PubH 6902
Maternal, Infant and Preschool Nutrition
Fall 2015

Credits: This is a 2 credit graduate-level course
Meeting Days: Fridays, September 11 through December 11
Meeting Time: 11:15 - 1:10
Meeting Place: Mayo D199
Instructor: Jamie Stang, PhD, MPH, RDN
Office Address: 330 West Bank Office Building, Division of Epidemiology and Community Health
1300 South Second Street, Minneapolis, MN 55454-1015
Office Phone: 612-626-0351
Fax: 612-624-9328
E-mail: stang002@umn.edu
Office Hours: By email arrangement

I. Course Description
This 2-credit course provides an overview of nutrition issues affecting pregnant and postpartum
women, females of reproductive age, infants and children through five years of age. The course
integrates public health practice and policy recommendations with evidence-based clinical practice
guidelines to provide a comprehensive view of maternal and infant nutrition issues seen by
practitioners in community settings. The course also provides an opportunity for students to develop
social marketing and media communication skills and messages appropriate for maternal and child
health (MCH) populations.

II. Course Prerequisites
Students who enroll in the PubH 6902 course should have had previous coursework or a
background in nutrition. Students who are unsure if they meet the pre-requisites should contact the
instructor for more information.

III. Course Goals and Objectives
By the end of the course, students will be able to:

1. Identify nutrition-related health issues among females of reproductive age (12-48 years) that
can affect the ability to become pregnant and the maternal and fetal outcomes of pregnancy

2. Describe appropriate weight gain for women during pregnancy including total and rate of gain as
well as promising practices for achieving an appropriate gestational weight gain.
3. Discuss maternal and fetal health risks associated with pre-pregnancy obesity, excessive gestational weight gain and postpartum weight retention

4. Identify the role of nutrition in preventing and treating nutrition-related issues during pregnancy, such as gestational diabetes, hypertensive disorders and iron deficiency anemia

5. Discuss the benefits and limitations of breastfeeding vs. bottle-feeding for postpartum women and their infants including long-term health risks with emphasis on breastfeeding promotion

6. Describe the progress of the introduction of solid foods for infants, including developmental cues, types of foods introduced and timing of food introductions, with an emphasis on how the introduction of foods may affect health issues such as risk for obesity and food allergies

7. Discuss the relationships between food intake, psychosocial development and physiological needs among 12-72 month old children

8. Develop messages to change nutrition-related behaviors among MCH populations and use visual media to convey these messages

IV. Methods of Instruction and Work Expectations
This course will utilize PowerPoint presentations, readings, completion of a group project, and participation in classroom discussions to convey course content and evaluate student performance. The viewing of audiovisual media inside and outside of the classroom may be required as well. All students are expected to participate fully in group project activities and classroom discussions.

It is expected that each student will spend an average of 6 hours of time per week on course readings and activities. Assignments will be delivered to the instructor via Moodle unless otherwise noted in the syllabus and will have a specific time and date on which they are due. Late assignments will be subject to a loss of points and possible reduction in grade.

V. Course Text and Readings
Readings are listed by week on the course moodle site and on the course syllabus. There is no required text for this course. Suggested readings may be available for some topics when there are readings that may be excessively long or somewhat interesting but not essential to mastering the content of that specific topic.

VI. Course Outline/Module Schedule
September 11 - Course Overview

Introductions
Course Overview
• Project groups assigned

Nutrition during pregnancy: A brief overview

Reading Prior to Class:


Optional readings:

Activity 1 assigned: Identify effective PSA or storytelling example

September 18 - Nutrition Issues of Young Children

Common feeding behaviors and concerns

Role of parenting style on obesity and nutritional status

Read Prior to Class:


• Cassells EL, Magarey AM, Daniels LA, Mallan KM. The influence of maternal infant feeding practices and beliefs on the expression of food neophobia in toddlers. Appetite. 2014;82:36-42. doi:10.1016/j.appet.2014.07.001

Suggested Readings:


September 25 - Group Media Project, Planning and Resources

No readings for class.

Come prepared to work in small groups on developing your messages and producing a project timeline.

Guest lecturer: Scott Spicer, Walter Library Media Librarian

Examples of effective PSA or storytelling due - used in class as examples

October 2 - Nutrition and reproductive health, part 1.

Preconception and interconception health and nutrition

Diet, nutrition and fertility

Effects of obesity among women of reproductive age on fertility and pregnancy outcomes

Weight gain in pregnancy

Read Prior to Class:


Optional readings:


October 9 - Infant Nutrition, Focus on Breastfeeding Promotion

Guest lecturer: Linda Dech, MN Department of Health

Lactation

Read Prior to Class:

• Fewtrell M, Wilson DC, Booth I, Lucas A. Six months of exclusive breastfeeding: how good is the evidence? BMJ 2011;342:c5955. doi: 10.1136/bmj.c5955


Optional readings:


October 16 - Nutrition in Late Infancy and the Toddler Periods

Introduction to solids
Development of feeding behaviors

Read Prior to Class:


Optional readings:


October 23 - Fetal and Early Childhood Growth and Fetal Origins of Disease

Role of fetal development and early growth in metabolic programming
Role of fetal nutrition on development of congenital anomalies

Read Prior to Class:


Optional readings:

October 30 - Nutrition in childcare and early childhood programs

Guest Lecture: Jamie Bonczyk, MA, Director of Health and Nutrition, PICA Head Start

Read Prior to Class:


November 6 - Food Allergies and Intolerances

Common food allergies/intolerances

Causes and consequences of food allergies/intolerances

Read Prior to Class:


Optional readings:


November 13 - No in person class.

