BIOL 233 Nutrition and Health

Why are we here?

Course Objectives: The purpose of this course is to help you:

- **Most importantly**: answer the question "***What should I eat?"*** for yourself and others
- Understand the fundamental **concepts** that underlie our current understanding of human nutrition
- Gain **tools** to assess the overwhelming amount of nutritional "information," most of it lies or fiction, that is presented to us on television, the internet, and in diet books
- Prepare you for settings in the **health professions** in which you may be called on to provide nutritional information or advice
- Take a serious look at **your own eating habits** and thoughtfully consider how you would like to eat

How will we do all that?

Course Activities:

- To understand **concepts** and gain some nutritional **tools**, you will read the excellent text I have chosen for you and use the nutritional analysis software that comes with it
- To test your understanding of **concepts**, practice using **tools**, and practice the interpersonal interactions you may experience as a member of a **health profession**, we will work though/discuss/ practice many of the concepts, tools, and issues of nutrition in teams in class
- For difficult concepts and to introduce topics, I will lecture
- To see how all of the above is going, we will have tests

- Ideally, all of the above will contribute to your ability to answer the important question: ***What should I eat?***

The Details

Face-to-face meeting time: Tuesday and Thursday 1-3 p.m. This is a ***hybrid course***, so in addition to the face-to-face time and time spent reading and studying, you will have several additional hours a week spent doing online work (online assignments, using the diet analysis software, and using the Bb resources).
Instructor: Sarah Leupen
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Text: Nutrition by Insel et al., 4th edition. Jones & Bartlett Publishers, 2011. Careful reading of the textbook is especially important in a hybrid course, when class time is reduced. To help you know what to focus on in the book, links to ***video reading guides*** are posted on Blackboard for every chapter in the book. You must also get the **Eat Right Analysis** software by Esha, Inc. This comes bundled with the book in the UMBC bookstore, or you can obtain it separately.

Evaluation:

30% 2 Tests
25% "Comprehensive Lite" Final Exam
15% Projects
15% 6 of 7 Chapter Quizzes
15% Dietary Analysis/Advice Assignments

Projects: You will complete two short projects in the course. See end of syllabus for the list of projects. You can propose a project that is not on this list, but it must be pre-approved by me. All projects are graded according to rubrics which, along with detailed descriptions of the assignment, are available on the Blackboard site and which you should look at before you do the project. I recommend you make your project plans now since many projects take days or even weeks to do.

Chapter Quizzes: On most non-test days, there will be a chapter quiz. Chapter quizzes cover the **goals** for the indicated chapters and are intended to help you keep up with the pace of a summer class, which is really fast. The lowest Chapter Quiz grade is dropped. Quizzes cannot be made up once they are handed back (usually at the beginning of the next class day). If you know ahead of time that you will miss a quiz, you can take it after the previous class day's class (i.e. 3 pm of the previous class day), but only if you let me know in advance—so I can have the quiz ready for you!

Diet Analysis Assignments: Most Mondays (Weeks 2-5), a diet analysis assignment is due. For the first and last assignments, you will record your diet for three days using the Eat Right Analysis software. The other two assignments involve looking at and working with this data.

Late work policy: If you miss a test for a good reason and contact me in advance, I'll give you a make-up test. Late assignments and projects are 25% off per day late, with **three free days** to be distributed across the term (***not*** three free days per assignment). The three free days for the assignments/projects, plus the dropped chapter quiz grade, ought to cover all technical/computing, academic, personal, meteorological, and automotive crises. Starting things early is also useful in crisis prevention.

If you require accommodation for any physical or learning disability, please see me.

***Approximate* Class Schedule**

Date	Topic
Tues 5/29	Intro to Class, Ch 1-2
Thurs 5/31	Quiz Ch 1, Ch 3-4
What's Due Online Week 1:	Diet Analysis (not due yet, but you must do it this week)
Tues 6/5	Quiz Ch 2-3, Ch 4-6
Thurs 6/7	**Test 1**, Ch 7
What's Due Online Week 2:	Diet Analysis Assignment #1: Diet Record
Tues 6/12	Quiz Ch 7, Ch 8-9
Thurs 6/14	Quiz Ch 8-9, Ch 10-11
What's Due Online Week 3:	Project #1; Diet Analysis Assignment #2: Advice to peers
Tues 6/19	Quiz Ch 10-11, Chs 12-13
Thurs 6/21	**Test 2**, Ch 14
What's Due Online Week 4:	Diet Analysis Assignment #3: Vitamins & Minerals
Tues 6/26	Quiz Ch 14, Chs 15-16
Thurs 6/28	Quiz Ch 15-16, Ch 17
What's Due Online Week 5:	Project #2; Diet Analysis Assignment #4: Diet Record Redux
Tues 7/3	Chs 18-19
Thurs 7/5	***Final exam***
What's Due Online Week 6:	Online Component of Final

Projects

Note: these are only "thumbnail" descriptions. For the complete assignment and grading rubric for a project, see the "Projects" tab on the Blackboard site.

1. Try a diet. You choose a specific, existing diet plan, such as the Paleo Diet, or simply choosing to be vegetarian or vegan (only if you are not already!), and follow the diet for several days, then report on your experience of the diet as well as scientific evidence on the effectiveness and/or health-promoting effects of the diet.

2. Become more active. You commit to daily exercise for two weeks (not if you already do this! Active athletes may still complete this project; see complete project description.) You then report on the objective and subjective effects of exercise and some of the scientific evidence to support increased activity levels.

3. Communal meal: Form a group of 3-5 students, who will gather at a meal for which you cook your favorite or traditional foods for each other. Each person then turns in pictures of each food and the meal, your reaction to each food, and a nutritional analysis of the food you cooked.

4. Historical perspective. Interview one of your grandparents, or another person of that generation, about what they ate and cooked as a young person. If possible, cook a meal together. Report on the results on the interview, and your personal and scientific assessment of whether you or your interviewee ate more healthfully.

5. Food Bank or Soup Kitchen Visit. Volunteer at a local food bank or soup kitchen. Report on your experience, the function of food banks and the access to nutritional foods that people in the community served by the food bank have. May be done individually or as a group.

6. Food Documentaries. Form a group of 3-5 students, who will gather together to watch a documentary about food production/ the food industry, such as *Food, Inc.*, *The Future of Food*, *Supersize Me, FatHead, etc.* Afterward, you will examine some of the industry response to the film, then provide your own views.

7. Nutrition in the News: Choose a recent media story about nutrition that reports on recent findings by nutrition scientists. Find and read the original scientific article on which the media story is based. Report on the contents of the scientific article and the "match" between the primary article and the media story, and prepare a single PowerPoint slide for me to show at the beginning of class with the findings.

8. Diet or supplement evaluation. You choose a diet or supplement that someone you know follows or uses. Using 3-5 scientific articles, evaluate the likely effectiveness of that diet for whatever purpose (weight loss, muscle gain, etc.) the person is using it. Overall, does the weight of evidence support the person's use, or not, or is there not enough evidence to tell?

9. Diet and Disease. Using scientific articles, you will evaluate the connection between diet and a particular disease, for example, cancer and a high-animal-protein diet.