

ESSENTIALS OF GLOBAL HEALTH
GLBH 181
Spring 2016
T Th 11:00 AM to 12:20 PM
Center Hall Room 216

Faculty

Eileen V. Pitpitan, PhD
Assistant Professor of Medicine/Global Public Health
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Office Hours: By appointment

Teaching Assistants

Mandy Diec
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OH: Thu 1-2:30pm (Peet's Coffee by RIMAC); Tue 5-6:30pm (Virtual)

Qing Qing Zheng
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OH: Tue 3:30-5pm (Peet's Coffee by RIMAC); Fri 1-2:30 (Virtual)

Course Description

This course will provide an overview of global health as a field of research and practice, with an emphasis on use of surveillance and research methods to understand health and determinants of health, evidence-based program development and evaluation of programs in the field, and engagement with governments and advocacy groups to elicit evidence-based policy change. Topics of focus will prioritize infectious diseases, maternal child health, substance use and gender-based violence, as case examples of global health research and programmatic approaches.

Course Objectives

By the end of this course, students will be able to:

1. Demonstrate an understanding of epidemiological concepts and research.
2. Describe the epidemiology of (some) major diseases and population health concerns.
3. Understand determinants of global health and disease, including factors related to the environment and the social context.
4. Understand how to intervene upon the determinants of disease and other health concerns with the goal of improving individual and global health.
5. Argue for the engagement of key stakeholders, including international organizations, to disseminate research findings and support evidence-based policies and programs.

Materials

All course readings and other materials will be available on TritonEd. Additional or alternative readings may be included; if such changes occur, you will be informed ahead of time in class and the materials will be made available on TritonEd.

Course Requirements

1. Exams (70%): There will be 2 exams – one midterm and one final – designed to assess your understanding of the course materials (lectures, guest lectures, readings, etc). Each will contribute 35% of your final course grade.
2. Response papers (30%): A total of five (6% each) 2-3 page response papers will be required throughout the course.

Instructions for Response Papers

- Briefly summarize (~one paragraph) the specific reading or lecture about which you are writing. Only choose new material that has been presented since the last response paper was due.
- The rest of the paper will be divided into two sections:
 - a. Present some new information that you found from a scientific source (e.g., peer-reviewed journal) that was not presented in the reading and/or lecture that serves to either supplement the class information or describe an opposing viewpoint. (~in approximately one page)
 - b. Describe your personal reactions to both sets of material (the class material and the new material you found). This may include answers to the following questions- *Are you surprised, angered, inspired, motivated to act by this information? How do you propose to deal with this issue? What individuals or institutions need to become involved to deal with this issue?* (~in approximately one page)

Instructions for Response Papers (cont.)

- Grades will be based on how you approached the prompt, content, thoughtfulness, organization, structure, and ability to tie material together and look at the “big picture.” You should integrate any relevant content (e.g., concepts, terms) from the class. You are responsible for following the rules of grammar, spelling and punctuation in all written work. Every word and idea that is not your own—whether quotation, paraphrase or summary—must be cited properly. Response papers should be double-spaced, Arial font, size 11, with margins at 0.5 inch all around. All response papers will be submitted to turn-it-in through TritonEd *before the start of class on the days noted in the syllabus*, no hard copies will be accepted.

Policies

Attendance: As per University policy, students who miss 5 or more classes will fail the course.

Classroom conduct: Please refrain from all unnecessary use of electronics, side conversations, and multi-tasking. Computer use in the lecture hall should be strictly limited to consultation of course materials and composition of class notes. Please put away your cell phones before entering the lecture hall or classroom. Because health impacts every person, everyone has experiences to share. Health can be an incredibly personal thing, and I aim to make our classroom a safe place for discussion. Please be respectful of classmates when they share their experiences. You are invited to participate in creating an environment of mutual respect and intellectual productivity by listening and speaking with an open mind.

Make up exams and lateness: Exams: A student may not take a make-up test unless s/he has an excused absence. Excused absences are given only with presentation of a valid medical or emergency excuse (for self or family member) in writing (written by a medical doctor although no specific identifying information regarding the condition should be included). Any other failure to take an exam when it is scheduled will result in no credit for the exam. There are absolutely no makeups for the final exam unless you meet the conditions set out in the undergraduate handbook. Late response papers: will lose a full letter grade for each day that the paper is late.

Accommodations: Anyone in need of classroom or exam accommodations for a disability is encouraged to contact the Office for Students with Disabilities and should inform me as soon as possible.

Academic integrity: All suspicions of integrity violation will be reported to the Academic Integrity Office according to university policy. The Policy on Integrity of Scholarship (academicintegrity.ucsd.edu) list some of the standards by which you are expected to complete your academic work, but your good ethical judgment (or asking me for advice) is also expected, as we cannot list every behavior that is unethical or not in the spirit of academic integrity.

