



Introduction to Global Health Principles

MD ID 6500 (Medical Students)

PED 5500 (Undergraduate Students)

PED 6500 (Graduate Students)

Syllabus - Academic Year 2020-2021

Contact Information

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Course Information

Course Background & Description

This 1-credit course is designed for medical students, graduate students and undergraduate students who are interested in a broad overview of global health. Designed as an introduction to global health, this course has a strong public & community health focus and complements additional global health courses available to medical students & undergraduates (Preparation for Global Health Service & Learning, FPMD 6525 & 6524) and senior medical students (Global Medicine, MDID 6530). This course is required for medical students who participate in the *Graduate Certificate in Global Medicine*, but clinical training or experience is not required to take this course.

Course topics include:

- Working Towards a Global Health Perspective
- The Global Burden of Disease
- Global Health Governance
- Social & Environmental Determinants of Health
- Global Health Economics
- Malnutrition and Food Insecurity
- Health and Human Rights: Health Implications of Migration, Travel, War & Displacement
- Climate Change and Human Health

Expected Learning Outcomes - As a result of completing the course, students are expected to be able to...

1. Students will be able to describe the role and influence of governmental (i.e., Zambia, China), intergovernmental (e.g., WHO, World Bank) and non-governmental organizations (e.g., Doctors Without Borders, Gates Foundations) in developing healthcare policies and practices
2. Students will be able to describe the global burden of disease and metrics used to assess disease burden and compare, contrast mortality and morbidity rates.
3. Students will be able to discuss social, economic and environmental determinants of health and health inequalities and how these forces impact health.
4. Students will demonstrate familiarity with the concepts of health as a human right and discuss the history of significant health and human rights achievements.
5. Students will be able to describe the major economic forces at play that determine the health of populations.
6. Students will be able to list the major health implications of forced migration, travel, war and displacement as well as the status and administration of refugee immigration to the U.S.
7. Students will be able to discuss the direct and indirect causes and health outcomes of malnutrition and food insecurity, including micronutrient deficiencies, and suggest public health approaches to mitigating the impacts of malnutrition.

Course Format/Schedule

Timeline

- The course is taught in 8, 2-hour modules during the Fall Semester
Thursday nights from 5:30-7:30 pm remotely via Zoom: <https://lms-utah.zoom.us/j/91130864617>

Educational and Instructional Modalities

- Multi-media presentations
- Required & Supplemental Readings
- Peer-to-Peer Education through small group activities integrated into lectures

Additional Resources

All course resources are in digital format. Required and supplemental readings are available on the course Canvas page.

Guest Instructors

Jeff Robison, MD, Associate Professor, Pediatric Emergency Medicine

Sean Runnels, MD, Associate Professor, Anesthesiology

Ty Dickerson, MD, MPH, Assistant Dean of Global Health Education, Associate Professor of Pediatrics, Adjunct Assistant Professor of Public Health

Juan Carlos Negrette, MBA, Director of Global Health

Michael Morgan, MD, Assistant Professor, Emergency Medicine

Andrea Brunelle, Ph. D., Chair and Professor, Department of Geography

Simon Brewer, Ph. D., Assistant Professor, Department of Geography

Elizabeth Keating, MD, Pediatrics Emergency Medicine and Global Health Fellow

Reena Tam, MD, Associate Professor, Pediatric Inpatient Medicine

Assessment and Grading

Minimum Course Requirements

- Course is for 1 credit
- Class meets once a week for a two-hour block. Total of 8 weeks.
- Attend at least 7 of the 8 classes. Absences must be approved by the one of the Course Directors
- Suggested readings for each class will be emailed to class participants and made available on Canvas
- Show preparedness for class by completing required activities such as attending lectures, completing required readings, and completing assigned homework exercises.
- Complete 4 quizzes throughout course
- Complete discussion questions and present 1 case study as a small group to the class from “Case Studies in Global Health: Millions Saved” which will be assigned and made available over Canvas and during class
- The course final will be to write an op-ed assigned by the course directors. The student will write an op-ed regarding a pressing issue or problem related to global health that is of interest to them. This will challenge them to reflect on the themes discussed in the course.

