

PUBH 6907, SECTION 320

Maternal, Infant, Child and Adolescent Nutrition Summer
Summer 2019

COURSE & CONTACT INFORMATION

Credits: 3 credits

Meeting Day(s), Time, and Place: This course is entirely web-based, delivered via Canvas at <http://canvas.umn.edu>.

Contact Type	Contact Information	Role	When to Contact
Instructor	<p>Jamie Stang, PhD, MPH, RDN stan002@umn.edu 612-624-1818</p> <p>Aida Miles, EdD, MMSc, RDN miles081@umn.edu 612-625-5865</p>	Primary instructors for this course	<p>Questions about the course's content, video-lectures, assigned reading, discussion post assignments, group project.</p> <p>Unforeseen circumstances that affect class participation and/or completion.</p>
Technical Support	<p>Technical support options are available on the SPH website. https://z.umn.edu/sphquickhelp</p>	Troubleshoots technical issues related to the course site or course content.	Technical issues with the course site, media, quizzes or assignments.

Please save this contact information to your computer or print it. That way, you can still contact us in the event that you have difficulty connecting to the Internet or accessing the syllabus.

Communication in Online Courses

Communication is especially important in an online course. The course site announcement forums/discussions and email will be used to communicate with students. You are responsible for reading all course-related emails sent to your University email account and contacting us in a timely manner with any questions you may have. We strongly recommend that you check your U of M email daily. Our goal is to respond to emails within 48 hours.

COURSE DESCRIPTION

This course provides an overview of nutrition issues affecting pregnant and postpartum women, females of reproductive age, infants, children and adolescents. The course integrates public health practice and policy recommendations with evidence-based clinical practice guidelines to provide a comprehensive view of maternal and child health (MCH) nutrition issues seen by practitioners in community settings. The course addresses nutrition education, community/ population nutrition intervention strategies, and programs and policies to promote healthy eating and physical activity and to reduce obesity and chronic disease risk among MCH populations. The course also provides an opportunity for students to develop social marketing and media communication skills and messages appropriate for MCH populations as well as to evaluate child nutrition assistance programs and policies. Credit for this course will not be granted if students have already taken PubH 6902 or 6903.

COURSE PREREQUISITES

Students who enroll in the PubH 6907 course should have had previous training in introductory nutrition concepts. Students who have not taken prior nutrition coursework need to review Chapter 1 of the assigned textbook before starting the course.

COURSE GOALS & 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 their ability to conceive and that affect 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 breastmilk vs. infant formula for postpartum women and their infants, including short- and long-term health risks, with an emphasis on breastfeeding promotion strategies.
6. Describe the process of introducing 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 children from birth to age 21 years, including the psychological, social, cultural, familial, economic and environmental factors that influence food behavior, dietary intake and physical activity patterns of youth and how these factors affect food choices, nutritional needs, obesity and health.
8. Identify nutrition education and health promotion concepts, interventions, strategies and resources pertinent to youth.
9. Demonstrate skills and develop tools that will enhance the practice of MCH nutrition and obesity prevention in public health settings and schools including program and policy evaluation.
10. Develop messages to change nutrition-related behaviors among MCH populations and use appropriate media to convey these messages

METHODS OF INSTRUCTION AND WORK EXPECTATIONS

Course Workload Expectations

PubH 6907 is a 3 credit course. The University expects that for each credit, you will spend a minimum of three hours per week attending class or comparable online activity, reading, studying, completing assignments, etc. over the course of a 15-week term. Thus, this course requires approximately [3 * 45] hours of effort spread over the course of the term in order to earn an average grade.

This course is entirely online. Therefore, time you would otherwise be in class will be incorporated into work for the course in the form of online discussions, lectures, etc. All course material, including lectures, class notes, assignments and faculty student correspondence will be done via Canvas or email.

This course will be offered over a 10-week period, which means that it is more time intensive than a traditional 3-credit, one-semester course. 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 Canvas 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.

Each week will cover a different topic in the form of a “module.” Each module is identified separately in the Canvas site by dates. Students should start the module by reviewing the Lesson Overview for that week. Each module (with the exception of week 10) includes required reading and a video lecture. Some will also include a discussion forum. It is imperative that students complete the required reading each week prior to viewing the lecture and prior to participating in a discussion forum (if there is one for the week).