Those students found to have committed academic misconduct will face administrative sanctions imposed by their college Dean of Student Affairs and academic sanctions imposed by me. Students can also face suspension and dismissal from the University; those sanctions are not at my discretion. Academic sanctions can range from an F on the assignment to an F in the class. The appropriate sanctions are determined by the egregiousness of the Policy violation. Students who assist in or are complicit with cheating could also be in violation of the Policy. Thus, students who become aware of their peers either facilitating academic misconduct or committing it should report their suspicions to me for investigation.

Grades

A: 93-100	C: 73-76
A-: 90-92	C-: 70-72
B+: 87-89	D+: 67-69
B: 83-86	D: 60-66
B-: 80-82	F: 59 and below
C+: 77-79	

SCHEDULE OF CLASSES

(This schedule is subject to change based on how much we can get through in our allotted class time. I will notify you of any changes as they are made.)

WEEK 1: Introduction to Course / Goals of Global Health

March 29 Defining and Studying Global Health from an Interdisciplinary Approach

Required Readings:

- Koplan JP, Bond TC, Merson MH, et al. (2009). Towards a common definition of global health. *Lancet*.
- Fried LP, Bentley ME, Buekens P, et al. (2010). Global Health is Public Health. *Lancet*.
- Sepúlveda J, Murray C. (2014). The state of global health in 2014. *Science*.

March 31 What are the Goals of Global Health and Development- MDGs/SDGs

Required Readings (Note that the reports for the MDGs and SDGs are very long, so you may skim these):

- **READ:**
 - http://www.who.int/topics/millennium_development_goals/about/en/
 - <https://sustainabledevelopment.un.org/?menu=1300>
 - Sachs J. (2012). From Millennium Development Goals to Sustainable Development Goals. *Lancet*.
 - Christopher JL & Murray MD. (2015). Shifting to Sustainable Development Goals – Implications for Global Health. *New England Journal of Medicine*.
- **SKIM:**
 - United Nations. The Millennium Development Goals Report 2015.
 - Sustainable Development Knowledge Platform. Open Working Group proposal for Sustainable Development Goals.

WEEK 2: Epidemiologic Concepts to Understand Global Health I

April 05 Epidemiologic Measures of Disease Frequency and Impact

Required Readings:

- Aschengrau A, Seage GR. Essentials of Epidemiology in Public Health, 3rd edition 2013. Chapter 2. Measures of Disease Frequency
- GBD 2013 Mortality and Causes of Death Collaborators. (2015). Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*.
- Norheim OF, Jha P, Admasu K, et al. (2015). Avoiding 40% of the premature deaths in each country, 2010-30: review of national mortality trends to help quantify the UN sustainable development goal for health. *Lancet*.

Response Paper #1 Due

April 07 Epidemiologic Study Designs

Required Readings:

- Aschengrau A, Seage GR. Essentials of Epidemiology in Public Health, 3rd edition 2013. Chapter 6. Overview of Epidemiologic Study Designs.
- Urban M, Banks E, Egger S, et al. (2012). Injectable and Oral Contraceptive Use and Cancers of the Breast, Cervix, Ovary, and Endometrium in Black South African Women: Case-Control Study. *PLoS Med*.

WEEK 3: Epidemiologic Concepts to Understand Global Health II

April 12 Deriving Inferences from Epidemiologic Studies

Guest Lecture: Sexual risk trajectories among men who have sex with men in the Multicenter AIDS Cohort Study (Dr. Heather Pines)

Required Readings:

- Vera et al. (2012). Mujer Mas Segura (Safer Women): a combination prevention intervention to reduce sexual and injection risks among female sex workers who inject drugs. *BMC Public Health*.
- Strathdee et al. (2013). Reductions in HIV/STI incidence and sharing of injection equipment among female sex workers who inject drugs: results from a randomized controlled trial. *PLoS ONE*.

April 14 Descriptive Epidemiology: Person, Place, and Time

Guest Lecture: The effect of geography on HIV and sexually transmitted infections in Tijuana's red light district (Dr. Tommi Gaines)

Required Readings:

- Aschengrau A, Seage GR. Essentials of Epidemiology in Public Health, 3rd edition 2013. Chapter 5. Descriptive Epidemiology
- Maclachlan JH, Lavender CJ, & Cowie BC. (2012). Effect of latitude on seasonality of tuberculosis, Australia, 2002-2011.

WEEK 4: Epidemiologic Concepts to Understand Global Health III

April 19 Dynamics of Disease Transmission

Guest Lecture: High dead-space syringe use among people who inject drugs in Tijuana, Mexico (PhD Student Claudia Rafful)

Required Readings:

- Gordis L. Epidemiology, 5th edition 2014. Chapter 2. The Dynamics of Disease Transmission.

Response Paper #2 Due

April 21 Assessing the Validity of Diagnostic and Screening Tools

Guest Lecture: Point of Care Diagnostics for TB Surveillance (PhD Student Sophia Georghiou)

Required Readings:

- Gordis L. Epidemiology, 5th edition 2014. Chapter 5. Assessing the Validity and Reliability of Diagnostic and Screening Tests

WEEK 5: Midterm / Infectious Disease: HIV

April 26 **MIDTERM EXAM**

April 28 HIV, Infectivity, and Infectiousness

Required Readings:

- Cohen L. (2011). HIV Treatment as Prevention. *Science*.
- Murray CJ et al. (2014). Global, regional, and national incidence and mortality for HIV, tuberculosis, and malaria during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*.

