FYSP 22, 2017

What's for dinner? The science of healthy eating
MW 2:30 - 3:20 pm, Science Center A255

Laura Romberg, Instructor
Biology Department
Oberlin Science Center A235
email: laura.romberg@oberlin.edu

Office Hours:
Tue 11:00 am - 1:00 pm; Th 11:30 am - 1:30 pm

Sign up on my google calendar
https://calendar.google.com/calendar/selfsched?sstoken=UVA3cFNRcmxBSWlHfGRlZmF1bHR8ZWQ3ZDc2YTM0NTU2YjJjMjg1NTA3OGU0Y2VkNGE4MWI

You may sign up for as many time slots as you need, and I also can meet with you at many other times. Just email me to set up a time: lromberg@oberlin.edu

Course Description:

Full Course; 4 NS, QFR

Why do dietary recommendations continually change? It is actually quite difficult to determine the relationship between nutrition and health. This course will examine why this is so difficult, and it will give you tools for evaluating newly emerging dietary claims. We will discuss the strengths and limitations of different types of nutritional research and will apply this information to current controversies, e.g. What are the effects of sugars and other simple carbs on your health? Does dietary fat affect coronary heart disease? We will also discuss societal issues such as how do government agencies decide on dietary recommendations and on the laws governing dietary supplements.

Course Objectives:

In this course, I hope to help you be able to:

- Understand the different types of nutritional studies and how they are conducted.
- Evaluate the strengths and weaknesses of each type of study
- Find articles describing research on nutritional topics that interest you
- Interpret graphs and tables displaying the results from such research.
- Critically evaluate hypotheses that connect diet to health and support your evaluation with evidence.
- Enhance your analytical, discussion, and writing skills.
## Schedule Overview

*(subject to modification)*

<table>
<thead>
<tr>
<th>Week 1</th>
<th>How do you choose what to believe?</th>
<th>8/28 - 9/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>Historical development of our understanding of disease</td>
<td>9/4 - 9/8</td>
</tr>
<tr>
<td>Week 3</td>
<td>Collecting data on diet and health</td>
<td>9/11 - 9/15</td>
</tr>
<tr>
<td>Weeks 4 - 5</td>
<td>From correlation to causation: Nutritional study design</td>
<td>9/18 - 9/29</td>
</tr>
<tr>
<td>Week 5</td>
<td>Accumulating evidence over time, <em>e.g.</em> #1:</td>
<td>9/25 - 9/29</td>
</tr>
<tr>
<td></td>
<td>Folic Acid and Neural tube defects in babies</td>
<td></td>
</tr>
<tr>
<td>Weeks 6 - 8</td>
<td>Limits to drawing conclusions from nutritional studies</td>
<td>10/2 - 10/30</td>
</tr>
<tr>
<td>Fall Break</td>
<td><em>[10/16 - 10/20]</em></td>
<td></td>
</tr>
<tr>
<td>Weeks 8-10</td>
<td>Mini-topics: Animal protein</td>
<td>10/23 - 11/10</td>
</tr>
<tr>
<td></td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sugar, sugar substitutes, and the glycemic index</td>
<td></td>
</tr>
<tr>
<td>Weeks 10-11</td>
<td>Media reports about health research</td>
<td>11/6 - 11/17</td>
</tr>
<tr>
<td>Weeks 11-13</td>
<td>Accumulating evidence over time, <em>e.g.</em> #2:</td>
<td>11/13 - 12/1</td>
</tr>
<tr>
<td></td>
<td>Fish oil and Coronary heart disease</td>
<td></td>
</tr>
<tr>
<td>Weeks 13-14</td>
<td>Food Politics:</td>
<td>11/27 - 12/8</td>
</tr>
<tr>
<td></td>
<td>US Dietary guidelines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regulating supplements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technofoods</td>
<td></td>
</tr>
</tbody>
</table>
Assignments and Grading

20% Your own Diet and health risks
   3% Dietary Assessments using two methods
   7% Paper 1: Proposed dietary change
   10% Lab Report: Blood pressure and diet in FYS 22

20% Nutritional Study Designs
   10% Problem Set 1: Classifying Nutritional Epidemiology Studies
   10% Problem Set 2: Caveats to Nutritional Epidemiology Studies

9% Evaluating Media Reports on nutrition
   3% Analysis of Web sites supplying nutritional information
   6% Analysis of Newspaper articles reporting on nutritional research

16% Participation: in-class discussions and group problem solving

15% Paper 2: Who should take fish oil supplements?
   6% 1st iteration
   9% Final version

20% Informal Written Assignments*

100% total

*Informal written assignments will include answering questions about readings. These will help you prepare for class discussions. These assignments will be graded simply for effort and completeness.

