Course Information:
CBHS 6617
NUTRITION AND PUBLIC HEALTH
1 credit hour
Course Delivery: online
Prerequisites: none

Course Communication:
Use Canvas Messaging. I will check Canvas regularly and will try to respond to emails within 24 hours. If you need to submit a document to me (e.g., if you cannot upload your assignment in Canvas, or need me to sign something) you can also use my email above. Sometimes attachments sent through Canvas have not come through.

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 nutrition research articles. The second part 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 theoretical frameworks 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:**
For most weeks, there is a lecture available as well as the PowerPoint version with notes. The Powerpoint version may be quicker/easier to go through. Both versions are very similar. 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 before doing assignments.

**Required Material:**
- *A Place at the Table* (video). You will need to rent (available on Netflix and Redbox) or borrow (available through Denver Public Library) this video to watch before or during week 11.

**Evaluation:** The grading breakdown for the course is---

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Due</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>1. Tell Me About Yourself</td>
<td>1/28</td>
<td>2</td>
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<tr>
<td>2. 24-hour recall &amp; food diary</td>
<td>2/4</td>
<td>4</td>
</tr>
<tr>
<td>3. Food frequency</td>
<td>2/11</td>
<td>4</td>
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<tr>
<td>4. Comparison of diet collection methods</td>
<td>2/18</td>
<td>15</td>
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<tr>
<td>5. Diet and weight</td>
<td>3/11</td>
<td>15</td>
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<tr>
<td>6. Nutrition methods</td>
<td>4/1</td>
<td>15</td>
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<tr>
<td>7. Dietary Guidelines</td>
<td>4/8</td>
<td>10</td>
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<tr>
<td>8. Food insecurity</td>
<td>4/22</td>
<td>10</td>
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<tr>
<td>9. Analysis of Blue Bird Jernigan article (Final paper)</td>
<td>5/18</td>
<td>25</td>
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**Course Policies:**

**Expectations for written work:**
All written work should be submitted through Canvas as a Word document. If there is an occasion when you encounter a problem uploading an assignment in Canvas you may send it to me directly at work email or through Canvas (although sometimes this does not work).

Clear writing is an essential public health competency. Papers submitted by Master’s level students should be grammatically correct and well organized. If you submit a paper that is poorly written, it will be marked down and/or returned for revision (with points deducted).

If you need help with writing, please use the link below to find out about The Writing Center. They offer a wide range of free services to help you pull together a professional document. For hours and location, see [http://www.ucdenver.edu/academics/colleges/CLAS/Centers/writing/Pages/TheWritingCenter.aspx](http://www.ucdenver.edu/academics/colleges/CLAS/Centers/writing/Pages/TheWritingCenter.aspx).
**Late Work Policy/Attendance Policy.** If you anticipate that you will not be able to complete an assignment on time or have an emergent problem, contact me to make arrangements. I can be very flexible and accommodating but it is your responsibility to contact me. If you do not reach out to ask for extra time then late work is subject to being marked down by 5% for each 24 hour period it is late.

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/Policies%20Library/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. The 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**

**Accommodations for Disabilities**

Students requesting accommodations for a disability must contact one of the following:

**Sherry Holden | Coordinator**

University of Colorado Anschutz Medical Campus Disability Resources & Services

Bldg. 500, Room Q20-EG 305A
Phone: (303) 724-5640, Fax (303) 724-5641
Part-time: Monday, Tuesday and Thursday
sherry.holden@ucdenver.edu

Selim Özi | Assistive Technology Specialist, Accommodation Coordinator
University of Colorado Anschutz Medical Campus Disability Resources & Services
Mail Stop A010, Building 500, Room Q20-EG 306
Phone: (303) 724 8428, Fax: (303) 724 5641
selim.oz@ucdenver.edu

Be aware that the determination of accommodations can take a long period of time. No accommodations will be made for the course until written documentation is provided by the Disability resources and services office to the course directors. It is the student’s responsibility to coordinate approved accommodations with the Disability resources and services office in advance.

Further general Information regarding disability resources and services can be found at:
http://www.ucdenver.edu/student-services/resources/disability-resources-services/accommodations/Pages/accommodations.aspx

Students can set up an appointment at:
http://www.ucdenver.edu/student-services/resources/disability-resources-services/about-office/contact-us-CUAnschutz/Pages/form.aspx

Academic Conduct Policy
All students are expected to abide the Honor Code of the Colorado School of Public Health. Unless otherwise instructed, all of your work in this course should represent completely independent work. Students are expected to familiarize themselves with the Student Honor Code that can be found at:
http://www.ucdenver.edu/academics/colleges/PublicHealth/resourcesfor/currentstudents/academics/Documents/PoliciesHandbooks/CSPH_Honor_Code.pdf or in the Policies and Handbooks section under Student Resources of the ColoradoSPH website. Any student found to have committed acts of misconduct (including, but not limited to cheating, plagiarism, misconduct of research, breach of confidentiality, or illegal or unlawful acts) will be subject to the procedures outlined in the CSPH Honor Code.

