

Introduction to Public Health SPHG 600 (3 credits)

Monday and Wednesday 10-10:50 am, Rosenau 228

Instructor:

Anna Maria Siega-Riz, PhD, RD
Professor of Epidemiology and Nutrition
Associate Dean for Academic Affairs
2105-A McGavran Greenberg Hall
Email: am_siegariz@unc.edu

Teaching Assistant:

Kapuaola Gellert, MPH
Department of Epidemiology
Email: kapuaola@gmail.com

A. Course Description: This introduction course will describe the history of public health, the key terms and concepts, and how the core areas of public health are integrated to promote health at a population level. The class will engage the students in active learning through the use of media, innovative technology, discussion groups, and field experiences.

Objectives of this course include:

- Developing a foundation of the breadth and depth of public health both locally and globally;
- Becoming familiar with the basic concepts of the public health disciplines and how they contribute to our understanding of public health;
- Learning about the history of public health and its influence on the development of today's public health systems and approaches;
- Identifying the causes of social and behavioral factors that affect health of individuals and populations; and
- Becoming aware of ethical consideration in research studies.

B. Resources:

1. Introduction to Public Health, second edition by Mary-Jane Schneider
2. Essentials of Public Health, second edition by Bernard J Turnock
3. A dictionary of public health edited by John Last
4. UNC media library: <http://www.lib.unc.edu/house/mrc/>

C. Assignments (80% of grade):

1. Public health event presentations: students will be broken up into small groups of 4-5 to prepare a class presentation on Monday 2/13 and Wednesday 2/15 as listed in the lesson descriptions. The presentation will describe a local public health event. This presentation will include a description of the event by sharing the media coverage if available. Then, the group will lead a discussion describing how this public health issue involves the application of the different disciplines. Each presentation will be 10 minutes in length and one paper will be handed in by the group that summarizes this information (3 pages in length double-spaced). **15% of grade**

2. Built environment and obesity investigation: students will be assigned to one of two topics; 1) obesity and the built environment related to physical activity. For this topic, through the use of cameras and other media, students will document how the built environment contributes to obesity or 2) obesity and accessibility of affordable foods. Students will be given a “basket of food” that they will price at various food outlets to compare the cost of eating healthy vs. un-healthy. Each group will prepare a report of their findings not to exceed 5 double-spaced pages. **15% of grade**

3. Epidemiology and biostatistics basic concepts assignment: this assignment will include questions on the basic concepts of biostatistics and epidemiology including study design, measures of disease frequency, incidence, and prevalence. **10% of grade**

5. Final group presentation paper (15 minutes and 5 minutes of Q&A): students will work as a group to describe an issue in public health that we have not presented on during the semester and develop a means to address the issue. The description should include the following components: What is the issue? Where does the issue exist? What are the social-behavioral determinants of this public health issue? What is the biology related to this issue? What are some potential interventions for resolving the issue? Do any public health policies exist concerning this issue?

- Group size will depend on class size but ideally 4-5 per group. Each student will take part in the presentation.
- A 10 page double-spaced paper addressing the questions will be turned in as a group project for grading. **(40% of grade)**
- Students in the audience will come prepared with an index card that contains questions to ask the presenters concerning their topics. Questions will be sorted by the TA and asked by the originator of the question.

D. Class participation 20% of grade

- 1. Current public health issue presentations:** throughout the semester, each student will be assigned on a different day to bring a media brief on a current public health event to class. The student will give a 2 minute presentation to the class highlighting how this is public health. (Counts towards class participation)
- 2. John Snow activity:** (http://courses.sph.unc.edu/john_snow/) students will complete this online John Snow case study investigation which describes the cholera outbreak of September 1854. Throughout the activity, students will learn about

John Snow’s response to the outbreak and also examine the steps they may have taken if they were John Snow. Questions will be provided at the end of each section of the activity for students to evaluate their understanding of each activity. (Counts towards class participation)

- 3. Field Trips:** There will several opportunities for field trips throughout the semester. Thus far these have been identified:
- Health Department
 - UNC Water Institute

We expect students to regularly contribute to class discussions in a positive and valuable manner and to be respectful of peers and guest lecturers. Attendance is required, readings or viewing media are expected to be done prior to class and activities listed for a particular lecture in the syllabus should be prepared prior to class. Please notify the instructor and TA (Kapuaola) if you must miss a class for an important reason. **Classroom participation will count towards 20% of the grade.**

