



**PubH 6390, Topics in Epidemiology: Foundations of Global Health**  
**Section 320**  
**Fall Semester 2016**

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**Credits:** 2  
**Meeting Days:** September 6 – December 14, 2016  
**Meeting Time:** Online at moodle.umn.edu  
**Meeting Place:** Online at moodle.umn.edu  
**Instructor:** Claudia Munoz-Zanzi, DVM, MPVM, PhD  
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**I. Course Description**

This course provides an introduction to key principles and topics in global health including measures of global burden of disease, identification of key health problems around the world and the main determinants, health systems and international public health organizations. In addition, we will discuss cross-cutting and timely issues in health promotion, disease control programs, and operational research in international settings. Class exercises and discussions will focus on challenging global health problems, and strategies to address them. This course is required for those students enrolled in the School of Public Health Global Health Certificate program, and is also open to other qualified students (see Course Prerequisites). Examples of diseases and illustrations of global health problems in this class will include both infectious and non-infectious diseases and should be of interest to students in various programs.

**II. Course Prerequisites**

All students who are currently enrolled in MPH, MS or PhD programs are eligible for this class. Those who have previously graduated from a Master's or Doctoral program in public health are also eligible. Current or former post baccalaureate students in other health professions (e.g., Medicine, Nursing, and Veterinary Medicine) may be admitted with permission of the instructor.

### III. Course Goals and Objectives

Goals of this course are to introduce students to the key principles and practice of global health, as articulated in the Global Health Competency Model developed by the Association of Schools and Programs of Public Health (ASPPH), developed specifically for global health programs in schools of public health. Key components of this ASPPH model include:

- Capacity strengthening: knowledge, skills, and resources for enhancement of global public health programs, infrastructure, and workforce
- Collaborating and partnering: global health stakeholders to advance research, policy, and practice goals, and effective communication
- Health equity and social justice: analysis of strategies to address health disparities across socially, demographically, or geographically defined populations
- Program management: ability to design, implement, and evaluate global health programs to maximize effective policy and practice, and improved and sustainable health outcomes.
- Socio-cultural and political awareness: working effectively within diverse cultural settings and across international political landscapes
- Strategic analysis: monitoring and evaluation of health programs, including operational research, and assessment in complex emergencies/disaster settings

Course objectives are:

- To develop an understanding of measures of population health and how they are used to quantify global burden of disease.
- To become familiar with key global issues in infectious diseases, maternal and child health, nutrition, mental health, and environmental health including ecological, social, and cultural determinants.
- To recognize rationale and methods for disease surveillance and outbreak investigation in international settings.
- To recognize strategies for health promotion including community-level control and prevention programs and a One Health approach to control programs.
- To become familiar with scientific literature and research methods as applied to research in low-resource settings and operational research.
- To identify differences in health systems between developed and developing countries
- To become familiar with the role and work of international organizations and sources of global public health data.

For those enrolled in the 15 credit Global Health Certificate program, this course focuses on principles and cross-cutting issues in global, with discussion of specific topics that illustrate these issues. Other courses in the Certificate program will focus on specific content areas (e.g. nutrition, maternal-child health, etc.), practical skills and logistics for working in global health, or ethical and human rights issues. Field experience will help to provide further practical training in global health.

However, for those who do not want to enroll in the Certificate program, and who want one general course that provides an overview of global health and addresses each of the major competency areas, this class will also meet their needs.

### IV. Methods of Instruction and Work Expectations

This course is conducted online through Moodle with independent completion of online lectures, tests, readings, assignments, and online forum discussions. The course is organized in modules that contain a description of the weekly objectives, assignments, instructions for forum discussions, and expectations for each week. Students are expected to engage actively in class discussion and to complete assigned work by the indicated deadline.

Classes will include a combination of the following:

A. Lecture: Most classes will include an on-line lecture on a general topic in global health, with a focus on global health principles and cross-cutting issues

B. Forum discussion: Students will be asked to participate in critical review of articles and reading assignments. Discussion will be guided by the instructor through a series of questions. Specific participation requirements for full credit will be stated.