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. 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. Each week’s readings are posted on Canvas within that week’s module. Please let me know if you have difficulty locating materials.
3. Please check Canvas prior to class each week, and periodically during the week, for supplementary readings or other materials.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
<th>READINGS, ASSIGNMENTS, AND ACTIVITIES</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>1/22-28</td>
<td><strong>Nutrition Research</strong>&lt;br&gt;Types of studies&lt;br&gt;• Cross sectional&lt;br&gt;• Case-control&lt;br&gt;• Cohort&lt;br&gt;• RCT&lt;br&gt;Complexities of doing nutrition research</td>
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<tr>
<td>2.</td>
<td>1/29-2/4</td>
<td><strong>Energy Sources.</strong>&lt;br&gt;Macronutrients: Fats</td>
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<tr>
<td>3.</td>
<td>2/5-11</td>
<td><strong>Macronutrients:</strong>&lt;br&gt;Carbohydrates</td>
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<tr>
<td>4.</td>
<td>2/12-18</td>
<td><strong>Macronutrients:</strong>&lt;br&gt;Protein</td>
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</table>
| 5.  | 2/19-25 | Micronutrients: Vitamins and Minerals | **Readings:**  
1) *Eat, Drink and Be Healthy*, Chapters 8 & 11  
Optional:  
2) *Eat, Drink and Be Healthy*: Chapters 9, 10 & 13  
| 6.  | 2/26-3/4 | Energy balance, weight control and obesity. | **Readings:**  
1) *Eat, Drink and Be Healthy*: Chapter 4, “Healthy Weight”  
| 7.  | 3/5-11 | The microbiome | **YouTube Video:**  
Optional Readings:  
2. Davis SC., Yadav JS, Barrow SD, and Robertson BK. Gut microbiome diversity influenced more by the Westernized dietary regime than the body mass index as assessed using the effect size statistic. Microbiology Open 2017  

## 2: INTERPRETING AND APPLYING NUTRITION RESEARCH

<p>| 8.  | Nutrition Research Methodology | <strong>Reading:</strong> |
|     | <strong>Assignment #6:</strong> Nutrition methods used |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Readings</th>
<th>Assignment #7: Dietary Guidelines</th>
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<tbody>
<tr>
<td>10.</td>
<td>Theoretical Models and Frameworks</td>
<td>Readings:Ecological model:</td>
<td></td>
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3. PUBLIC HEALTH NUTRITION
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings and Websites</th>
<th>Assignment #8</th>
</tr>
</thead>
</table>
**Life Course Nutrition:**  
**Optional:** Resources on Behavior Change Theories  
| 11. 4/9-15 | **Food Insecurity**          | Watch video: “A Place at the Table” (on poverty in America). Get from local library or online.  
**Read:**  
Hilary K. Seligman, M.D., and Dean Schillinger, M.D. Hunger and Socioeconomic Disparities in Chronic Disease. Nejm. 363;1. July 1, 2010 | Effects of food insecurity (Due: 4/22) |
| 12. 4/16-22 | **Government Food Programs and Nutrition Surveillance** | **Readings and Websites:**  
2) USDA Food and Nutrition 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?  
3) History of NHANES (pdf) |  |
| 13. 4/23-29 | **Community Nutrition Assessment** | **Optional Resources** for finding nutrition data:  
LiveWell: [https://www.communitycommons.org/groups/colorado-food-system/](https://www.communitycommons.org/groups/colorado-food-system/)  

**Reading:**  
Community Food Security Assessment Toolkit (pdf). Read chapters 1-9  
Optional (a nice resource to know about)  

| 14. 4/30-5/6 | **Case study: Community Based Research** | **Reading:**  

**Assignment #9:** Final Paper Analysis of Blue Bird Jernigan article (Due 5/18) |

| 15. 5/7-13 | **Food Safety (USDA)**  
**Food Labeling (HHS-FDA)** | **Readings:**  
**New Food labels:**  
3. Mark Wilson, The Plodding 3-year process to redesign the FDA’s Nutrition Label. (pdf)  
**Food Safety:** |
<table>
<thead>
<tr>
<th>5/14-18</th>
<th>FINALS WEEK</th>
<th>Final Paper (Assignment #9)</th>
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Update: Delayed implementation of new labeling laws: