Nutrition Science 105
Nutrition in the 21st Century
TTh 8:30-9:20am
EE - 170
2013

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Phone: 494-0662
EMAIL: mattes@purdue.edu

Objectives:
To develop awareness of the scope of nutrition
To learn approaches for studying nutrition
To acquire basic knowledge and critical thinking skills

Prerequisites:
Nutrition Major

Basis of Evaluation:
Successful Completion of CITI program (Due September 3) 20 points
Point-Counter-point (Due September 17) 20 points
Claim Evaluation (Due September 24) 20 points
Presentation Summaries (1st due October 1, 2nd due October 10) 20 points
Attendance 20 points
TOTAL POINTS POSSIBLE 100 points

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Lower Percent</th>
<th>Upper Percent</th>
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<tr>
<td>A+</td>
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<tr>
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<tr>
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Course Agenda

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Date</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug. 20</td>
<td>Introduction / What is nutrition</td>
<td>Mattes</td>
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<td>2</td>
<td>22</td>
<td>Dept. overview/DGA</td>
<td>Weaver</td>
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<td>3</td>
<td>27</td>
<td>Literature searches</td>
<td>Slebodnik</td>
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<td>Referencing and Plagiarism</td>
<td>Slebodnik</td>
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<td>5</td>
<td>Sept. 3</td>
<td>Study abroad</td>
<td>Cai</td>
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<td>6</td>
<td>5</td>
<td>Nutrition education/communication</td>
<td>Mayfield</td>
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<td>7</td>
<td>10</td>
<td>Macronutrients/Energy</td>
<td>McCrory</td>
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<td>8</td>
<td>12</td>
<td>Aging and nutrition balance</td>
<td>Campbell</td>
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<td>17</td>
<td>Child nutrition</td>
<td>Kranz</td>
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<td>10</td>
<td>19</td>
<td>Eating disorders</td>
<td>Clark</td>
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<td>24</td>
<td>Sports Nutrition</td>
<td>Clark</td>
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<td>12</td>
<td>26</td>
<td>Vitamins</td>
<td>Jiang</td>
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<td>Oct 1</td>
<td>Antioxidants</td>
<td>Burgess</td>
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<td>3</td>
<td>Obesity and its management</td>
<td>Gletsu-Miller</td>
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<td>15</td>
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<td>Lactose intolerance/Bone health</td>
<td>Savaiano</td>
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<td>16</td>
<td>15</td>
<td>Cancer</td>
<td>Teegarden</td>
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STUDENT RESPONSIBILITIES:

Students are expected to take responsibility for their own learning and mastery of the material presented. To this end, the following points are made explicit to the student:

1) Attendance: Attendance is an important component of this course since information not contained in a textbook will be presented during class through lectures, videotapes, and demonstrations. Two unexcused absences will be allowed. However, two points will be deducted from the semester point percentage for each unexcused absence beyond the second. An absence from a regularly scheduled class will be excused if it is the result of illness, death in the family, religious observance or participation in a University-sponsored activity at the request of University authorities. Evidence documenting the cause for absence must be provided in writing within one week of the absence. To avoid a point deduction following an unexcused absence, the student may submit a typed, one page, abstract (about 250 words) of a peer-reviewed article that is related to the topic covered the day of the absence. The abstract must be turned-in within one week of the absence. Students are discouraged from leaving class early since this is disruptive to the instructor and, more importantly, distracting to classmates.

2.) Assignment due dates: The due dates for all assignments are clearly stated on this syllabus. Failure to turn in assignments **IN CLASS** at the designed time will result in point deductions as follows:

Drop off assignment at instructor’s office after class but before 5:00PM on due date -2 points.
Between 5:00PM on due date and next class -5 points  
Between next class and class held one week after initial due date -10 points  
Assignments more than 1 week late will not be accepted.

3) Active Participation: Students are encouraged to actively participate in the learning process. This includes attentive listening. Students who are continuously talking during lecture are showing disrespect for their classmates who are serious about the learning process. **Disruptive students will be asked to leave the lecture and will only be invited to return at the discretion of the instructor.** A second component of active participation is clarification of confusing information. Students are encouraged to ask questions of the instructors since, if one individual does not follow a concept, it is likely that many do not.

4) Work load: Students are expected to spend at least two hours outside class for each hour in class to complete the assignments for this course.

**COURSE POLICIES:**

Cheating, plagiarism and fabrication will not be permitted in this class. All students are advised to read and follow the rules set forth in the Code of Student Conduct and the Academic Dishonesty Code. These publications are available in the Judiciary Office. If any student is found cheating, plagiarizing or fabricating information, strict and immediate action will be taken by the professor.

Non-discrimination: Purdue University and this instructor do not discriminate on the basis of race, religion, color, gender, age, national origin, handicap, or disabled status.

**LEARNING ACTIVITIES:**

**Assignment 1 - CITI PROGRAM**

The CITI (Collaborative IRB Training Initiative) human subjects research educational program consists of modules focused on different aspects of bio-ethics and human subjects research. Each Part, developed by experts in the "IRB community," has an associated quiz.