E. Final grades will be based upon the completion of the assignments and class participation explained above as follows:

Task	Value	Date
Final Group Presentation and Paper	40%	Due on the day assigned to your group
Classroom participation	20%	Ongoing
Public Health Event Presentation & Paper	15%	Either 2/13 or 15 th
Built Environment and Obesity Investigation	15%	Due on 3/14
Epidemiology and biostatistics basic concepts assignment	10%	Due on 2/7

Letter grades are assigned according to the following scale:

Graduate Students: H (94-100%); P (70-93%); L (50-70%); F (<50%)
 Undergraduates: A (93-100%); A- (90-92%); B+ (87-90%); B (83-86%); B- (80-82%); C+ (77-80%); C (73-76%); C- (70-72%); D+ (67-70%); D (63-66%); D- (50-52%); F (<50%)

F. Honor System

As part of the UNC Honor Code, Carolina students pledge to maintain ideals of academic honesty, personal integrity, and responsible citizenship. These ideals are embodied in the Honor Code set forth in the Instrument, with the support of students, faculty, and staff. When a student applies to Carolina, he undertakes a commitment to the principles embodied in the Honor Code. The University

endeavors to instill in each student a love of learning, a commitment to fair and honorable conduct, and respect for the safety and welfare of others. It also strives to protect the community from those who, for whatever reason, do not embody these values in their conduct, and to protect the integrity of the University and its property for the benefit of all.

G. On-line Course Evaluation

The School uses an on-line evaluation system to assess the quality of instruction and learning of the courses offered. The system is open for a two week period beginning on April 11 and runs through the last day of classes. An email will notify you that the system is open and a link to access the form. This evaluation system is anonymous. The instructors will only see the aggregate data with any comments at the end of the course after grades are turned in. It is your responsibility as a student to complete the evaluations. You will be sent multiple emails until it is completed.

H. Laptop Policy

We expect to bring their laptops to class. They will be used for class room activity purposes and not for surfing the internet or other extracurricular activities not related to the class discussion. Please remember that engaging in such activities during class time is disruptive to fellow students who can see your screen. It is also unacceptable for any of our esteemed visiting guest lecturers to see such non-academic activities during class time. Full engagement in class activities is part of the class participation component of the grade.

I. Valuing, Recognizing, and Encouraging Diversity

Promoting and valuing diversity in the classroom enriches learning and broadens everyone's perspectives. Inclusion and tolerance can lead to respect for others and their opinions and is critical to maximizing the learning that we expect in this program. This may challenge our own closely held ideas and personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment.

Diversity includes consideration of (1) the variety of life experiences others have had, and (2) factors related to "diversity of presence," including, *others*, age, economic circumstances, ethnic identification, disability, gender, geographic origin, race, religion, sexual orientation, social position.

This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.

J. Class Schedule, Topics, and Reading/ Media Assignments

Date	Speakers	Topics and descriptions
Monday 1/9	Anna Maria Siega-Riz, PhD	<p>Course introduction and public health class discussion</p> <ol style="list-style-type: none"> 1. Introduction to the course, review syllabus, describe learning objectives, and explain various field trips that will take place throughout the semester 2. Class discussion on “what is public health.” Students will break into assigned small groups to discuss their understanding of what public health means to them.
Wednesday 1/11	Guest	<p>Health department</p> <ol style="list-style-type: none"> 1. Presentation on the structure and roles of the health department as it relates to public health 2. Student current public health issue presentation <p><u>Readings:</u></p> <ol style="list-style-type: none"> 1. press release from NC department of health: http://www.ncdhhs.gov/pressrel/2011/2011-07-05-seven_north_carolina.htm 2. The ten essential public health services: http://www.cdc.gov/nphpsp/essentialServices.html 3. Kusuma Madamala, PhD, MPH, Katie Sellers, DrPH, Leslie M. Beitsch, MD, JD, Jim Pearsol, MEd, and Paul E. Jarris, MD, MBA. Structure and functions of state public health departments. <i>Am J Public Health.</i> 2011 Jul; 101 (7)1179-1186.
Monday 1/16		Holiday
1/18 Wednesday	Margaret Bentley, PhD (invited)	<p>Global health is local public health</p> <ol style="list-style-type: none"> 1. Discussion of the connection between global health and public health showing examples from work done at the local level. 2. Student current public health issue presentation <p><u>Reading:</u> http://www.ncmedicaljournal.com/wp-content/uploads/2011/01/C_bentley_051310_448-451.pdf</p>