## V. Course Text and Readings

Readings for several topics will be assigned from “Understanding Global Health” by Thuy D. Bui and William H. Markle (Second Edition) 2014. McGraw-Hill Education. The book is available online through the University of Minnesota library

([http://primo.lib.umn.edu/primo\\_library/libweb/action/dlDisplay.do?vid=TWINCITIES&docId=UMN\\_A\\_LMA51606267530001701](http://primo.lib.umn.edu/primo_library/libweb/action/dlDisplay.do?vid=TWINCITIES&docId=UMN_A_LMA51606267530001701))

Links to all other required and supplemental readings will be available on the course website.

## VI. Course Outline/Weekly Schedule

Week	Dates	Lecture	Readings	Assignments
1	9/6-9/11	<ul style="list-style-type: none"> <li>Principles of Global Health: Concepts, Overview</li> <li>Data Used to Monitor Global Health (morbidity, mortality, disability)</li> </ul>	<ul style="list-style-type: none"> <li>Bui and Markle, Chapter 1: The Global Burden of Disease</li> </ul>	Participation in forum discussions (instructions in Moodle)
2	9/12-9/18	Health Systems	<ul style="list-style-type: none"> <li>Why do health systems matter? In: Health Systems: Improving Performance, World Health Report 2000. WHO. (Pages 1-11 only)               <ul style="list-style-type: none"> <li>The changing landscape</li> <li>What is a health system?</li> <li>What do health systems do?</li> <li>Why health systems matter?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Participation in forum discussion (instructions in Moodle)</li> <li>Homework #1: Role of NGOs and other non-profits in global health (Due: one week later)</li> </ul>
3	9/19-9/25	Social Determinants of Health	<ul style="list-style-type: none"> <li>Friel S, Marmot MG. Action on the social determinants of health and health inequities goes global. Annu Rev Public Health. 2011;32:225-36.</li> </ul>	<ul style="list-style-type: none"> <li>Participation in forum discussion (instructions in Moodle)</li> <li>Homework #2: Case study (Due: one week later]</li> </ul>
4	9/26-10/2/16	Culture, Behavior and Health	<ul style="list-style-type: none"> <li>Why Culture Matters in Health Interventions: Lessons From HIV/AIDS Stigma and NCDs. Health Education &amp; Behavior 2014, Vol 41(1) 78–84</li> </ul>	Participation in forum discussion (instructions in Moodle)

5	10/3-9/16	Disease Surveillance in the Global Context	<ul style="list-style-type: none"> <li>Kariuki JK, Stuart-Shor EM, Leveille SG, Hayman LL. Methodological Challenges in Estimating Trends and Burden of Cardiovascular Disease in Sub-Saharan Africa. <i>Cardiol Res Pract.</i> 2015;2015:921021.</li> </ul>	<ul style="list-style-type: none"> <li>Participation in forum discussion (instructions in Moodle)</li> <li>Homework #3: Under-diagnosis and under-reporting in global surveillance (<b>Due:</b> one week later]</li> </ul>
6	10/10-16/16	Operational and implementation research	<ul style="list-style-type: none"> <li>Zachariah et al. Operational research in low-income countries: what, why, and how? <i>Lancet Infect Dis</i> 2009; 9: 711–7</li> <li>Babu and Kar. Coverage, compliance and some operational issues of mass drug administration during the programme to eliminate lymphatic filariasis in Orissa, India. <i>Trop Med Intl Health</i> 2004;9:702–9.</li> </ul>	Participation in forum discussion (instructions in Moodle)
7	10/17-23/16	Infectious Diseases	<ul style="list-style-type: none"> <li>Accelerating work to overcome the global impact of neglected tropical diseases – A roadmap for implementation. WHO (<a href="http://apps.who.int/iris/bitstream/10665/70809/1/WHO_HTM_NTD_2012.1_eng.pdf">http://apps.who.int/iris/bitstream/10665/70809/1/WHO_HTM_NTD_2012.1_eng.pdf</a>)</li> <li>Bardosh K. Global aspirations, local realities: the role of social science research in controlling neglected tropical diseases. <i>Infect Dis Poverty.</i> 2014 Oct 1;3(1):35.</li> </ul>	Participation in forum discussion (instructions in Moodle)
8	10/24-30/16	Environmental Health	<ul style="list-style-type: none"> <li>Bui and Markle, Chapter 6: Environmental Health in the global context.</li> <li>McMichael AJ. Globalization, Climate Change, and Human Health. <i>N Engl J Med</i> 2013;368:1335-43.</li> </ul>	Participation in forum discussion (instructions in Moodle)
9	10/31-11/6/16	Maternal and Child Health	Bui and Markle, Chapter 4: The health of women/mothers and children.	<ul style="list-style-type: none"> <li>Participation in forum discussion (instructions in Moodle)</li> <li>Homework #4: Case study (<b>Due:</b> one week later]</li> </ul>
10	11/7-13/16	Non-communicable Diseases	<ul style="list-style-type: none"> <li>WHO. Global status report on noncommunicable diseases 2010. Chapter 1: Burden: mortality, morbidity and risk factors: 9-31.</li> <li>Remais JV, Zeng G, Li G, Tian L, Engalgau MM. Convergence of non-communicable and infectious diseases in low- and middle-income countries. <i>Int J Epidemiol.</i> 2013 Feb;42(1):221-7.</li> </ul>	Participation in forum discussion (instructions in Moodle)