Use this day to work on group projects.

November 20 - Obesity and Chronic Disease Prevention and Intervention in MCH populations

Evidence-based interventions and promising practices to limit postpartum weight retention

Factors associated with early development of childhood obesity and interventions to prevent excessive early growth among young children


Optional readings:


• Demment MM, Graham ML, Olson CM. How an online intervention to prevent excessive gestational weight gain is used and by whom: a randomized controlled process evaluation. J Med Internet Res. 2014;16(8):e194. doi: 10.2196/jmr.3483


December 4 - Food Insecurity in MCH Populations

Read Prior to Class:

• Children's Health Watch. Food security protects Minnesota children's health. Feb 2014. Available at www.childrenshealthwatch.org


Optional Reading:


• Cook J, Jeng K. Child food insecurity: the economic impact on our nation. 2009. Available at www.feedingamerica.org


December 11 - Group Project Presentations
Final version of PSA or storytelling video due
Peer and group self assessment form due

Public Health Message and Media Assignment
This project entails developing a public health message on an assigned MCH nutrition topic, then developing a media-based format to convey that message. The goals for this project are for students to learn how: to develop concise, effective public health messages; to develop media-related presentation skills for conveying public health messages to various audiences; and to learn to work effectively in a group.

The context for this project is:
You are employed at a health department in the area of MCH nutrition. Your agency has received grant funding to try to reduce childhood obesity. One of the key strategies to achieve this goal is to develop a social marketing campaign on the topic of nutrition for very young children. Since picky eating is the most common child nutrition issue that parents ask staff about, and is one of the main reasons parents provide for feeding children sugar sweetened beverages and high fat/sugary snack foods, this is the topic that your group decides to address with the first video. Your group has been given the task of developing a message for your community on this topic as well as one media-component for this campaign.

For this course project, you will be required to complete the project described above, which must include both an audio and visual component. The public health message media component should be no more than 2 minutes long. Technology assistance from several campus resources will be available to groups as they work on their assignments, so prior experience in media production is not required. The assignment is broken down into several steps to allow for feedback throughout the process. These steps are:

- Activity 1: Each group will be asked to identify a public health message aimed at the maternal and child health population. This message should be brought to class on 9/25. We will discuss these in class with Scott Spicer, a media technology resource librarian from Walter Library. (5 points)
- Develop your public health message based on your target audience. For this project a target audience has not been defined. You can determine who your target audience is and utilize this in your message development. Your group will want to consider aspects of the audience such as age, race/ethnicity, country of origin, literacy levels, and common health issues related to the topic, etc. Your target audience can be very defined (e.g., parents of a particular SES group, racial/ethnic group, etc) or can be broad (e.g. all parents of 2-3 year old children).
- Write up a description of your target audience, including the public health message you have developed. Write a short (1-2 page) review of why you chose the particular message you did based on your population characteristics. You will need to include at least 3 credible references for this assignment. Develop a project task list and timeline for this project. This should outline which group members are responsible for which activities as well as when specific tasks need to be completed. This is due on October 16. (25 points)
- Develop a storyboard for your media component that outlines the content of your presentation. This is due on October 30. (20 points)
- Present your public health message project to the class. The presentation should include a description of your target audience, the public health message, a short discussion of why your
message is appropriate for your audience and a viewing of the media component you have developed. Each group will have no more than 15 min. to present. **This will occur on December 11.** (35 points)

- On Dec 11, each student will review the presentations of other groups using a peer-review form (handed out in class). These are due at the end of each viewing. (10 points)
- Turn in a group and personal self assessment form (5 points) on Dec 11.

Five percent of the points for each assignment will be deducted each day if it is turned in late.

**Course participation:**
Students are expected to attend lectures, participate in class discussions and fully participate in group project activities. There are not right or wrong answers to the discussion questions. Rather, students are asked to critically think about the questions posed and to integrate information from the entire course as well as personal and professional experiences when answering each question.

**Media Use in Class Policy**
Students are expected to fully participate in class activities and discussions. The use of electronic media in the class to check email or Facebook, send text messages, etc is disruptive to other students and to lecturers. Students who are found to be using electronic media in the class will have 5 points removed from their overall grade for each offense. Exceptions will be made for students who have documented learning needs or when media is required for the class activities.

