Course Information

<table>
<thead>
<tr>
<th>Days</th>
<th>Tuesday</th>
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<tbody>
<tr>
<td>Time</td>
<td>1:00 – 3:50pm</td>
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<tr>
<td>Location</td>
<td>Room B248, Basic Science Building (BSB), School of Medicine</td>
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Structure of the Course

1 – 2pm Faculty Presentation for 45 minutes, Student/Faculty Discussion for 10 minutes, Break for 5 minutes
2 – 3pm Faculty Presentation for 45 minutes, Student/Faculty Discussion for 10 minutes, Break for 5 minutes
3 – 3:50pm Student Presentations (presentations/case studies/discussions for 10 minutes each by student groups concerning current global health events)

Faculty

Steffanie A. Strathdee, PhD
sststrathdee@ucsd.edu
(858) 822-1953
Institute of the Americas, Room 222
Office Hours: By appointment

Harold J. Simon, M.D, PhD
hsimon@ucsd.edu
(858) 534-3479
Institute of the Americas, Room 220
Office Hours: TBA

Karla Wagner, PhD
kdwagner@ucsd.edu
(858) 534-9570
Institute of the Americas, Room 125
Office Hours: By appointment

Leo Beletsky, JD, MPH
lbeletsky@ucsd.edu
(858) 822-0578
Institute of the Americas, Room 109
Office Hours: By appointment

Teaching Assistant

Angela Robertson, MPH
amrobertson@ucsd.edu (*please use for all questions and communications about the course)
Office Hours: Tues, 12:30–1pm (BSB-B248)

Course Description

This course will provide an overview of the socio-cultural, economic, and geo-political framework for the study and understanding of medical problems on a worldwide scale, and as basis for international health policy. This course will cover patterns of major diseases and health problems of global health importance, availability and needs for medical technology, and comparisons between diverse medical education and health care delivery systems abroad with those in the United States. By the end of this course students should have acquired an understanding of diverse determinants of the global burden of major diseases and the relationships between socioeconomic development and global health.

Materials
Required:


*Additional required readings are marked with an asterisk ( * ) in the syllabus

Faculty Responsibilities

Prepare presentations, make required readings and reference materials available, provide advice on additional readings, electives and career opportunities, and evaluate students.

Student Responsibilities

1. **Readings:** Read assigned sections in the textbook and other required readings before class. Consult the reference list for required and recommended readings. Textbooks are on reserve in the Biomedical Library and available for purchase in the UCSD Bookstore. Additional references and course materials listed in this Syllabus are available through the Biomedical Library e-Reserves (http://libraries.ucsd.edu/resources/course-reserves/index.html). Students can select their appropriate department and their class will be displayed. Off-campus access may require a proxy server or VPN. Contact ACMS for assistance: (858) 534-3227 or acs-help@ucsd.edu.

2. **Attendance and Participation:** Attend (and sign-in) classes, participate in discussions, complete the student presentation assignment (required for students taking the class for a grade, see items #3 and #4 below) and weekly evaluations of faculty presentations (see item #5 below).

3. **Student Presentations:** The course is designed to familiarize students with both content and process of global health research. To accomplish the latter, each week two student groups (3-4 students per group) will give a 10-minute presentation on a topic of their choice (suggested topics are listed in the syllabus). Students may propose a topic of their own, but all topics must be approved by instructors present in class. Student groups may sign up for a presentation topic and time-slot during the first or second class session. Once approval has been obtained and groups have signed up, one group representative should email the TA (amrobertson@ucsd.edu) with their approved topic, full names of all team members, and preferred presentation date. Each team will prepare a few key questions on their topic for follow-up class discussion. PowerPoint is required, and groups must send the final version of their presentation to the TA by 10:00 am on the day of the presentation. The group presentation component will be graded using the following criteria:
   a. **Timing:** presentations must be no longer than 10 minutes (+5 minutes for discussion)
   b. **Organization:** presentations must be clearly organized. At a minimum, presentations must include a title slide (including title, date, and names of all presenters), a slide that clearly outlines the objectives to be met in the presentation, an introduction to the topic, a discussion of the background/significance of the topic and relevance to global public health, and a discussion/conclusion.
   c. **Content:** presentations must contain accurate, clear, and up-to-date information pertinent to the chosen topic.
d. References: presentations must provide at least five appropriate, properly-formatted citations for all references, photographs, images, etc.
e. Discussion: presentations must conclude with one or two discussion questions.