Grading System

You will receive a final letter grade of PASS (P) or FAIL (F).

PASS: Attend 7/8 classes unless excused. Submit an acceptable final paper.

FAIL: Failure to attend class and/or submit a final exam.

Student Feedback

Student feedback is important and helps identify opportunities to improve the course

- At the conclusion of each course, clerkship or rotation medical students are required to complete a summative evaluation. Evaluations are completed electronically and remain confidential.
- Confidential On-The-Fly evaluations give students an opportunity to anonymously evaluate an instructor, learning activity or clinical experience in "real time." These evaluations are available on a secure UUSOM website (<https://students.medicine.utah.edu>) and are submitted to the Senior Director of Professionalism, Evaluation & Learning.

Standard Policies

Please refer to the Student Handbook (on the Student Affairs website) for these policies:

Accommodations

Attendance policy

Dress Code

Examination and Grading Policies

Grade or Score Appeal

Professionalism, Roles & Responsibilities

Mistreatment

Disability services

The School of Medicine seeks to provide equal access to its programs, services and activities for all medical students. The Center for Disability Services (CDS) provides accommodations and support for the educational development of medical students with disabilities.

Medical students with a documented disability are required to meet with the CDS Director for recommended accommodations. The CDS will work closely with eligible students and the Associate Dean of Professionalism, Accountability and Assessment to make arrangements for approved accommodations. The School of Medicine and CDS maintain a collegial, cooperative, and collaborative relationship to ensure compliance with federal and state regulations for students with disabilities.

Contact Robert Rainey (Steven.Baumann@hsc.utah.edu) for details

Or:

University of Utah Center for Disability Services

Introduction to Global Health Principles

Homework Assignments

Date	Topic	Assignment	Scoring	Proportion of Final Grade
Varies	Class Attendance	Attend 7 out of 8 classes		10%
Varies	Knowledge Assessment: Multiple Choice Quizzes	Quiz questions will be based on the required readings for class and will focus on global public health issues. Four (4) quizzes will be given during the course at random times but not during the first class.	Low quiz score is dropped 3 MCQ x 10% each = 30% of final grade	3 MCQ x 10% = 30%
Assigned: TBD Due: TBD	Global Health Case Study	<p>Students will work in small groups to prepare in-class group discussions regarding Global Health Case Studies. Each group will prepare for and present discussion topics to their peers for one (1) case study during the course. Small Group Assignments include:</p> <ul style="list-style-type: none"> Reviewing the Case Study and relevant supporting information and utilizing that information to address a series of questions provided by the Course Directors. Since Case Studies will not have all the necessary information to address all of the questions, students will seek additional resources to complete the questions. In class, Case Study teams use their assigned questions as a guide to lead their peers (who have read the Case Study) in group discussion. <p>Case Study topics include:</p> <ul style="list-style-type: none"> <i>Case Study: Improving The Health Of The Poor In Mexico</i> <i>Case Study: Reducing Child Mortality through Vitamin A in Nepal</i> 	<p>Grades will be assigned by the instructor who will assess presentation to the class for:</p> <ul style="list-style-type: none"> Questions addressed completely Answers are contextually appropriate Information resources are cited as appropriate 	1 Case Study = 20%