**VII. Evaluation and Grading**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Due Date</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify effective messages - PSA or storytelling</td>
<td>9/25</td>
<td>5</td>
</tr>
<tr>
<td>Public health message documentation/task list</td>
<td>10/16</td>
<td>25</td>
</tr>
<tr>
<td>Public health message story board</td>
<td>10/30</td>
<td>20</td>
</tr>
<tr>
<td>Final public health message presentation</td>
<td>12/11</td>
<td>40</td>
</tr>
<tr>
<td>Group and self assessment form</td>
<td>12/11</td>
<td>5</td>
</tr>
<tr>
<td>Class discussion and participation</td>
<td>NA</td>
<td>5</td>
</tr>
</tbody>
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**Grading Scale**

- **A** 93-100%
- **A-** 90-92.9%
- **B+** 87-89.9%
- **B** 84-86.9%
- **C+** 80-83.9%
- **C** 77-79.9%
- **C-** 74-76.9%
- **D+** 65-69.9%
- **D** 60-64.9%
- **F** < 60%
The University utilizes plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following:

A  4.000 - Represents achievement that is outstanding relative to the level necessary to meet course requirements
A-  3.667
B+  3.333
B  3.000 - Represents achievement that is significantly above the level necessary to meet course requirements
B-  2.667
C+  2.333
C  2.000 - Represents achievement that meets the course requirements in every respect
C-  1.667
D+  1.333
D  1.000 - Represents achievement that is worthy of credit even though it fails to meet fully the course requirements
S  Represents achievement that is satisfactory, which is equivalent to a C- or better.

For additional information, please refer to:
http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html.

Course Evaluation
The SPH will collect student course evaluations electronically using a software system called CoursEval: www.sph.umn.edu/courseval. The system will send email notifications to students when they can access and complete their course evaluations. Students who complete their course evaluations promptly will be able to access their final grades just as soon as the faculty member renders the grade in SPHGrades: www.sph.umn.edu/grades. All students will have access to their final grades through OneStop two weeks after the last day of the semester regardless of whether they completed their course evaluation or not. Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete a course evaluation for each of the courses for which you are registered.

Incomplete Contracts
A grade of incomplete "I" shall be assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., documented illness or hospitalization, death in family, etc.), the student was prevented from completing the work of the course on time. The assignment of an "I" requires that a contract be initiated and completed by the student before the last official day of class, and signed by both the student and instructor. If an incomplete is deemed appropriate by the instructor, the student in consultation with the instructor, will specify the time and manner in which the student will complete course requirements. Extension for completion of the work will not exceed one year (or earlier if designated by the student's college). For more information and to initiate an incomplete contract, students should go to SPHGrades at: www.sph.umn.edu/grades.

University of Minnesota Uniform Grading and Transcript Policy
A link to the policy can be found at onestop.umn.edu.
VIII. Other Course Information and Policies

Grade Option Change (if applicable):

For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. Grade option change deadlines for other terms (i.e. summer and half-semester courses) can be found at onestop.umn.edu.

Course Withdrawal:

Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Office of Admissions and Student Resources at sph-ssc@umn.edu for further information.

Student Conduct Code:

The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf.

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

Use of Personal Electronic Devices in the Classroom:

Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

Scholastic Dishonesty:

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html.

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: http://www1.umn.edu/oscai/integrity/student/index.html. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Makeup Work for Legitimate Absences:

Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty,
military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see:
http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html.

**Appropriate Student Use of Class Notes and Course Materials:**
Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

**Sexual Harassment:**
"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/SexHarassment.pdf

**Equity, Diversity, Equal Opportunity, and Affirmative Action:**
The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf.

**Disability Accommodations:**
The University of Minnesota is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center Student Services is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DRC at 612-626-1333 or drc@umn.edu to arrange a confidential discussion regarding equitable access and reasonable accommodations.

If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be applied in the course.

For more information, please see the DS website, https://diversity.umn.edu/disability/.

**Mental Health and Stress Management:**
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.

**The Office of Student Affairs at the University of Minnesota:**
The Office for Student Affairs provides services, programs, and facilities that advance student success, inspire students to make life-long positive contributions to society, promote an inclusive environment, and enrich the University of Minnesota community.

Units within the Office for Student Affairs include, the Aurora Center for Advocacy & Education, Boynton Health Service, Central Career Initiatives (CCE, CDes, CFANS), Leadership Education and Development – Undergraduate Programs (LEAD-UP), the Office for Fraternity and Sorority Life, the Office for Student Conduct and Academic Integrity, the Office for Student Engagement, the Parent Program, Recreational Sports, Student and Community Relations, the Student Conflict Resolution Center, the Student Parent HELP Center, Student Unions & Activities, University Counseling & Consulting Services, and University Student Legal Service.
For more information, please see the Office of Student Affairs at http://www.osa.umn.edu/index.html.

**Academic Freedom and Responsibility: for courses that do not involve students in research:**

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.*

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, (Dr Kristin Anderson, SPH Dean of Student Affairs), or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

* Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".

**Student Academic Success Services (SASS):** http://www.sass.umn.edu:

Students who wish to improve their academic performance may find assistance from Student Academic Support Services. While tutoring and advising are not offered, SASS provides resources such as individual consultations, workshops, and self-help materials.