Course Information:
CBHS 6670
NUTRITION AND PUBLIC HEALTH
Semester: Fall 2015 - 1 credit hour
Course Delivery: online
Prerequisites: none

Instructor Information:
Kirsten Black, PhD, MPH, RD
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Aurora, CO 80045

Course Communication:
Use Canvas Messaging. I will check Canvas regularly and will try to respond to emails within 24 hours.

University Course Catalog Description:
This survey course begins with an overview of nutrition and its relation to health and disease. The learner will gain experience in reading and evaluating published nutrition research. The second half of the course focuses on public health nutrition topics including theories and frameworks, food insecurity, food policies and regulations and federal programs. For students who are in the Public Health Nutrition Concentration at CSU this course cannot be taken for credit.

Course Competencies:
Maternal and Child Health Competencies Addressed in this Course:
1. Conceptualize and appropriately use data to identify problems and assets, and to plan implement, and evaluate programs.
Community and Behavioral Health (CBH) Competencies Addressed in this Course:
1. Describe, select and apply appropriate theories, models, frameworks and evidence-based strategies for the development of health promotion, disease prevention, and disease management programs.
2. Describe and apply systematic approaches and methods to assess the health-related needs of communities and populations, taking into account individual, interpersonal, community and societal factors.

Cross-cutting Competencies Addressed in this Course:
1. Define, assess and report on the health status of populations, determinants of health and illness, and factors contributing to health promotion and disease prevention.
2. Identify, retrieve, appraise, and apply scientific evidence relevant in the practice of public health.

Course Learning Objectives:
At the end of this course the student will be able to:
1. Explain the relationship between diet, health and disease.
2. Apply critical thinking skills to evaluate nutrition research, published articles, and information in the lay media.
3. Summarize the major functions of nutrients: macro nutrients (fats, carbohydrates, and proteins) and micro nutrients (vitamins and minerals).
4. Apply an ecological framework to identify factors at the individual, family, community, and societal levels that affect the food intake and nutritional status of individuals and populations.
5. Identify behavior change theories commonly used for nutrition assessment and program planning.
6. Discuss federal public health laws, regulations, and policies, in relation to federal food programs, and particularly as they relate to nutrition interventions, and community nutrition health problems.

Lectures:
Lectures will be posted at the beginning of each week and will be approximately 10-20 min in length. The lectures will be most meaningful if you have completed the reading ahead of time. The lectures will highlight important points from the reading(s) as well as introduce new concepts.

Required Readings:
Readings will be derived from books, scientific journals, and websites. Assigned readings are listed within the schedule. Readings will be posted on Canvas as pdfs or web links.
You are expected to complete the assigned reading prior to class.

Required Text:
**Evaluation:**
The grading breakdown for the course is:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Due</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Online profile</td>
<td>End of week 1</td>
<td>5</td>
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<tr>
<td>2. 24 hour recall &amp; food diary</td>
<td>End of week 3</td>
<td>5</td>
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<tr>
<td>3. Food frequency</td>
<td>End of week 3</td>
<td>5</td>
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<tr>
<td>4. Comparison of diet collection methods (1-2 pages)</td>
<td>End of week 5</td>
<td>15</td>
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<tr>
<td>5. Critical appraisal of nutrition article (3-4 pages)</td>
<td>End of week 9</td>
<td>15</td>
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<tr>
<td>6. Community assessment analysis of article (3 pages)</td>
<td>End of week 12</td>
<td>15</td>
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<tr>
<td>7. Letter of inquiry (3 pages)</td>
<td>Finals week</td>
<td>20</td>
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**Discussions**
1. Astrup and Smith articles                      | End of week 11   | 10     |
2. Dietary guidelines                              | End of week 13   | 10     |

**Course Policies:**

**Late Work Policy/Attendance Policy.** Late work will be accepted with a 5% reduction in grade for each 24 hour period it is late. Further detail about late policies specific to assignments will be provided within the rubrics and descriptions of those assignments. I will follow the UC Denver Student Attendance and Absences Policy for granting excused absences (late-work): [http://www.ucdenver.edu/faculty_staff/employees/policies/Policies20Library/OAA/StudentAttendance.pdf](http://www.ucdenver.edu/faculty_staff/employees/policies/Policies20Library/OAA/StudentAttendance.pdf).

**Religious Observances:** If there is a conflict between the normal class schedule and major religious observances, please notify the instructor in advance. See the UC Denver Policy referenced above.

**Extra Credit Policy:** There is no extra credit in this course.

**Grades of "Incomplete":** The current university policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course and the remaining work can be completed the next semester. Your instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished by the end of the year or the “I” will automatically be recorded as an “F” on your transcript.

**Technology and Media**
Email: Official university communication is only sent via a student’s university email address (i.e., firstname.lastname@ucdenver.edu). Most times, email will be returned within 24 hours, or by Monday if you send something over the weekend.
Canvas: This course maintains a Canvas website, and students are expected to be current with course information posted there. Emails from Canvas will forward to your university email address.