*To simulate a real-world environment of presentations at conferences and scientific meetings, presentations that exceed 10 minutes will be penalized. Students are encouraged to utilize online resources regarding how to deliver effective, professional presentations (e.g., http://www.lrc.centennialcollege.ca/tutorserv/Presentations/Presentation%20Skills.htm; http://home.sandiego.edu/~kaufmann/envi_mars495/envi_mars495_handout.html) and to contact instructors with questions about this process.

4. Student Evaluations of Presentation Group Members (“Self-Appraisal”): Students must evaluate their own group members using our online Self-Appraisal forms available at http://gph.ucsd.edu/machform/view.php?id=4. These confidential evaluations must be submitted online no later than one week after their group presents. Group members will assess each other’s performance in various aspects of the group presentation project, including rating the extent to which each member helped obtain background material and prepare the presentation, how well each member worked as a team, and additional comments.

5. Weekly Online Evaluations of Faculty and Guest-speakers: Students must complete and submit online evaluations for each presentation during a class session no later than one week after that session.

Students will receive an email about completing faculty evaluations from Felipe Zatarain in the Office for of Educational Development and Evaluation, who manages these electronic evaluations. Please note: Students must complete course and faculty evaluations in order to receive credit and a grade. The identity of individual students will not be shared with course instructors. For assistance with online evaluations, please email fzatarain@ucsd.edu and the TA.

6. Final Exam: Take home, objective exams will be distributed March 1, 2011 and will be due at the beginning of class on March 8, 2011. Exams are multiple choice and open-book; however, students may not work together on exams. To ensure compliance, students will be asked to sign an assurance on the exam.

Final exam must be handed in at the beginning of class to the TA or to Dr. Strathdee's office in the Institute of the Americas before the last day of class (contact amrobertson@ucsd.edu and sstrathdee@ucsd.edu for arrangements).

Evaluation and Grading

The course grading policy will be discussed when enrollment is established and is based on a final exam, presentations, and participation as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Attendance and Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Student Presentations (grading by faculty)</td>
<td>20%</td>
</tr>
<tr>
<td>Student Presentations (self-evaluation by students)</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>55%</td>
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This course is nearly paperless. We have made all required and recommended materials available online through the Biomedical Library’s e-Reserves (see Readings on page 2). The e-Reserves website also provides the course syllabus and links to students’ presentation schedule and evaluations.
SCHEDULE OF CLASSES

January 4  Orientation for Undergraduate Students (Course Aims & Objectives)
Faculty – Drs. Simon, Wagner and Beletsky

January 11  Overview of Major Health Problems & Determinants – Simon
Global Health Indicators – Wagner
Student Presentation Sign-Up
VIDEO and Discussion
Faculty – Drs. Simon and Wagner

January 18  Global Impacts of HIV/AIDS – Strathdee
Maternal and Child Health – Weeks
Population and Family Planning – Weeks
Demographic/Epidemiologic Transition – Weeks
Student Presentation (one group only)
Faculty – Drs. Strathdee and Simon

January 25  TBA
Student Presentations
Faculty – Dr. Beletsky and Dr. Simon

February 1  Health for All: A Critical Analysis – Simon
Infectious Disease Issues at Disaster Sites – Jacoby
Student Presentations
Faculty – Drs. Simon and Wagner

February 8  Emerging and Re-Emerging Infectious Disease Threats and Bioterrorism – Leake
Global Health, Law, and Human Rights– Beletsky
Student Presentations
Faculty – Dr. Simon and Dr. Beletsky

February 15  Training Programs with a Multiplier Effect – Brownlee
Travel Medicine & Global Health Care – Fleming
Student Presentations
Faculty – Dr. Simon and Dr. Strathdee

February 22  Malnutrition – Rock
Substance Use in Developing and Transitional Countries– Pollini
Student Presentations
Faculty – Dr. Simon and Dr. Beletsky

March 1  FINAL EXAM HANDED OUT
Immunizations – Waterman
Overview of Polio Eradication Efforts Worldwide – Migala
Student Presentations
Faculty – Dr. Simon and Dr. Strathdee