Monday 1/23	Anna Maria Siega-Riz, PhD	<p>History of public health: infectious disease part a:</p> <ol style="list-style-type: none"> 1. Discussion of reactions to John Snow Case study activity 2. Discussion of infection history movie 3. Student current public health issue presentation <p><u>Media:</u></p> <ol style="list-style-type: none"> 1. John Snow case study activity: (http://courses.sph.unc.edu/john_snow/) 2. Infection: A history (running time: 51:02) available from the media library under FMG streaming. http://www.lib.unc.edu/house/mrc/
Wednesday 1/25	Anna Maria Siega-Riz, PhD	<p>History of public health: infectious disease part b:</p> <ol style="list-style-type: none"> 1. Group discussion on reactions to the media resources and assigned NY times articles describing the outbreak. 2. Student current public health issue presentation <p><u>Readings:</u></p> <ol style="list-style-type: none"> 1. “rare cancer in 41 homosexuals”: http://www.nytimes.com/1981/07/03/us/rare-cancer-seen-in-41-homosexuals.html 2. “2 Fatal diseases focus of inquiry”: http://partners.nytimes.com/library/national/science/aids/082981sci-aids.html 3. “A new disease’s deadly odyssey”: http://partners.nytimes.com/library/national/science/aids/020683sci-aids-mag.html
Monday 1/30	Anna Maria Siega-Riz, PhD	<p>History of public health: chronic disease -evolution of obesity</p> <ol style="list-style-type: none"> 1. Description of the history of obesity as it relates to public health 2. Student current public health issue presentation <p><u>Readings/ Media:</u></p> <ol style="list-style-type: none"> 1. The Times article on the evolution of obesity: http://www.timesonline.co.uk/tol/life_and_style/health/features/article6787727.e 2. The Obesity Epidemic. Source: National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity and Obesity. http://www.cdc.gov/cdctv/ObesityEpidemic/. (Running time: 7:13)
Wednesday 2/1	Kurt Ribisil, PhD	<p>History of public health: chronic disease-evolution of smoking</p> <ol style="list-style-type: none"> 1. Description of the history of smoking as it relates to public health 2. Student current public health issue presentation

Monday 2/6	Anna Maria Siega-Riz, PhD	Overview and integration of the 5 core areas of public health <ol style="list-style-type: none"> 1. Each of the core areas of public health will be described with an example of their role in public health 2. Student current public health issue presentation
Wednesday 2/8	Anna Maria Siega-Riz, PhD	Public health events <ol style="list-style-type: none"> 1. Class Discussion on how the areas of public health are integrated when addressing the public health problems associated with the Japan earthquake 2. Break class up into groups to present on a current local public health issue of their choice which will be previously approved by the instructor 3. Student current public health issue presentation <p><u>Readings:</u></p> <ol style="list-style-type: none"> a. NY Times article: http://thelede.blogs.nytimes.com/2011/03/12/video-of-japanese-nuclear-plant-explosion/ b. Time magazine article on the rebuilding of Japan after the earthquake: http://www.time.com/time/magazine/article/0,9171,2079476,00.html
Monday 2/13	Students	Public health event student presentations to the class part b-local issues <ol style="list-style-type: none"> 1. Class will be divided into groups to present on a current public health issue of each group's choice which will be previously approved by the instructor. 2. Student current public health issue presentation
Wednesday 2/15	Students	Public health event student presentations to the class part c-local issues <ol style="list-style-type: none"> 1. Class will be divided into groups to present on a current public health issue of each group's choice which will be previously approved by the instructor. 2. Student current public health issue presentation
Monday 2/20	Anna Maria Siega-Riz, PhD	Epidemiology <ol style="list-style-type: none"> 1. Introduction to study design and measures of health outcomes 2. Presentation on national data sets that speak to the health of the public 3. Student current public health issue presentation
Wednesday 2/22	BIOS faculty	Biostatistics <ol style="list-style-type: none"> 1. Introduction to biostatistics interactive discussion about how methods of biostatistics apply to public health 2. Student current public health issue presentation <p><u>Media resources:</u> Carnegie Mellon learning tools- Intro to population mean, sample mean, standard deviation, standard error, and probability: https://oli.web.cmu.edu/jcourse/lms/students/syllabus.do?section=5cb5601d80020ca6012fc1871b42f1bb (open source)</p>