Video lectures will NOT cover content that is found in the assigned reading. The lecture will build and supplement the reading. To learn the intricacies of maternal, infant, child and adolescent nutrition, students are expected to actively participate in their own learning by completing all required reading.

The Canvas site has a Q&A Discussion Forum. Students are encouraged to post questions or comments via this forum. Instructors will also post on this forum and answer student questions. Because this is an online class and there is no opportunity for students to ask questions in class, this discussion forum will serve the purpose of clarifying points or discussing them in greater depth.

Technology

You will have a group project for this course. Your group may decide to collaborate electronically through using shared documents. You will also be asked to develop a product to be evaluated within your group. You will have flexibility on the technology to use for that project. Some possible tools you might use include:

- **Google Docs:** Information on sharing and uploading Google Documents is available in the E-Learning and Academic Technologies site under [Guides](#).
- **Google Hangouts:** may be used to “meet” with group members and discuss the project. Information on using Google Hangouts is available in the E-Learning and Academic Technologies site under [Guides](#).
- **Video Production:** If you choose to record a video as a product, the University of Minnesota’s Information Technology group has a [self-help guide](#) that may assist you.
- **YouTube:** If you choose to record a video as a product, you should upload the video to YouTube and provide the link for others to view. Information about YouTube for University of Minnesota students is available [here](#).

Learning Community

School of Public Health courses ask students to discuss frameworks, theory, policy, and more, often in the context of past and current events and policy debates. Many of our courses also ask students to work in teams or discussion groups. We do not come to our courses with identical backgrounds and experiences and building on what we already know about collaborating, listening, and engaging is critical to successful professional, academic, and scientific engagement with topics.

In this course, students are expected to engage with each other in respectful and thoughtful ways.

In group work, this can mean:

- Setting expectations with your groups about communication and response time during the first week of the semester (or as soon as groups are assigned) and contacting the instructor if scheduling problems cannot be overcome.
- Setting clear deadlines and holding yourself and each other accountable.
- Determining the roles group members need to fulfill to successfully complete the project on time.
- Developing a rapport prior to beginning the project (what prior experience are you bringing to the project, what are your strengths as they apply to the project, what do you like to work on?)

In group discussion, this can mean:

- Respecting the identities and experiences of your classmates.
- Avoiding broad statements and generalizations. Group discussions are another form of academic communication and responses to instructor questions in a group discussion are evaluated. Apply the same rigor to crafting discussion posts as you would for a paper.
- Consider your tone and language, especially when communicating in text format, as the lack of other cues can lead to misinterpretation.

Like other work in the course, all student to student communication is covered by the [Student Conduct Code](#).

COURSE TEXT & READINGS

The required text for this course is ***Nutrition Through the Lifecycle, 7th ed.* (2019). J Brown, ed. ISBN: 9781337919333**

This course uses journal articles, which are available via the University Libraries' E-Reserves and will be linked from the course site. 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.

COURSE OUTLINE/WEEKLY SCHEDULE

This course has specific deadlines. All coursework must be submitted via the course site before the date and time specified on the site. **Note: assignments are due by 11:55pm CST unless indicated otherwise.**