March 8  FINAL EXAM TURNED IN AT START OF CLASS
Malaria – Brodine
Breast Feeding and Related Issues – Vaucher
Faculty – Dr. Simon and Dr. Wagner
COURSE FACULTY

Julia Aledort-Gaebler, PhD – Assistant Adjunct Professor, UCSD School of Medicine, jaledort@ucsd.edu

Ann Brownlee, PhD – Clinical Professor, Family and Preventive Medicine (FPM), UCSD School of Medicine; Staff Consultant, WELLSTART, San Diego, absykora@gmail.com

Stephanie Brodine, MD – Professor and Division Head, Epidemiology and Biostatistics, Graduate School of Public Health, San Diego State University (SDSU), sbrodine@mail.sdsu.edu

Regina Fleming, MD, MSPH – Director, UCSD Student Health Services, UCSD School of Medicine, rfleming@ucsd.edu

Joshua Graff Zivin, PhD – Associate Professor, International Relations and Pacific Studies, UCSD, jgraffzivin@ucsd.edu

Irving “Jake” Jacoby, MD – Clinical Professor of Medicine and Surgery, UCSD School of Medicine; Attending Physician, Emergency Medicine, UCSD Medical Center, jjacoby@ucsd.edu

John A.D. Leake, MD, MPH – Division of Infectious Diseases, Children’s Hospital, and Department of Pediatrics, UCSD School of Medicine, jleake@ucsd.edu

Henri Migala, MA, MPH – Executive Dean for Institutional Advancement, Cuyamaca College, El Cajon, CA, henri.migala@gcccd.edu

Robin Pollini, PhD – Associate Professor, Division of Global Public Health, UCSD School of Medicine, rpollini@ucsd.edu

Cheryl L. Rock, PhD, RD – Professor, FPM, UCSD School of Medicine, clrock@ucsd.edu

Hossain Ronaghy MD, MPH – Clinical Professor, UCSD School of Medicine; Formerly Dean, Fassa School of Medicine, Iran

Harold J. Simon, MD, PhD – Professor, Division of Global Public Health; Director of International Health Programs, UCSD School of Medicine, hsimon@ucsd.edu

Yvonne Vaucher, MD, MPH – Attending Neonatologist, Division of Neonatal/Perinatal Medicine and Clinical Professor of Pediatrics, UCSD School of Medicine, yvaucher@ucsd.edu

Stephen Waterman, MD, MPH – Senior Medical Epidemiologist, CDC; California Office of Border Health, San Diego County Department of Public Health, shw2@cdc.gov

John R. Weeks, PhD – Professor of Geography; Director, International Population Center, SDSU; Clinical Professor, Global Public Health, UCSD School of Medicine, john.weeks@sdsu.edu

Maria Luisa Zuñiga, PhD – Associate Professor, Division of Global Public Health, UCSD School of Medicine, mzuniga@ucsd.edu
SAMPLE TOPICS FOR STUDENT-LED SEMINARS*

Promising Developments in Global Health – Sub-topics could include polio eradication; the Onchocerciasis Control Project in West Africa; the Dracunculiasis Control Program; new pharmaceuticals (drugs, vaccines) for “diseases of poverty” such as AIDS, schistosomiasis, malaria, etc.

Global Health Ethics – Conducting work in other countries leads to a number of ethical dilemmas, including provision of services after a study ends. Sub-topics could include basic ethical principles (e.g., to do no harm?), examples of ethical dilemmas and possible solutions.

Refugee Medicine and Health – Sub-topics could include health implications of recent refugee situations (e.g., in Congo, Rwanda, Angola, Southeast Asia, the former Yugoslavia or Soviet Union, Iraq) and a discussion of agencies involved in refugee health (e.g., UN, NGOs).

Global Environmental Change – Sub-topics could include the health effects of global climate change, deforestation, desertification, pesticide and chemical pollution of air, soil, and water, famine and other man-made maladies (e.g., consequences of dam building, etc).

The Population Explosion – Sub-topics could include population growth and its distribution; infrastructure needs; economic consequences; and control measures (not to be limited or focus on birth control or family planning measures).

Natural Disasters and Response – Sub-topics could include specific recent disasters in developing countries (e.g., 2004 SE Asian tsunami; 2010 Haiti earthquake, or floods, volcanic eruptions, El Niño, etc), disaster preparedness, responses strategies, and agencies involved.