Monday 2/27	Rebecca Fry, PhD	Environmental health and engineering (ESE) 1. Introduction to ESE interactive discussion about how methods of ESE apply to public health 2. Student current public health issue presentation
Wednesday 2/29	Allan Steckler, DrPH	Health Behavior and Health Education (HBHE) 1. Introduction to HBHE interactive discussion about how methods of HBHE apply to public health 2. Example of a particular study will be given 3. Student current public health issue presentation
Spring Break: 3/3-3/11		
Monday 3/12	HPM faculty	Health Policy and Management (HPM) 1. Introduction to HPM interactive discussion about how methods of HPM apply to public health 2. Student current public health issue presentation
Wednesday 3/14	Barry Popkin, PhD	Nutrition and epidemiology 1. Interactive discussion about the influence of nutrition on public health at a local and global level. 2. Student current public health issue presentation
Monday 3/19	Lew Margolis, MD	Maternal and child health 1. Using articles from the mass media, this class session will enable students to articulate the core principles and activities of the field of MCH. 2. Student current public health issue presentation
Wednesday 3/21	Ronald Aubert, PhD	Pharmacoepidemiology 1. Interactive discussion with faculty adjunct about the role of public health in pharmacoepidemiology 2. Student current public health issue presentation
Monday 3/26	Carri Casteel, PhD	Injury in public health 1. Presentation and discussion on injury prevention as it relates to public health 2. Student current public health issue presentation <u>Readings and Media:</u> 1. APHA injury control and emergency services: http://www.apha.org/membergroups/sections/aphasections/icehs/

<p>Wednesday 3/28</p>	<p>Anissa Vines, PhD and students from the LGBTQ student alliance</p>	<p>Socio-demographic determinants of Health:</p> <ol style="list-style-type: none"> 1. Discussion on the socio-demographic characteristics that have influenced public health. Areas that will be addressed include: <ol style="list-style-type: none"> i. Cultural ii. Racial iii. Sexual orientation iv. Gender v. Socioeconomic 2. Student current public health issue presentation
<p>Monday 4/2</p>	<p>Louise Winstantly, LLB, MS (invited)</p>	<p>Ethics in Public Health</p> <ol style="list-style-type: none"> 1. Discussion of the history of the role of ethics in public health with historical examples. 2. Student current public health issue presentation <p><u>Media:</u> The Deadly Deception-1993 rare documentary (56:28): UNC media resources course reserve call number 65-V4580 or http://www.youtube.com/watch?v=ofiOzzfKK84</p>
<p>Wednesday 4/4</p>	<p>Ralph Baric, PhD</p>	<p>Global public health</p> <ol style="list-style-type: none"> 1. Description of the SARS outbreak and the public health response that was undertaken at a local and global level. 2. Student current public health issue presentation <p><u>Media assignment:</u> Influenza 1918 (running time: 52:32) available from the media library under NC Live streaming. http://www.lib.unc.edu/house/mrc/</p>
<p>Monday 4/9</p>	<p>HPM faculty</p>	<p>Public health system</p> <ol style="list-style-type: none"> 1. Interactive discussion on the strengths and weaknesses of the public health system 2. Student current public health issue presentation <p><u>Reading:</u> 10 essential public health services: http://www.cdc.gov/nphpsp/essentialServices.html</p>

Wednesday 4/11	HPM faculty	Health policy 1. Examples of how health policies have been created around public health issues 2. Student current public health issue presentation
Monday 4/16	Students	Group presentations (3 groups)
Wednesday 4/18	Students	Group presentations (3 groups)
Monday 4/23	Students	Group presentations (2 groups)
Wednesday 4/25	Dean Barbara Rimer, DrPH	Future of public health 1. Discussion on the future of public health 2. Complete course evaluations <u>Reading:</u> IOM future of PH report: http://www.iom.edu/~media/Files/Report%20Files/2002/The-Future-of-the-Publics-Health-in-the-21st-Century/Future%20of%20Publics%20Health%202002%20Report%20Brief.pdf
Exam Week: 4/27-5/4 (Thursday-Wednesday)-no exam for this course		