Civility: The instructor has a commitment to create a climate for learning characterized by respect for each other and the contributions each person makes to class. Please make a similar commitment.

University Policies

Students with Disabilities: Students requesting accommodations need to contact the Office of Disability Resources & Services (DRS) located in Building 500, Rm. W1103. The physical address is 13001 E. 17th Place, and the phone number is (303) 724-5640. Their staff will assist in determining reasonable accommodations as well as coordinating the approved accommodations.

Honor Code of the University of Colorado Denver: “Education at the Colorado School of Public Health (CSPH) is conducted under the honor system. Matriculation at the CSPH implies the acceptance of, and adherence to, the CSPH Student Academic Honor and Conduct Code. All students who have entered graduate and health professional programs should have developed the qualities of honesty and integrity, and each student should apply these principles to his or her academic and subsequent professional career. All students are expected also to have achieved a level of maturity reflected by appropriate conduct at all times.” The Student Academic Honor and Conduct Code Colorado School Of Public Health - Effective August 18, 2009 (http://www.ucdenver.edu/academics/colleges/PublicHealth/Academics/academics/Documents/PoliciesHandbooks/CSPH_Honor_Code.pdf) to which all students are held accountable, includes guidelines about academic honesty, professional conduct, alcohol and drug use, and respect for the rights and property of others, among other important details. In particular, plagiarism (including the undocumented use of internet and web-based information), cheating, illegitimate possession and/or use of examinations, violation of the ethical standards for conducting research, and falsification of official records are unacceptable and may result in dismissal from the school.

In this course, the honor code translates readily into the expectation that each student performs each assignment independently without assistance from others, including other students. Students are encouraged to study together, but must respond to the items on the exam or take home assignments independently. Students are encouraged to solicit guidance from librarians and experts, but are expected to create papers and presentations independently. If students plan and deliver presentations as a team, then, obviously they need to work collaboratively and not independently on that assignment. Please ask the instructor if there are any questions about the meaning of “independently”.
**Plagiarism** is the use of another person’s ideas or words without acknowledgement. The incorporation of another person’s work into yours requires appropriate identification and acknowledgement. Examples of plagiarism when the source is not noted include: word-for-word copying of another person’s ideas or words; the “mosaic” (interspersing your own words here and there while, in essence, copying another’s work); the paraphrase (the rewriting of another’s work, while still using their basic ideas or theories); fabrication (inventing or counterfeiting sources); submission of another’s work as your own; and neglecting quotation marks when including direct quotes, even on material that is otherwise acknowledged.

**Cheating** involves the possession, communication, or use of information, materials, notes, study aids, or other devices and rubrics not specifically authorized by the course instructor in any academic exercise, or unauthorized communication with any other person during an academic exercise. Examples of cheating include: copying from another’s work or receiving unauthorized assistance from another; using a calculator, computer, or the internet when its use has been precluded; collaborating with another or others without the consent of the instructor; submitting another’s work as one’s own.

**Fabrication** involves inventing or counterfeiting information—creating results not properly obtained through study or laboratory experiment. Falsification involves deliberate alteration or changing of results to suit one’s needs in an experiment or academic exercise.

**Multiple submissions** involves submitting academic work in a current course when academic credit for the work was previously earned in another course, when such submission is made without the current course instructor’s authorization.

**Misuse of academic materials includes**: theft/destruction of library or reference materials or computer programs; theft/destruction of another student’s notes or materials; unauthorized possession of another student’s notes or materials; theft/destruction of examinations, papers, or assignments; unauthorized assistance in locating/using sources of information when forbidden or not authorized by the instructor; unauthorized possession, disposition, or use of examinations or answer keys; unauthorized alteration, forgery, fabrication, or falsification of academic records; unauthorized sale or purchase of examinations, papers, or assignments.

**Complicity in academic dishonesty** involves knowingly contributing to or cooperating with another’s act(s) of academic dishonesty.
### Schedule of Topics, Readings, and Assignments

**A few notes:**

1. I reserve the right to change the order of topics or substitute readings, films, activities, or assignments of equal length as needed to respond to current events, new resources, or relevant events on campus.

2. Readings will show the full bibliographic citation or link in APA format. These will be posted on Canvas. Please let me know if you have difficulty locating any of these materials.

3. Please check Canvas prior to class each week, and periodically during the week, for supplementary readings or other materials.

#### WEEK | TOPIC | READINGS, ASSIGNMENTS, AND ACTIVITIES

| 1: INTRODUCTION AND OVERVIEW |
|---|---|---|
| **1.** | Studying Nutrition | **Readings:**

- Willet Chapter 2: “What can you believe about diet?” Pages: 27-34

- Online reading on different types of studies: [http://www.hsph.harvard.edu/nutritionsource/research-study-types/](http://www.hsph.harvard.edu/nutritionsource/research-study-types/). Click the link on the bottom to read about: Fiber and colon cancer example.