Newly Emerging (and Re-emerging) Infections – Sub-topics could include travel, SARS, Ebola, Marburg, HTLV, drug-resistant tuberculosis, influenza, malaria, West Nile, etc.

Non-Infectious Diseases – Sub-topics could include the global epidemic of autism, obesity, mental health, injuries (accidental, self-inflicted or due to war), tobacco control efforts, etc.

The Cholera Outbreak in Haiti

The Role of the UN in Addressing Global Health Problems

Should the US Government Have a Role to Play in Global Health Improvement?

*Note: Student groups (of 3-4 students each) are encouraged to select their own topics, which must be different from those of the course faculty and guest speakers (no exceptions). All groups must obtain advance approval for their topics from the Instructors during class. After obtaining approval for their topics, groups must email the TA (amrobertson@ucsd.edu) with the following information: topic/title, all group members’ full names, and presentation date. The TA will update the schedule of student presentations online (eReserves) on a weekly basis so students may view available dates and topics.
READING LIST

Note: Asterisk (*) denotes required reading.

January 4 – ORIENTATION – Simon, Wagner, and Beletsky

- Review syllabus; no other reading required.

January 11 – OVERVIEW – Simon

- Text: * Preface & Chapters 1, 2, 3 (Understanding Global Health)
- Foreword & Introduction, Chapters 13, 14 (Intl. Public Health)
- Simon HJ. “Why International Experiences for Medical Students?”
- Crump JA, Sugarman J. “Ethical Considerations for Short-Term Experiences by Trainees in Global Health.” *JAMA* 300:1456-1458, 2008

January 11 – GLOBAL HEALTH INDICATORS – Wagner

- Text: * Chapters 1, 2, 3 (Understanding Global Health)

January 18 – THE GLOBAL IMPACTS OF HIV/AIDS – Strathdee

- Text: * Chapter 8 (Understanding Global Health)

January 18 – MATERNAL AND CHILD HEALTH – Weeks

- Text: * Chapter 3 (Intl. Public Health)
January 18 – DEMOGRAPHIC/EPIDEMIOLOGIC TRANSITION – Weeks

- Text: * Chapter 1 (Intl. Public Health)
- "Demographic Transition" Handout posted to eReserves.
- Taylor D. "Medicine, Health and the Poor World" (see Section on Technology Transfer: Pharmaceuticals).
- Demographic and Health Surveys: http://www.measuredhs.com

January 18 – POPULATION AND FAMILY PLANNING – Weeks

- Text: * Chapters 2, 3 (Intl. Public Health)
- International Planned Parenthood Federation: http://www.ippf.org/
- US Census Bureau: www.census.gov
- National Center for Health Statistics: www.cdc.gov/nchs

January 25 – TBA

February 1 – HEALTH FOR ALL BY THE YEAR 2000: A CRITICAL ANALYSIS – Simon

- Text: * Chapters 7, 11 (Understanding Global Health)
- Review Chapters 11, 12, 13, 14, 15 (Intl. Public Health)
- Rea PA, Zhang V, Baras YS. Ivermectin and River Blindness. American Scientist, 98; 294-2010.
- Dracunculiasis: www.who.int/health-topics/dracunculiasis.htm (detailed pictures and descriptions of epidemiology, clinical disease, treatment and eradication efforts).
- Progress Toward Global Eradication of Dracunculiasis, January 2009-June 2010. MMWR 59;1239-1242 October 1, 2010

February 1 – INFECTIOUS DISEASE ISSUES AT DISASTER SITES – Jacoby

- Schneider E et al. A Coccidioidomycosis outbreak following the Northridge Earthquake. JAMA 1997; 277:904-908.
- Morgan O. Infectious disease risks from dead bodies following natural disasters. Rev Panam Salud 2004;
February 8 – (RE)EMERGING INFECTIOUS DISEASES & BIOTERRORISM – Leake

- Text: * Chapters 9, 12 (Understanding Global Health)
- NIAID Emerging and Re-emerging Infectious Diseases Homepage: [http://www3.niaid.nih.gov/research/topics/emerging/default.htm](http://www3.niaid.nih.gov/research/topics/emerging/default.htm)

