

## Course Syllabus (August 28, 2020 version)

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# **Obesity: Biology, Behavior, and Management – Fall 2020**

**This is an On-line class – The Live lectures will be:**

- **Wednesdays** 10:55 AM - 1:55 PM
- Prerequisite: 709:255 (Nutrition & Health)
- See the Canvas Site for the class – Lectures will be via Zoom
- It is very important to see the Schedule of Classes to see the full extent of the course

## **Updated: September 2, 2020**

**Course Director:** Joseph L. Dixon, Ph.D., Room 167, Foran Hall (on the Cook campus)

Email: Dixon@sebs.rutgers.edu

Office hours: To be announced

### **Background:**

The study of obesity provides an excellent opportunity to examine a complex problem from a multidisciplinary perspective. In fact, I believe the greatest surprise from this course is that you will find that high rates of obesity in the US have many complicated causes; most of which are not directly related to biological regulation of metabolism. This course will enable students to see the connections between numerous disciplines and fields, all of which impact the same outcome, obesity. The course will provide a series of state-of-the-art lectures by scientists actively involved in different aspects of research relevant to obesity. These lecture/discussion sessions will enable the students to understand the multi-factorial etiology of the epidemic, as well as the treatment and public policy approaches that are being used in the obesity research community to combat the disease.

### **Objectives:**

Upon completion of this course, students will be able to:

- i. describe the trends in the prevalence of obesity over the past 100 years
- ii. evaluate the interplay among causes of human obesity, i.e., nutritional, physical, behavioral, social and environmental
- iii. better grasp how public policy can influence obesity.

**Textbook:** *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 there was not a good “Textbook” available for this course. For the course, I am requiring the printed version of the book. 1) I will

autograph it for you when that becomes possible. 2) If you do not mind marking your book, I would like you to make notations in the book if you see anything that is confusing. 3) The ebook is only available to you for a certain amount of time. If you have the printed book, you can keep it past the permit date for the ebook. With the print book you will also receive an access code for the book's Website. On the Website, you will be able to take short quizzes after reading each of the chapters. Also, there are short answer and essay questions for almost every chapter. Directions for the quizzes will be sent later. You will need a copy of Obesity Explosion on about September 9<sup>th</sup>.

### **Description of the class:**

For the first 2 -3 weeks I will present lectures on obesity and we will start to read the *Obesity Explosion*.

After that, then for half of the class a guest speaker will sign on and give a lecture about their particular research interest in Obesity. Each speaker will assign 2 scientific articles that you are required to read before the lecture. Also, you will need to write a one-page summary-review of one of the articles and hand it in to the Canvas drop site on the day of the class. I will grade these and return them the next week.

For the second half of the class we will have a discussion on the lecture, articles, or any other aspect of the Obesity Explosion.

Early in the semester I will have you sign up for a topic for your semester paper.

On 10-21-2020, a short progress report is due on your project/Term paper.

### **Evaluation:**

This is a writing intensive course and qualifies as a Capstone course, too. Students will be evaluated by four methods as shown below:

Please see the breakdown below and in the accompanying spreadsheet:

Obesity: Biology, Behavior, and Management				Points for	Percent of
This is an On-line class – The Live lectures will be: Wednesdays 10:55 AM - 1:55 PM				Type	(approx)
Type	Name	Description	Experience from last time Roadmap for success		
<b>Class Participation</b>		I will take attendance and evaluate how much you contribute online	Usually most students get full credit for this.	15	15
<b>Article Write Ups</b>	Weekly or almost depending upon speakers	There will be 8 outside speakers, I think. Each will require a page write up for one of their articles.	These write ups are always part of the course  They will need to be done very well to get full points The grade will be dependent upon the quality of your work.	40	40
<b>Obesity Explosion Book Quizzes and short answers</b>	Given on-line	These are graded on line - you just need to have completed 90% of the multiple choice questions and the essay type questions. You can retake them once to get all questions correct.	This is new to the course. These need to be taken before the chapter is discussed - obviously it is best to take after reading a chapter or two.	15	15
<b>Semester Project</b>	You need to hand in a progress report and then a final report!	Take one of the chapters in "Obesity Explosion" and expand on it. Write an 8 page paper on it that is due by the class after Thanksgiving. There will be a sign-up sheet for the chapters. If you really want to - you can pick another topic!	A project is always part of the course. This is the 4th time I have taught this class and every project has been different. Usually it is a group project but that can't be done this year.	30	30
<b>Total Points</b>				100 Points	100 Percent

See the original version of this spreadsheet!

