

PubH 6903

Child and Adolescent Nutrition

Fall 2015

Credits:	This is a 2 credit graduate-level course
Meeting Days:	Mondays, September 14 through December 14
Meeting Time:	1:25 - 3:20
Meeting Place:	Mayo A110
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
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I. Course Description

This is a 2-credit course focused on the major public health nutrition-related issues and concerns of school-aged children and adolescents (6-21 years of age). It does not address nutrition issues of younger children - those issues are addressed in the PubH 6902 course.

The main focus of this course is an overview of the factors influencing eating behaviors, physical activity patterns and obesity. The course addresses nutrition education, nutrition intervention strategies, and programs and policies to promote healthy eating and physical activity. Because of the strong influence that school meals have on the dietary patterns of children and teens, school meal programs will be emphasized, as will obesity prevention. The course is designed primarily for public health nutrition and MCH students as well as allied health or medical professionals who intend to work with school-aged children, adolescents and their families.

II. Course Prerequisites

Students who enroll in the PubH 6903 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. To understand the relationships between nutrition, growth and psychosocial development during childhood and adolescence.
2. To gain an understanding of the psychological, social, cultural, familial, economic and environmental factors that influence food behavior, dietary intake and physical activity patterns of children, adolescents and college students, and how these factors affect food choices, nutritional needs, obesity and health.
3. To recognize and understand the major nutrition-related problems of children and youth and identify “high risk” groups associated with these problems
4. To become familiar with nutrition interventions, policies, practices and programs affecting children, adolescents and their families.
5. To understand and identify chronic disease risk factors in childhood and dietary recommendations of youth. Special attention will be paid to child and adolescent obesity.
6. To become familiar with nutrition education and health promotion concepts, interventions, strategies and resources pertinent to youth.
7. To provide students with skills and tools that will enhance the practice of nutrition and obesity prevention in public health settings and schools including program and policy evaluation.

IV. Methods of Instruction and Work Expectations

This course will utilize PowerPoint presentations, required 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 imperative that students complete reading assignments BEFORE the class period for which they are assigned. We will have in class activities and discussions based on the readings. If a reading is listed as optional, those readings are not required to be completed prior to class.

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.

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. Students will be asked to stow electronic media or to leave the classroom if the use of electronic media is unavoidable. Exceptions will be made for students who have documented learning needs or when media is required for the class activities.

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 14 - Course Overview

Introductions

Course Overview

- Projects discussed and assigned

September 21 - Nutrition Needs and Eating Behaviors of Youth

Role of nutrition in physical growth and development

Psychosocial influence of eating behaviors and food choices

Read Prior to Class:

- Stang J, Story M. Adolescent Growth and Development. in: Guidelines for Adolescent Nutrition Services. 2010, Stang J, Story M, eds. Available at http://www.epi.umn.edu/let/pubs/adol_book.shtm
- Rogol AD, Clark PA, Roemmich JN. *Growth and pubertal development in children and adolescents: effects of diet and physical activity*. Am J Clin Nutr 2000;72(suppl):521S–528S.

September 28 - Influencing Eating Behaviors of Youth: Media and Advertising

Read prior to class:

- Kunkel DL, Castonguay JS, Filer CR. Evaluating industry self-regulation of food marketing to children. Am J Prev Med 2015; doi: 10/1016/j.amepre.2015.01.027
- Powell LM, Rimkus I, Isgor Z, Barker DC, Chaloupka FJ. Exterior marketing practice of fast-food restaurants - a BTG research brief. Chicago, IL: Bridging the Gap Program, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012. www.bridgingthegapresearch.org
- Davis B, Carpenter C. Proximity of fast-food restaurants to schools and adolescent obesity. Am J Public Health. 2009;99:505-510. doi: 10.2105/AJPH.2008.137638

October 5 - No Class

October 12 - School Meal Programs

Guest lecturer: Angie Gaszak, MPH, RDN, Nutrition Program, St Paul Public Schools

Read prior to class:

- Food Research Action Center. National School Lunch Program: Trends and factors affecting student participation. January 2015. Available at www.FRAC.org
- Hanks AS, Just DR, Wansink B. Chocolate milk consequences: a pilot study evaluating the consequences of banning chocolate milk in school cafeterias. PLoS ONE 2014;9(4):e91022. doi: 10.1371/journal.pone.0091022
- Wansink B, Just DR, Patterson RW, Smith LE. Nutrition report cards: an opportunity to improve school lunch selection. PLoS ONE. 2013;8(10): e72008.

October 19 - Behavioral Economics in School Nutrition Programs

Read prior to class:

- Wansink B, van Ittersum K, Payne CR. Larger bowl size increase the amount of cereal children request, consume and waste. *J Pediatr*. 2014;164:323-326.
- Wansink B, Van Ittersum K. Portion Size Me: Plate-size induced consumption norms and win-win solutions for reducing food intake and waste. *J Exper Psych: Applied*. 2013;19(4):320-332.
- Wansink B, Just DR, Payne CR, Zlinger MZ. Attractive names sustain increased vegetable intake in schools. *Prev Med*. 2012;55:330-332.
- Chandon P, Wansink B. Does food marketing need to make us fat? A review and solutions. *Nutr Rev*. 2012;70(10):571-593.
- Hanks AS, Just DR, Wansink B. Smart lunchrooms can address new school lunchroom guidelines and childhood obesity. *J Pediatr*. 2013;162:867-869.