February 8 – GLOBAL HEALTH, LAW, AND HUMAN RIGHTS – Beletsky

- Suggested: Additional Human Rights Treaties and documents available on-line at the University of Minnesota Human Rights Library ([http://www1.umn.edu/humanrts](http://www1.umn.edu/humanrts))
February 15 – TRAINING PROGRAMS WITH A MULTIPLIER EFFECT – Brownlee

- Text: * Chapter 4 (Understanding Global Health)
- Chapter 12 (Intl. Public Health)
- "Working Towards a "Baby Friendly" World - Wellstart's Involvement in the Baby Friendly Hospital Initiative." (Programmatic Case Study No.3.) Wellstart 1998.
- "Building Comprehensive Breastfeeding Programs at the National Level." (Programmatic Case Study No.2.) Wellstart 1998.
- Kumar P. “Providing the Providers - Remedying Africa’s Shortage of Health Care Workers.” *NEJM* 356: 2564-2567, 2007

February 15 – TRAVEL MEDICINE & GLOBAL HEALTH CARE – Fleming


February 22 – ESSENTIALS OF NUTRITION – Rock

- Text: * Chapter 6 (Understanding Global Health)
- Chapter 5 (Intl. Public Health)
- Freire WB. "Strategies of the Pan American Health Organization for the Control of Iron Deficiency in


**February 22 – INJECTION DRUG USE IN DEVELOPING COUNTRIES – Pollini**


**March 1 – IMMUNIZATIONS – Waterman**

- Text: * Chapters 4, 13 (Intl. Public Health)
- “Recommended Adult Immunization Schedule - United States, 2002-2003.” *MMWR* October 11, 2002
- WHO Vaccines and Immunizations (WHO vaccine-preventable disease initiatives, lists of vaccines currently available, etc.) Available at: [www.who.int/vaccines](http://www.who.int/vaccines)
- Health Information for International Travel 1999-2000. CDC, Dept. of Health and Human Services, Atlanta GA - Specific Recommendations for Immunizations (Japanese B encephalitis, Hepatitis A, meningococcal disease, rabies, typhoid, yellow fever).
- Santosham M. “Rotavirus Vaccine – A Powerful tool to Combat Deaths from Diarrhea.” *NEJM* 362:358-359, 2010

**March 1 – OVERVIEW OF POLIO ERADICATION EFFORTS WORLDWIDE - Migala**

- *Sitreps: [http://www.polioeradication.org/content/general/current_monthly_sitrep.asp](http://www.polioeradication.org/content/general/current_monthly_sitrep.asp)
March 8 – MALARIA – Brodine

- Text: * Chapters 4, 8 (Intl. Public Health)
- Website for Malaria: [www.who.int/health-topics/malaria.htm](http://www.who.int/health-topics/malaria.htm) (great resource for description of disease, prophylaxis, treatment, epidemiology, etc.)

March 8 – BREAST FEEDING AND RELATED ISSUES – Vaucher

- Text: * Chapter 5 (Intl. Public Health)
- Section on AIDS. DeCock et al: "Prevention of Mother-to-Child HIV Transmission in Resource-Poor Countries."
ADDENDUM – Additional References on Global Health

Text: Chapters 13-16 (Understanding Global Health)

Health Policy and Health Economics in Developing Countries


Pharmaceuticals for Developing Countries


International Cooperation in Health

- Text: Chapters 13, 14 (Intl. Public Health)
- World Health Organization - Administrative Flow Chart "WHO Constitution" Method of Work of World Health Organization"

International Health Work and Career Opportunities

- Simon HJ: "General Principles to Guide Students Seeking International Health Activities."
- Selected Sources of Information on Opportunities for International Health Work

Ethical Issues in Market Driven Health Care

- "The Globalization of Public Health II: The Convergence of Self-Interest and Altruism." Yach and


Safe Motherhood

- **Text: Chapter 2**
- Starrs A. Safe motherhood initiative: 20 years and counting. The Lancet. 2006;368:1130-1132.

**Websites:**
- Skilled attendant at birth: 2007. Available at [www.who.int/reproductive-health](http://www.who.int/reproductive-health)

Portable Field Diagnostic Technology

- "Applications: Portable Medical Labs and Other Portable Diagnostic Equipment.