA and other government websites.

KRDN 1.2: Select and use appropriate 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). **Currently we use ASA 24 from NIH to evaluate individual diets**

KRDN 1.3: Apply critical thinking skills (i.e., report on assessment of dietary intake using dietary analysis software; evaluate values for nutrients in diet and determine if meeting requirements). For this Core Knowledge goal students both prepare a Powerpoint presentation and submit a written assessment interpreting the data that is graphed in the Powerpoint that they prepare.

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). In particular, students prepare a physical exercise assignment where they calculate their Total Energy Expenditure (TEE) using an equation and determining how long it takes to “burn” certain snacks using their preferred physical activity.

KRDN 3.5: Describe concepts of nutritional genomics and how they relate to medical nutrition therapy, health and disease. (i.e., lecture on nutritional genomics assessed via mid-term exam and online quiz).

KRDN 4.7: 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).

Grades: Grades will be calculated on a point system.

There are different Aspects of the Class that are used to grade you. Only 55% of the points come from exams. If you are not happy with the grading system, please do not take the class!

See the Larger Full Version (Grading Rubric) of this, which is in an Excel Spreadsheet, in the first Module on the Canvas website. This will allow you to allocate time to the different aspects of the course. This may be altered slightly based upon how the course proceeds during the semester.

	Points
Exams	330
Assignments	130
Attendance Mini Quizzes	40
Lecture Material Quizzes	60
<u>Obesity Explosion Book Quizzes</u>	<u>40</u>
Total Points	600

Note: Because there are extra credit points and variable quiz points that influence the number of total points accumulated, the Grade Book in Canvas doesn't precisely tally the final number of points a student accumulates. The Canvas Gradebook only gives you your performance on each assignment. The final total points accumulated

are added up at the end of the semester and divided by 600 to give your percentage of points (See example).

Exams - Exams will be given in class unless otherwise announced. There is always a review sheet given out about a week ahead. There are 2 midterms and a final.

Assignments - Diet, and Exercise Assignments. I have been giving these for many years They will need to be done very well to get full points. The grade for each assignment will be dependent upon the quality of your work. This year the dietary assignment will be early in the semester. You will receive detailed instructions concerning this project. Most people like the dietary assignment and do well on it.

Quizzes - There are **three** types of Quizzes – please take special note of the different kinds.

1. Attendance Mini Quizzes – In about half of the lectures there will be a 3-question quiz during the class about $\frac{3}{4}$ through the lecture.

2. Lecture Multiple-choice Quizzes – Called “Lecture Quizzes” These quizzes are usually easy and can be whimsical. The quizzes (since being added to the class) have really increased the overall grades in class. You have to do about 12 quizzes to get full points. This means if you miss or forget about 1 or 2 quizzes, you won't be penalized. Due dates will be given and you need to complete the quiz (given once) before the due date. Quizzes will be all given through Canvas.

3. Obesity Explosion Book Multiple-choice Quizzes - Quizzes will be given online through the Book Website. SEE POWERPOINT EXPLAINING THESE QUIZZS! These quizzes are not graded one by one - you just need to have completed 100% of them by the end date for the assignment and you will receive a grade. You can retake them as many times as you wish until you get all the questions correct. These quizzes need to be taken within one week after the reading assignment is due – obviously, it is best to take after reading a chapter or two. The full grade for the **Obesity Explosion** quizzes will be put into the Canvas gradebook about $\frac{3}{4}$ of the way through the semester.

Extra Credit: There may be a chance for extra credit this year. The extra credit is totally discretionary and must be available for all students in class! (There is absolutely no extra credit on an *individual basis!*)

Final grade allocation: You need to obtain this percentage of points:

A= 91-100%, B+ = 86-90%, B= 81-85 %, C+ = 76-80%, C = 70 – 75%, D = 50 – 69.9%; < 50% is an F.

Exam Policy

All exams are mandatory – no exceptions!

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 questions will mostly come from the 3rd section (last textbook chapters and possibly Special Topics) but there may be a few important questions from earlier sections.

There will be NO make-up exams without an official Doctor's note (on Office or Hospital letterhead).

Academic Integrity – Please note – I am a Rutgers Integrity Officer and have investigated many cases involving 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 Academic Integrity Policy, Effective September 1, 2013 (and still in force), at <https://academicintegrity.rutgers.edu>

(There are many information sources on this site)

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 science

Exam and Quiz Make-ups for Nutrition and Health

Because of the large size of the class, make-ups for Exams and Quizzes will only be given for official excuses! There is always a chance that you did not receive a grade for an exam or quiz, or there was a computer error. In this case definitely contact me

Books for Nutrition and Health, Dr. Joe Dixon, 709:255:01 (Spring 2023)

There are 2 books required for Nutrition and Health 255 this Spring

First Book: McGuire Textbook - The textbook is the same one we have used for years:

The Rutgers Bookstore stocks new and used copies of this textbook

McGuire/Beerman - *Nutritional Sciences: From Fundamentals to Food*, Enhanced Edition - Price: about \$199.95 (Need to check current price) (**Upgraded 3rd edition**) ISBN: 9781337565332 (Hard cover version)

(Please note: Many students purchase the Textbook used on the Internet. The price can be as little as \$20. Also, there should be many copies available around campus from previous students! Please ask around)

MindTap Version, 1 term (6 months) Instant Access for McGuire/Beerman's Nutritional Sciences: From Fundamentals to Food - Price: about \$115.00 (Need to check current price) ISBN: 9781337396028 (on-line version)

The MindTap version is the on-line book. It contains lots of additional things, but **we are only going to use the textbook!** There will be no quizzes or projects using the MindTap site.

Second Book – Obesity Explosion – The Collision of Nutrition, Culture, Politics, and Food, by Joseph L. Dixon, Published on August 24, 2020; Kendall Hunt Publishing Company. This is a new book I have written because it is impossible to spend all the class time I wish to on this topic. Printed Book and Ebook, ISBN: 978-1-7924-2915-6 (BTW, I get no royalties from this book when used at Rutgers University)

Printed Book - The Printed book is available on the Kendall Hunt Website (see below) and can be ordered directly from Kendall Hunt. You will receive the book by mail or Fed-Ex in about a week. Printed Version is \$52.92.

Obesity Explosion will also be available at the Rutgers Bookstore. For class you must have the book around mid-September. The first reading assignment will need to be completed a week after that. If you buy the printed book, I will autograph it for you.

Ebook – You can purchase **Obesity Explosion** as an eBook which will allow you to get it immediately. This can also be ordered on the Kendall Hunt website:

<https://he.kendallhunt.com/product/obesity-explosion-collision-nutrition-culture-politics-food>
Kendall Hunt will email you an Ebook access code that may go to your spam folder – so watch out for it! The Ebook is \$26.46 for 6 months viewing.

Important Note: Both the *Obesity Explosion* printed book and the Ebook come with a **Quiz Access Code**. When you buy the printed book, a distinct access code for the quizzes

will be inside the front cover. Therefore, if you buy a used “printed” book, you have to be sure the access code for the quizzes has not already been used. Several students had a problem with this last semester. When you buy the Ebook, Kendall Hunt will send you the access code for the quizzes by email. With both forms of the book, you will need to establish an account to take the self-study quizzes for the book! It is all very easy to do. **I will send you a detailed PowerPoint on how to sign up for the quizzes.**