WEEK 6: Infectious Disease: Malaria and Tuberculosis / Maternal and Child Health

May 3 Horizons of Global Health Research Symposium and Field Experience Expo (11:30-3:30)

Guest Lecture: Malaria (Dr. Erin Connors); Required Readings: None

May 5

Guest Lecture 1: Tuberculosis (Dr. Rebeca Cazares)

Guest Lecture 2: Maternal health service acquisition as a predictor of neonatal mortality in low- and middle-income countries. (Dr. Lotus McDougal)

Required Readings:

- Verguet S, Norheim OF, Olson ZD, et al. (2014). Annual rates of decline in child, maternal, HIV, and tuberculosis mortality across 109 countries of low and middle income from 1990 to 2013: an assessment of the feasibility of post-2015 goals. *Lancet Glob Health*.
- Liu L, Oza S, Hogan D, et al. (2015). Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis. *Lancet*. 2015.

Response Paper #3 Due

WEEK 7: Social Determinants of Health

May 10 Stigma

Guest Lecture: Drug overdose and Stigma against drug users (Dr. Peter Davidson)

Required Readings:

- Keusch G, Wilentz J, & Kleinman A. (2006). Stigma and global health: Developing a research agenda. *The Lancet*.
- Mahajan et al. (2010). Stigma in the HIV/AIDS epidemic: A review of the literature and recommendations for the way forward. *AIDS*.

May 12 Gender

Required Readings:

- Hawkes S & Buse K. (2013). Gender and global health: Evidence, policy, and inconvenient truths. *The Lancet*.
- Devries et al. (2013). The global prevalence of intimate partner violence against women. *Science*.

WEEK 8: Structural/Environmental Determinants of Health

May 17 Poverty, hunger, and malnutrition

Required Readings:

- Dying for change: Poor people's experience of health and ill-health. World Health Organization and World Bank.
- Stuckler D, Nestle M (2012). Big food, food systems, and global health. *PLoS Med*.

May 19 Sanitation and climate change

Guest lecture: Sanitation and latrine ownership in India (Dr. Holly Shakya)

Required Readings:

- Boisson S, Engels D, Gordan BA, et al. (2016). Water, sanitation, and hygiene for acceleration and sustaining progress on neglected tropical diseases: a new global strategy 2015-20.
- Costello A, Abbas M, Allen A., et al. (2009). Managing the health effects of climate change. *Lancet*.

Response Paper #4 Due

WEEK 9: Global Health Interventions

May 24

Guest Lecture: Gender, Violence, and Girl Child Marriage (Dr. Anita Raj)

Required Readings: None

May 26 Intervening at the individual and community level

Guest Lecture 1: Development of theory and evidence-based global health interventions (Dr. Laramie Smith)

Guest Lecture 2: An integrated intimate partner violence and HIV prevention intervention in Rakai, Uganda (Dr. Jennifer Wagman)

Required Readings: TBA

WEEK 10: Ethics of Global Health Research / Spheres of Global Health Institutions

May 31 Structural interventions and ethics of research with vulnerable populations

Guest Lecture: 'ESTIMA' and 'Girls on the Move': Economic interventions for women and girls (Dr. Elizabeth Reed)

Required Readings:

- Blankenship KM, Bray SJ, & Merson MH. (2000). Structural interventions in public health. *AIDS*.
- van Rooyen C, Stewart R, & de Wet T. (2012). The impact of microfinance in sub-Saharan Africa: A systematic review of the evidence. *World Development*.
- Pittaway E, Bartolomei L, & Hugman R. (2010). 'Stop stealing our stories': The ethics of research with vulnerable groups. *Journal of Human Rights Practice*.

Additional Resource:

- Pinto AD & Upshur REG. (2007). Global health ethics for students. *Developing World Bioethics*.

June 2 Governing and engaging nation states, institutions, and stakeholders into global health

Guest Lecture: Global health governance and diplomacy (Dr. Timothy Mackey)

Required Readings:

- Frenk J, Moon S. (2013). Governance challenges in Global Health. *New England Journal of Medicine*.
- Feldbaum H, & Michaud J. (2010). Health diplomacy and the enduring relevance of foreign policy interests. *PLoS Medicine*.

Additional Resources:

- Brown MD, Mackey TK, Shapiro CN, Kolker J, & Novotny TE. (2014). Bridging public health and foreign affairs: The tradecraft of global health diplomacy and the role of health attachés. *Science and Diplomacy*.
- Mackey TK, & Liang BA. (2013). Response to comments on "A United Nations global health panel for global health governance. *Social Science and Medicine*.

Response Paper #5 Due

FINALS WEEK

June 7 **FINAL EXAM 11:30am to 2:29pm** (covering material since the Midterm)