Notification of school lunch visit location, date, time due to instructor

October 26 - Health Promotion and Disease Prevention Interventions for Youth

Guest lecture: Katie Loth, PhD, MPH, RDN, Assistant Professor, UMN School of Medicine

Read prior to class:

- Wright K, Norris K, Giger JN, Suro Z. Nutrition knowledge, and self-efficacy among underserved school children with parent and community involvement. *Childhood Obesity*. 2012;8(4):347-357. doi: 10/1089/chi.2012.0045

November 2 - Obesity Treatment and Prevention

Read prior to class:

- Johnson JA, Johnson AM. Urban-rural differences in childhood and adolescent obesity in the United States: a systematic review and meta-analysis. *Childhood Obesity*. 2015;11(3):233-242. doi: 10.1089/chi/2014.0085
- Active Living Research. Does summertime weight gain undermine youth obesity prevention efforts? Research brief. www.activelivingresearch.org
- Ho M, Garnett SP, Baur LA, et al. Impact of dietary and exercise interventions on weight change and metabolic outcomes in obese children and adolescents: A systematic review and meta-analysis of randomized trials. *JAMA Pediatr*. 2013;167(8):759-768.
- Barnett SJ. Bariatric surgical management of adolescents with morbid obesity. *Curr Opin Pediatr*. 2013;25:515-520.
- Black JA, White B, Viner RM, Simmons RK. Bariatric surgery for obese children and adolescents: a systematic review and meta-analysis. *Obesity Rev*. 2013;14:634-644.

Optional Reading:

- Minihan P, Fitch S, Must A. What does the childhood obesity epidemic mean for children with special health care needs? *J Law Med Ethics*. Spring 2007, pages 61-77.

November 9 - No Class (Food Access Summit)

November 16 - Physical activity

Guest lecture: Toben Nelson, ScD, Associate Professor, Division of EpiCH

Read Prior to Class:

- Clemes SA, Biddle SJH. The use of pedometers for monitoring physical activity in children and adolescents: measurement considerations. *J Phys Activ Health*. 2013;10:249-262.
- Dobbins M, Husson H, DeCorby K, La Rocca RL. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18. *Cochrane Database Syst Rev*. 2013 Feb 28;2:CD007651. doi: 10.1002/14651858.CD007651.pub2

November 23 - Eating Disorders

Read prior to class:

- Balantekin KN, Savage JS, Marini ME, Birch LL. Parental encouragement of dieting promotes daughters' early dieting. *Appetite*. 2014;80:190-196. doi: 10.1016/j.appet.2014.05.016
- Javed A, Tebben PJ, Fischer PR, Lteif AN. Female athlete triad and its components: toward improved screening and management. *Mayo Clin Proc*. 2013;88(9):996-1009
- Thein-Nissenbaum J. Long term consequences of the female athlete triad. *Maturitas*. 2013;75:107-112.
- Smink FR, van Hoeken D, Hoek HW. Epidemiology, course and outcome of eating disorders. *Curr Opin Pyschiatry*. 2013;26(6):543-548.
- Bryant-Waugh R. Feeding and eating disorders in children. *Curr Opin Psychiatry*. 2013;26(6):537-542.
- Neumark-Sztainer D. the interface between the eating disorders and obesity fields: moving toward a model of shared knowledge and collaboration. *Eating Weight Disord*. 2009;14:51-58.

December 7 - Presentations

School lunch presentations

Final school lunch observation reports and recommendations due

December 14 - Nutrition and Health Issues of Older Adolescents and College Students

Guest lecture: Katherine Lust, PhD, MPH, RDN, Boynton Health Service

School wellness policy evaluation and recommendation due

School Meal Observation Project

For this assignment, students should make arrangements to visit a school to observe a meal service. The preference is for students to observe a lunch period, but if this will not work due to scheduling issues, students may observe school breakfast with prior permission from the course instructor. The purpose of this project is for students to observe and describe (1) the school lunch program; (2) the

foods served; (3) the environment of the school cafeteria in an elementary, middle or high school; and (4) the overall food environment of the school including any behavioral economics strategies employed in the food service setting.

Students will be asked to choose an elementary, middle, junior high or high school to observe. They will need to make arrangements to visit the school during the lunch period. It is imperative that students follow the steps outlined below to obtain permission to visit a school in advance of the scheduled visit. Students are encouraged to observe lunches in small groups, however each student must write up their own observations and their own set of recommendations. Students will fill out the questions on the forms that are posted on the course website. At the end, each person will write a short summary (no longer than three pages).

School Wellness Policy Project

For this project you will be asked to locate and review the actual school wellness policy for the school/district you visited for your lunch observation, to determine how well it addresses required criteria. Using the School Wellness Policy Evaluation Tool (available on the course website), you will rate the policy for comprehensiveness and strength. In addition, you will be required to write a short (2-3 page) overview of the policy, outlining strengths and weaknesses of the policy and providing at least two (2) detailed recommendations for change.

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

Activity	Due Date	Points
Notification of school lunch observation date/place	10/19	5
School lunch observation report	12/7	35
School lunch observation presentation	12/7	20
School wellness policy evaluation and recommendations	12/16	30
Class discussion and participation	NA	10

Grading Scale

A	93-100%	C	74-76.9%
A-	90-92.9%	C-	70-73.9%

B+	87-89.9%	D+	65-69.9%
B	84-86.9 %	D	60-64.9%
C+	80-83.9%	F	< 60%
C	77-79.9%	.	

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 CourseEval: www.sph.umn.edu/courseeval. 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.