Week	Topic	Readings	Activities/Assignments
Week 1 June 10- June 16	<ul style="list-style-type: none"> Course Orientation, Nutrition Prior to Pregnancy, Role of Nutrition in Women's Health 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 2, pg 56 (start at Nutrition and Fertility)-66 Chapter 3, pg 71-78 (stop before section 3.5 Phenylketonuria). 	<ul style="list-style-type: none"> Student Introductions due Sunday, June 16, at 11:55pm.
Week 2 June 17 - June 23	<ul style="list-style-type: none"> Nutrition During Pregnancy, Postpartum Weight Issues 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 4, pg 87-127 Chapter 5, pg 132-150 	<ul style="list-style-type: none"> Discussion Forum 1: Contraception and Weight Gain - Initial post due 6/23 by 11:55pm. (Responses to peers due in next Module/week, 6/30 at 11:55pm)
Week 3 June 24 - June 30	<ul style="list-style-type: none"> Infant Nutrition, Focus on Breastfeeding Promotion 	<ul style="list-style-type: none"> Nutrition Through the Lifecycle <ul style="list-style-type: none"> Chapter 6, pg 154-181 Chapter 7, pg 185-199 (stop before section 7.5), and 204 (start at Infant allergies)-210 (stop before section 7.12) 	<ul style="list-style-type: none"> Discussion Forum 1: Contraception and Weight Gain - Responses to peers due 6/30 at 11:55pm
Week 4 July 1 – July 7	<ul style="list-style-type: none"> Toddler and Preschool Nutrition: Effects on Health and Food Allergy Risk 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 8, pg 214-234 Chapter 10, pg 255-280 Birch LL, Doub AE. Learning to eat: birth to age 2 yr. Changing Markets Foundation (2017) Milking It: How Milk Formula Companies are Putting Profits Before Science (English Summary) 	<ul style="list-style-type: none"> Discussion Forum 2: Marketing Human Milk Substitutes - Initial post due 7/7 at 11:55pm. (Responses to peers due in next Module/week, 7/14 at 11:55pm) Project Part 1 (Group Component) due 7/7 at 11:55 pm)
Week 5 July 8 - July 14	<ul style="list-style-type: none"> Growth, Nutrition and Development of Children and Adolescents 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 12, pg 299-307 (stop prior to section 12.6) and pg 312-315 (section 12.7 only). Chapter 14, pg 348-368 (stop prior to section 14.6). See also: lecture resources in Canvas 	<ul style="list-style-type: none"> Discussion Forum 2: Marketing Human Milk Substitutes - Responses due to peers 7/14 at 11:55pm
Week 6 July 15 – July 21	<ul style="list-style-type: none"> Child Nutrition Programs: Promoting Healthy Eating and Physical Activity Behaviors 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 12, pg 318-324 Chapter 14, pg 368 (start at section 14.6)-374 See also: lecture resources in Canvas 	<ul style="list-style-type: none"> Discussion Forum 3: Food advertising to children - Initial post due 7/21 at 11:55pm. (Responses to peers due in next Module/week, 7/28 at 11:55pm)
Week 7 July 22 – July 28	<ul style="list-style-type: none"> Adolescents Participating in Organized Sports; and Eating Disorders in Youth 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 12, pg 315 (start at section 12.8)-317 	<ul style="list-style-type: none"> Discussion Forum 3: Food advertising to children - Responses due to peers 7/28 at 11:55pm

		<ul style="list-style-type: none"> Chapter 15, pg 381 (start at section 15.2)-385 (stop prior to section 15.4) Chapter 15, pg 390-397 	
Week 8 July 29 – August 4	<ul style="list-style-type: none"> Children and Adolescents with Overweight and Obesity: Prevention and Treatment 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 12, pg 307 -312 (Section 12.6 only) Chapter 15, pg 377-381 (stop prior to section 15.2) 	<ul style="list-style-type: none"> Discussion Forum 4: Weight-based teasing - Initial post due 8/4 at 11:55pm. (Responses to peers due in next Module/week, 8/11 at 11:55pm)
Week 9 August 5 – August 11	<ul style="list-style-type: none"> Nutrition for Children and Youth with Special Health Care Needs 	<ul style="list-style-type: none"> <i>Nutrition Through the Lifecycle</i> <ul style="list-style-type: none"> Chapter 11, pg 283-296 Chapter 13, pg 327-345 	<ul style="list-style-type: none"> Discussion Forum 4: Weight-based teasing. Responses due to peers 8/11 at 11:55pm Project Part 2 (Individual Component) due 8/7 at 11:55pm)
Week 10 August 12 – August 16	<ul style="list-style-type: none"> Final Project 		<ul style="list-style-type: none"> Project Part 3 (Individual and Group component) due 8/16 at 11:55)

Group Project

Scenario:

You are part of a Community Food and Nutrition Council which has a goal of improving access to and intake of healthy foods in your community. The Council has been asked by state health officials to develop a campaign to reduce consumption of high-sugar content foods and sugary drinks by school-aged children (ages 5-12). Your task is to develop some type of product that will help parents of 5-12 year-old children reduce the quantity and/or frequency of high-sugar foods and beverages they purchase and serve to their children.

The “product” that you develop can take any form you would like. A few ideas (but certainly not an exhaustive list) would include YouTube video segments (2 mins or less in length), Public Service Announcements (PSAs), infographics, posters or other still image materials, a series of emails/tweets for parents, a radio announcement, etc. Be creative in what you do, but also keep your target audience in mind (info below). Each group member will develop a product and submit it to the larger group. The large group will determine, collectively, which product they would submit to the state health officials.