11	11/14-20/16	Global Mental Health	<ul style="list-style-type: none"> <li>• Bui and Markle, Chapter 17: Global mental health: The World Mental Health Survey Perspective.</li> <li>• Li et al. Risk factors for suicide in China's youth: a case-control study. <i>Psychological Medicine</i> (2008), 38, 397–406</li> <li>• Kim JC, et al. Understanding the impact of a microfinance-based intervention on women's empowerment and the reduction of intimate partner violence in South Africa. <i>Am J Public Health</i>. 2007;97(10):1794-802.</li> </ul>	Participation in forum discussion (instructions in Moodle)
12	11/21-27/16	Class project instructions: "Overview, challenges, and options for interventions of a selected global health problem".		Class time to work on project with assistance from the instructor.
13	11/28-12/4/16	Integrated Community-based Interventions	<ul style="list-style-type: none"> <li>• Dembele et al. Implementing preventive chemotherapy through an integrated national neglected tropical disease control program in Mali. <i>PLoS Negl Trop Dis</i> 6(3): e1574.</li> <li>• Gates Foundation Grand Challenge: Community-based interventions (<a href="http://gcgh.grandchallenges.org/challenge/new-ways-working-together-community-based-interventions-round-13">http://gcgh.grandchallenges.org/challenge/new-ways-working-together-community-based-interventions-round-13</a>)</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in forum discussion (instructions in Moodle)</li> <li>• Group assignment</li> </ul>
14	12/5-11/16	Disasters, Complex Humanitarian Disasters	<ul style="list-style-type: none"> <li>• Bui and Markle, Chapter 15: Humanitarian assistance and disaster relief.</li> <li>• Tappero, Tauxe. Lessons learned during public health response to cholera epidemic in Haiti and the Dominican Republic. <i>Emerg Infect Dis</i> 2011;17:2087-93.</li> </ul>	Participation in forum discussion (instructions in Moodle)
15	12/12-16/16	Finals Week		Final Exam

## VII. Evaluation and Grading

Below is a list of the activities by which students will be graded and their assigned weights:

Activity	Points/Percent of Grade
Introduction	1
Forum Discussions (3 point each)	39
Homework (5 points each)	20

Class Project	10
Final Exam	30
<b>Total</b>	<b>100</b>

Assignments are due on the due date indicated in the syllabus. Unless the student has received prior approval from the instructor, late homeworks and forum participation will be penalized 1 point for each day overdue.

**Grades:** Final grades will be assigned as follows, using the new recommended scale:

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 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 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/courseval](http://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](http://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](http://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](http://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](http://onestop.umn.edu).

#### **Course Withdrawal:**

Students should refer to the Refund and Drop/Add Deadlines for the particular term at [onestop.umn.edu](http://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](mailto: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](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](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](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](mailto: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.

*Template update 9/2014*