### **Class participation 15%**

Description: This is a combination of class attendance and asking questions of lecturers or participating in class. You are not allowed to be on the Internet during the lectures or group presentations. Attendance is mandatory and you need to sign the sign up sheet for every class. It is your responsibility not to forget to sign the sheet. If you miss class you need a valid excuse. Also, arriving late for class is not acceptable.

### **Article (weekly) write-ups 40%**

These need to be handed in the day of the class. The papers for each lecture will be available the week before the lecture is scheduled. A paragraph is required for one of the papers. From experience, the best write-ups usually require about one page of **single line** printing. Absolutely no reviews longer than 2 pages! If two papers are assigned, only one write up is required. I will be less strict in grading the first three required write ups. Last time, several students made great strides in their writing during the course and I take this into account. You cannot copy from the articles in any way. You must write in your own words. Your interpretations (whether they are correct etc.) are not as important as your ideas, concerns and comments. If I feel you need help writing, I will have you go to the Writing Center for a tutor. You must have that tutor email me to confirm you are getting help.

**Last time, about 3-4 students were identified as using significant amounts of writing from the papers they were reviewing – whole sentences to whole paragraphs! This is unacceptable! You cannot reuse other people’s writing. My technical definition of plagiarism is using more than 5 words from someone else’s work. Last time I made it a learning experience for the students – this time the penalty will be harsher!**

There will be about 9-10 lectures, and 10 total **Article** write-ups (not including the final one for the project) are required, but one grade can be dropped to obtain the final grade for the write-ups (i.e., you could do them all and then the top 9 will be taken for the grade)

Each Write-up will be graded on a 0 to 10 point scale.

**On-line Quizzes - Obesity Explosion Book Quizzes 15% of grade**

These are graded on line - you just need to have completed 90% of the multiple choice questions and the essay type questions. You can retake them once to get all questions correct. You will get an access code for the website.

**Final project (final written assignment) 30%**

The individual paper is due on the next to last class of the semester. The paper should be 8 pages double lined and it should have at least 5 journal science-based articles as references.

**Absolutely no websites are to be used for references!**

You need to hand in a progress report on and then a final report!

Take one of the chapters in "Obesity Explosion" and expand on it. Write an 8-page paper on it that is due by the class after Thanksgiving. There will be a sign-up sheet for the chapters you are going to use.

If you really want to - you can pick another topic!

A project is always part of the course. This is the 4th time I have taught this class and every project has been different. Usually it is a group project, but that can't be done this year.

**Alternate – You can do a paper on one of these topics:  
Novel strategies to prevent obesity - Topics for the final paper:**

Possible Topics: (These are general categories meant to start your discussions; others not included here can also be pursued).

1. Government programs to prevent obesity (this is a huge topic—federal programs, state, local governments, e.g., agricultural policies, urban planning, school breakfast and/or lunch programs; what has/has not worked?).
2. Role of fitness/exercise industry in preventing obesity (individual approaches, group approaches, home and/or workplace; what has/has not worked?).
3. School-based programs for obesity prevention (providing information, motivation, exercise and/or food-oriented programs; what has/has not worked?).
4. Public service campaigns for obesity prevention (effective marketing strategies; what has/has not worked?).
5. Community-based interventions to combat obesity (faith-based programs, community group programs, use of health professional groups, who are the high-risk groups; what has/has not worked?).
6. Role of the food industry in preventing obesity (food supply, advertising, ‘special’ foods, portion sizing; what has/has not worked?).