Pre-class assignments will be due by 2 am the night before the relevant class. Other assignments will be due by 5 pm the day before a class.

Both types of assignments should be submitted via blackboard as a Word file.

Microsoft Office, including Word, is available for free to all Oberlin students. To download it, go to https://citwiki.oberlin.edu/index.php/Office_365.

Readings
We will be using three books throughout the semester. The science library has copies on reserve.

- Nutritional Epidemiology. Adapted from http://sphweb.bumc.bu.edu/otlt/MPH-Modules/Menu/index.html. Can be purchased for $5 cash or check from Twila Colley in the biology office K123, 8:30 a.m. - 12 pm and 1 pm - 4:30 p.m.


Other readings will be made available as handouts and online through Blackboard.
You can reach Blackboard by going to https://www.oberlin.edu/current-students. Scroll down to Quick Links, Blackboard. Type in your user name and password. Find the centrally located subheading “My online course sites.” FYSP 022 should be listed there.
Late policy
No extensions will be given without prior consent, except in the case of an unexpected emergency (e.g. sudden illness with a doctor's note, death in the family). Assignments handed in late without prior consent or appropriate documentation will be marked down 20% per day late.

Honor Code
As members of the Oberlin College Community, each of us is expected to adhere to the Honor Code. I will tell you how the honor code applies to each specific assignment, but in general:

Problem Solving
Problem sets and lab reports are open book and you are encouraged to discuss the material with other students, but the final work must be your own. In particular, all writing must be in your own words and though you may orally discuss the work, you should never directly look at someone else’s lab write-up or problem set before they are due.

Writing
Papers must be written individually. Drafts may be read and commented on by other students in the class, but the writing itself must be yours.

What constitutes plagiarism?
- Copying text from anywhere without citing it and putting it in quotes.
- Paraphrasing by merely rearranging clauses and substituting individual words
- Including factual information in a paper without citing its source
- Having anyone else do any writing for you,

Sources of Help
You may always come to me for help or use reference librarians, writing tutors, or tutors at the Quantitative Skills Center.

At the end of each academic exercise all students must write the Honor Pledge:
"I affirm that I have adhered to the Honor Code in this assignment."

You must pledge the honor code on every assignment that you turn in.
If you forget to sign the honor pledge, I will withhold your grade until you write the Honor Pledge correctly, although I will not penalize you for the oversight.


Special Accommodations
Oberlin provides a number of resources for people needing special accommodations (note takers, extra time on exams, etc.). Contact the office of disability services:
https://new.oberlin.edu/office/disability-services/accommodations/
All discussions will remain confidential, and your professors will only receive information that describes the type of accommodation you need.
Places to get help

Quantitative skills Center
Science Library: study room, Mudd Library: main floor, Peer Learning Consulting Corner.
Sun - Thu 7 - 11 pm
http://new.oberlin.edu/office/clear/for-students/drop-in-tutoring/index.dot
Drop in help analyzing quantitative data (graphs, tables, statistics) or deciphering scientific papers. Staffed by students from a variety of natural science majors with strong backgrounds in quantitative methods.

Two students working at the Quantitative Skills Center, Ari Rosenblum and Anna Garrison, are particularly knowledgeable in research study design and statistics. Their schedules will be posted on blackboard, along with that of other students who can help with statistics.

Writing Center
Mudd Library 101A and Mudd 052
Sun 2 pm – 12 am, Mon - Thu. 7 pm – 12 am
https://new.oberlin.edu/arts-and-sciences/departments/rhetoric/writing-associates-program/writing-center.dot
Drop-in writing consultation for students working on academic assignments for any class and on any topic. The Center is staffed by student Writing Associates and welcomes all writers to a private one-on-one writing session. Students can visit the Writing Center at any stage of their writing process.

My Office Hours
Sign up on my google calendar (link posted on blackboard). Feel free to sign up for as many time slots as you need to discuss course material, problem solving assignments, writing assignments or any other issue you may be having.

Your classmates
You don't have to learn alone; in fact you shouldn't. Research has shown that the most successful way for students to learn is by studying in groups. In all your classes, your classmates will be an important resource for learning, both inside and outside of the classroom. (On any graded assignments, be sure to ask each professor what sorts of collaboration are allowed, because rules can vary.)