Anyone affiliated with Purdue who is planning human subjects research must be certified prior to engaging in the research activity. Depending on one's level of involvement, there is a different set of modules that must be completed to satisfy Purdue’s **institutional certification of human subjects training.** Certification is valid for five (5) years. Re-certification through the CITI continuing education program is available and recommended every three years thereafter. The passing score for the Modules is 80%.

The registration site is: [www.citiprogram.org](http://www.citiprogram.org) (copy and paste this in your web browser).

1. As a new user, click on “Register.”
2. Select “Purdue University from dropdown of Question #1

3. Create your username and password, security question, name & email

4. You are NOT requesting CME/CEU

5. submit

6. On next page
   - enter your email address for “institutional email address
   - enter your gender
   - enter highest degree
   - enter: Nutrition Science for department
   - select “student researcher – undergraduate” from drop down on “What is your role in research?”
   - enter our phone # for office phone
   - click on submit

7. Under Question #1 Human Subjects Research “Select **Group 5: Non-Key Personnel**

8. Click on submit

9. Do not register with another institution – click “No”

10. Under “Status” click on “Not Started – Enter”

11. Complete all modules. You must obtain a score of 80% correct or better. If you do not, you must re-take the modules until you do.

12. Print the page documenting that you have passed the course. Make 2 copies, one for you and one to be submitted to the instructor for credit.

You are to complete the online course on research ethics NOT the course on Responsible Conduct of Research (though you can do this too if you are interested – there is no extra credit for this).

**Assignment 2 – Point-Counterpoint**

Rarely in Science is there unanimity of views on a topic. There are always costs and benefits associated with any issue and reasonable people can disagree on the balance of the evidence. It is essential that you develop the skills to critically evaluate apparently conflicting views to derive your own perspective. This assignment calls for you to:

1) Identify a nutrition-related issue of personal interest.
2) Locate one peer-reviewed, original research article on the topic that offers one interpretation of the issue
3) Locate one peer-reviewed, original research article on the topic that offers an alternative interpretation
4) Evaluate the two papers and write a summary that includes:
   a) summary of position of one paper (one paragraph)
   b) summary of position of second paper (one paragraph)
   c) your conclusion about the issue based on the science reported in the papers (one paragraph)
   d) The strengths and weaknesses of each paper that provided the basis of your perspective (bullet list is sufficient)

All parts of the assignment must be handed in together. Bind or staple your materials and make sure they are secure. Be sure to put your name on the cover and each page. Do NOT include your student ID or social security number on the front cover of the project. All parts of the project are to be typed except articles can be photocopies. Hand-written projects will not be accepted. It is expected that your written materials will be free of spelling and grammatical errors. Five points will be deducted for sloppy work. Be sure to attach copies of both articles.

Assignment 3 – Claim Evaluation

There are two parts to this project.

Part 1 (10 points):
   A) Find an article in lay publications (e.g., popular magazine, newspaper) that makes a claim about the health benefits of a food or diet.
   B) Make a photocopy of the article.
   C) Write a one paragraph summary of the claim made in the article and identify the support or rationale provided for the claim.
   D) List 2 questions you would want answered before you would consider believing the claim made in the article.

Part 2 (10 points)
   A) Find a scientific article in a peer reviewed journal (NOT AN INTERNET ADVERTISEMENT OR BLOG SITE, ETC, but accessing a peer-reviewed journal on the internet is acceptable) that is relevant to the questions you have identified as requiring further consideration for the claim in the lay article you selected. Make a photocopy of the article to turn in with this assignment.
   B) State, in one paragraph, whether you are more or less inclined to accept the claim made in the lay article given the additional information you gathered from the scientific literature.

All parts of the project are to be typed except the lay and scientific articles can be photocopies. Hand-written projects will not be accepted. It is expected that your written materials will be free of spelling and grammatical errors. Five points will be deducted for sloppy work. Parts 1 and 2 must be handed in together. Bind or staple your materials and make sure
they are secure. Be sure to put your name on the cover and each page. Do **NOT** include your student ID or social security number on the front cover of the project. Be sure to attach copies of both the lay claim and peer-reviewed article.

**YOU MUST KEEP A PHOTOCOPY OF YOUR MATERIALS. IF THEY ARE LOST AND YOU DO NOT HAVE A COPY, WE WILL ASSUME THAT YOU DID NOT TURN THEM IN.**

**Assignment 4 – Presentation Summaries**

Attend (at least) two lectures on a nutrition/food science topic held on campus, *but not just lectures offered in regular departmental (nutrition or other) courses.* The goal here is to help you learn about the activities and resources on campus. Write a one page summary of the presentation. The write-up should include:

1. Presenter's name
2. Title and date of presentation
3. Summary of content
4. Your opinion of the quality of the science presented
5. Two (2) strengths and two (2) weaknesses of the presentation
6. The primary take-home message for you