  **Optional:** Evaluating Nutrition Information: [http://www.cals.uidaho.edu/critical/index.htm](http://www.cals.uidaho.edu/critical/index.htm) (This site can be helpful for those who need a quick refresher on statistics (see “Primer on Statistics”) or study design (see “Evaluating Nutrition Information”).

  **Assignment #1:**

  Complete an online profile

| 2: NUTRIENTS |
|---|---|---|
| **2.** | Energy Sources. Macronutrients: Fats | **Readings:**

- Willet Chapter 4: “Surprising News about Fats” Pages 56-84.

  **Read one of these:**


| 3. | Macronutrients: Carbohydrates | **Readings:**  
Willet. Chapter 5: “Carbohydrates for better or worse”. Pages: 85-100  
**Assignment #3:**  
Complete a food frequency survey (provided) |
| 4. | Macronutrients: Protein | **Readings:**  
Willet. Chapter 6: “Choose healthier sources of protein” Pages: 101-113  
**Assignment #4:**  
Comparison of diet instruments |
| 5. | Micronutrients: Vitamins and Minerals | **Readings:**  
Willet: Chapters 9-11 Pages: 138-185 |
| 6. | Energy balance, weight control and obesity. | **Readings:**  
**Discussion #1:**  
Evaluating studies to make dietary recommendations |
### 3: NUTRITION RESEARCH METHODS

#### 7. Assessing Nutrition Literature

- **Subjects**
- **Data sources**
- **Instruments**
- **Concepts: Sensitivity, specificity**
- **Review and meta-analysis articles**

**Readings:**


**Assignment #5:**

Critical appraisal of a nutrition article

#### 8. Theoretical Models and Frameworks

- **Ecological Framework**
- **Behavior Change theories**

**Readings**

**Ecological model:**


**Behavior Change Theories:** (read one of these)


#### 9. Community Based Participatory Research

**Reading:**

### 4. COMMUNITY NUTRITION ASSESSMENT

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<tr>
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<th>Nutrition/Community Assessment</th>
<th>Reading:</th>
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| 10. |                                | 1. Community Tool Box  
Read: Sections 1 & 2 from the menu on the left (and browse any other sections you find interesting)  
2. USDA Community Food Security Assessment Toolkit (pdf)  
Read chapters 1-3 (pages 2-29). Chapter 3 is a good lead in to the following week’s topic: nutrition surveillance. |

**Assignment #6:**  
Community Assessment: Analysis of Blue Bird Jernigan article (3 pages)

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<tr>
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<th>Nutrition Surveillance</th>
<th>Readings</th>
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| 11. |                        | 1. History of NHANES (pdf)  
Explore these websites to see what types of data is available  
2. USDA List of Food and Nutrition Surveys:  
3. Fruit and vegetable intake (CDC):  
4. Maps showing food, nutrition and physical activity indicators by state(CDC):  
Indicators by state: http://nccd.cdc.gov/NPAO_DTM/# |

### 5. GOVERNMENT FOOD PROGRAMS AND POLICIES

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<thead>
<tr>
<th></th>
<th>Food Insecurity</th>
<th>Reading/Video:</th>
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</thead>
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| 12. 11/16-20 |                  | 1. Watch video: “A Place at the Table” (on poverty in America). Get from local library or online.  

**Assignment #7:**  
Letter of Inquiry (3 pages)

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<thead>
<tr>
<th></th>
<th>USDA</th>
<th>Readings and Websites:</th>
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<tbody>
<tr>
<td></td>
<td>(HHS-USDA)</td>
<td>(read through the questions and answers)</td>
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<td><strong>Discussion #2:</strong></td>
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<td></td>
<td>Politics of the Dietary Guidelines.</td>
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|   | USDA                                                                             | Readings and Websites:                    |
|   | • Nutrition Programs                                                            |                                          |
|   |                                                                                 | 2. USDA FNS Programs and Services:  [http://www.fns.usda.gov/programs-and-services](http://www.fns.usda.gov/programs-and-services)  Click on links for individual programs to learn about them. Things to pay attention to: Who qualifies, what do participants receive, how are the programs funded and administered. Which programs operate in your community? |
|   |                                                                                 |                                          |
|   | 14. Food Safety (USDA)                                                          |                                          |
|   | Food Labeling (HHS-FDA)                                                        |                                          |
|   | FDA: Foods and Supplements: production, labelling, regulations and safety        |                                          |
|   |                                                                                 | 2. FDA Basic Video: Vasilios H. Frankos: Dietary Supplements  [http://www.fda.gov/AboutFDA/Transparency/Basics/ucm195691.htm](http://www.fda.gov/AboutFDA/Transparency/Basics/ucm195691.htm). What is a supplement? |

|   | FINALS WEEK                                                                 |                                          |
|   | Final Paper due                                                               |                                          |