Your community will vary – each group will be assigned a specific group with defined demographic characteristics, such as race/ethnicity, Socio Economic Status (SES), geographic area, etc. This will inform the type of product that you develop. A list of groups and demographic characteristics will be included on the course site and will be provided once class groups are formed.

PROJECT PART 1 (GROUP COMPONENT):

Each group will be asked to identify and report several key pieces of background information to inform the development of their product. The pieces of information include:

1. What percentage of youth in your demographic group consume less than 10% of daily Kilocalories (Kcals) as added sugars? What percentage consume more than 10% of daily energy intake as added sugars? These data must be from a reliable database (e.g., What We Eat in America or NHANES). You will likely not find state specific data, so national data is fine to use. A citation for the source of your data is required.
2. What are the major sources of added sugars in the diets of youth in your group? List the top 8 food and beverage sources of added sugars. Data should be published within the past 6 years (though the data it is based on could be collected more than 6 years prior). These data must be from a reliable database (e.g., What We Eat in America, NHANES or the Food Pattern Equivalent Database). You will likely not find state specific data, so national data is fine to use. A citation for the source of your data is required; sources must be from reputable sources and cannot be from industry, Wikipedia, blogs, etc.
3. Are there any specific cultural, religious or other traditional food practices that might need to be considered? This may or may not be something you find, but it is something you should investigate and report (yes or no, details if the answer is yes).

This is due at the end of Week 4 (Sunday, July 7 at 11:55 pm). Points = 20

PROJECT PART 2 (INDIVIDUAL COMPONENT):

Each person will develop a single “product” that they will submit to their group as a possible solution. The “product” that you develop can take any form you would like. A few ideas (but certainly not an exhaustive list) would include:

- YouTube video segments (2 mins or less in length),
- PSAs (90 secs or shorter),
- infographics,
- posters or other still image materials,
- a series of emails/tweets for parents,
- a radio announcement,
- anything else that is creative and would engage your audience.

Each group member will develop a product and submit it to the larger group. This part is due at the middle of week 9 (Wednesday, August 7 at 11:55 pm). Total points = 30

PROJECT PART 3 (INDIVIDUAL & GROUP COMPONENT):

Each person in the group will use a rubric to evaluate each product and will submit the evaluations to the course instructors. The sum of the final scores determine, collectively, which product they would submit to the state health officials. This part is due on Friday, August 16 at 11:55 pm. Total points = 10

SPH AND UNIVERSITY POLICIES & RESOURCES

The School of Public Health maintains up-to-date information about resources available to students, as well as formal course policies, on our website at www.sph.umn.edu/student-policies/. Students are expected to read and understand all policy information available at this link and are encouraged to make use of the resources available.

The University of Minnesota has official policies, including but not limited to the following:

- Grade definitions
- Scholastic dishonesty
- Makeup work for legitimate absences
- Student conduct code
- Sexual harassment, sexual assault, stalking and relationship violence
- Equity, diversity, equal employment opportunity, and affirmative action
- Disability services
- Academic freedom and responsibility

Resources available for students include:

- Confidential mental health services
- Disability accommodations
- Housing and financial instability resources
- Technology help
- Academic support

EVALUATION & GRADING

[Enter a detailed statement of the basis for grading here. Include a breakdown of course components and a point system for achieving a particular grade. Include expected turnaround time for grading/feedback. Please refer to the University’s Uniform Grading Policy and Grading Rubric Resource at <https://z.umn.edu/gradingpolicy>]

Component	Points	% of Final Grade
Introductory Discussion: Introduce Yourself	5	4.76%
Discussion Forum 1	10	9.52%
Discussion Forum 2	10	9.52%
Discussion Forum 3	10	9.52%
Discussion Forum 4	10	9.52%
Project Part 1 (Group Component)	20	19.06%

Project Part 2 (Individual Component)	30	28.58%
Project Part 3: (Individual & Group Component)	10	9.52%
TOTAL	105	100.00%

Grading Scale

The University uses plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following, and you can expect the grade lines to be drawn as follows:

% In Class	Grade	GPA
93 - 100%	A	4.000
90 - 92%	A-	3.667
87 - 89%	B+	3.333
83 - 86%	B	3.000
80 - 82%	B-	2.667
77 - 79%	C+	2.333
73 - 76%	C	2.000
70 - 72%	C-	1.667
67 - 69%	D+	1.333
63 - 66%	D	1.000
< 62%	F	

- A = achievement that is outstanding relative to the level necessary to meet course requirements.
- B = achievement that is significantly above the level necessary to meet course requirements.
- C = achievement that meets the course requirements in every respect.
- D = achievement that is worthy of credit even though it fails to meet fully the course requirements.
- F = failure because work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (Incomplete).
- S = achievement that is satisfactory, which is equivalent to a C- or better
- N = achievement that is not satisfactory and signifies that the work was either 1) completed but at a level that is not worthy of credit, or 2) not completed and there was no agreement between the instructor and student that the student would receive an I (Incomplete).

Evaluation/Grading Policy	Evaluation/Grading Policy Description
<p>Scholastic Dishonesty, Plagiarism, Cheating, etc.</p>	<p>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 (As defined in the Student Conduct Code). For additional information, please see https://z.um9n.edu/dishonesty</p> <p>The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: https://z.umn.edu/integrity.</p> <p>If you have additional questions, please clarify with your instructor. 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.</p> <p>Indiana University offers a clear description of plagiarism and an online quiz to check your understanding (http://z.umn.edu/iuplagiarism).</p>
<p>Late Assignments</p>	<p>Late assignments will be subject to a loss of points and possible reduction in grade.</p>
<p>Attendance Requirements</p>	
<p>Makeup Work for Legitimate Reasons</p>	<p>If you experience an extraordinary event that prevents you from completing coursework on time and you would like to make arrangements to make up your work, contact your instructor within 24 hours of the missed deadline if an event could not have been anticipated and at least 48 hours prior if it is anticipated.</p> <p>University policy recognizes that there are a variety of legitimate circumstances in which students will miss coursework, and that accommodations for makeup work will be made. This policy applies to all course requirements, including any final examination. Students are responsible for planning their schedules to avoid excessive conflicts with course requirements.</p> <ol style="list-style-type: none"> 1. Instructors may not penalize students for absence during the academic term due to the following unavoidable or legitimate circumstances: illness, physical or mental, of the student or a student's dependent; medical conditions related to pregnancy; participation in intercollegiate athletic events; subpoenas; jury duty; military service; bereavement, including travel related to bereavement; religious observances; participation in formal University system governance, including the University Senate, Student Senate, and Board of Regents meetings, by students selected as representatives to those bodies; and activities sponsored by the University if identified by the senior academic officer for the campus or the officer's designee as the basis for excused absences. 2. Voting in a regional, state, or national election is not an unavoidable or legitimate absence. 3. Instructors are expected to accommodate students who wish to participate in party caucuses, pursuant to Board of Regents resolution (see December 2005 Board of Regents Minutes, p 147.) 4. For circumstances not listed in (1), the instructor has primary responsibility to decide on a case-by-case basis if an absence is due to unavoidable or legitimate circumstances and grant a request for makeup work. <p>Because this course is entirely online and all materials are available to students from the first day of the term, we expect students to plan accordingly if travels or access to internet will cause them to miss a deadline. Note that our deadlines are generally set for 11:55 p.m. CST, so traveling to a different time zone will require additional planning. Further, circumstances that qualify for making up missed work will be handled by the instructor on a case-by-case basis; they will always be considered but not always granted. For complete information, view the U of M's policy on Makeup Work for Legitimate Absences (http://z.umn.edu/sphmakeupwork).</p>
<p>Extra Credit</p>	

Saving & Submitting Coursework	Documents that students submit are considered final; students may not submit more than one version or draft of each assignment.
Technical Issues with Course Materials	<p>You are expected to submit all coursework on time and it is your responsibility to ensure that your work is submitted properly before the deadline.</p> <p>If you experience technical difficulties while navigating through the course site or attempting to submit coursework:</p> <ul style="list-style-type: none">• Go to Quick Help: http://z.umn.edu/sphquickhelp.• Connect with the appropriate person or office within 30 minutes of the problem's occurrence.<ul style="list-style-type: none">○ Provide as much information as possible, so the tech team can best help you as soon as possible.○ You can expect a response within 1-2 business days to help resolve the problem.