		<ul style="list-style-type: none"> • <i>Case Study: Preventing Iodine Deficiency Disease In China</i> • <i>Case Study: Preventing HIV and sexually transmitted infections in Thailand</i> 		
<p>Assigned: Start of Course</p> <p>Due: Last class 11/12/20</p>	<p>Summarizing & Communicating Issues in Global Health: The Op-Ed Article</p>	<p>Assignment Writing an op-ed requires deep understanding of an issue and reflects the author’s ability to locate, organize, analyze, evaluate, synthesize and communicate a message about a particular issue. <u><i>In 750 words or less, write an op-ed regarding a pressing issue or problem related to global health</i></u> that is of interest or concern to you. Your op-ed may address an issue related to one of the clinical case studies or another issue. Students must address the five (5) elements noted in “scoring” in order to receive full credit.</p> <p>Background Writing an op-ed requires deep understanding of an issue and reflects the author’s ability to locate, organize, analyze, evaluate, synthesize and communicate a message about a particular issue.</p> <p>An op-ed (originally short for "opposite the editorial page" although often taken to stand for "opinion editorial") is a written prose piece typically published by a newspaper or magazine which expresses the opinion of a named author usually not affiliated with the publication's editorial board. Op-eds are different from both editorials (opinion pieces submitted by editorial board members) and letters to the editor (opinion pieces submitted by readers).</p> <p>The Earth Institute at Columbia University offers this advice to writing an effective op-ed: “An op-ed is generally 500-750 words. It must unfold quickly. Focus on one issue or idea, briefly express your opinion in your opening paragraph, and be clear and confirmed in your viewpoint. The following paragraphs should back your viewpoint with factual, researched, or first-hand information. A good op-ed is not just an opinion; it consists of fact put into well-informed context. Be timely and controversial--but not outrageous. Personal, conversational, and humorous (when appropriate) writing is important to readability, and to capturing the reader’s attention. Make sure that you educate without preaching. Near the end, clearly restate your position and issue a call to action.</p>	<p>In 750 words or less they will address the following elements...</p> <ol style="list-style-type: none"> 1. Stated main point of op-ed early in the text <ol style="list-style-type: none"> a. What specifically is the problem/issue you want to address? b. Have you stated your main point while avoiding medical or technical jargon? 2. Provided a brief background description of the problem/issue <ol style="list-style-type: none"> a. What factors (e.g., social, economic, political, geographic or environmental) have led to the problem? b. Are there credible statistics or data support your main point? 	<p>40%</p>

		<p>If you are discussing a problem, then offer a solution or a better approach; this takes the reader beyond mere criticism. Try to include a catchy title for your op-ed that emphasizes your central message. This will help the editor grasp the idea quickly, and help sell the piece. (However, be prepared for the paper to write its own headline; they will rarely use the writer’s head no matter how good it is. That’s just the way it’s done.)”</p> <p><u>Here are some specific devices to keep in mind as you write</u></p> <ul style="list-style-type: none"> • Come down hard on one side of the argument, and never equivocate. • Identify the counterargument, and refute it with facts. • Emphasize active verbs; go easy on adjectives and adverbs. • Avoid clichés. • Avoid technical jargon and acronyms • Try to grab the reader's attention in the first line. End with a strong or thought-provoking line. • Use specific references and easy-to-understand data rather than abstraction. • Anecdotes can sometimes help enhance understanding of an issue. • Ideally, your topic will be timely, but at the same time have a long shelf life (i.e., the problem won’t be solved in a month). <p>Example Op-Eds</p> <ol style="list-style-type: none"> 1. Tropical Diseases: The New Plague of Poverty. Hotez PJ. New York Times, 18Aug2012. 2. Avoiding the Blind Alley. Ichhpujani P & Mohindroo C. The Hindu, 19June2016. 3. A Birth Pill. Grossman A. New York Times, 9May2009. 4. Tetanus Elimination: A Big Boost for Public Health. Singh PS. The Hindu, 18Nov2016 	<p>3. Described the relevance of the issue/problem</p> <ol style="list-style-type: none"> a. Why should readers care about this issue? b. Is there an alternative argument to your main point or take-home message that should be noted or addressed? <p>4. Offered a specific solution or solutions to the issue/problem</p> <ol style="list-style-type: none"> a. What are a few specific actions that need to be taken to help address the issue/problem? <p>5. Ended with a strong conclusion</p> <ol style="list-style-type: none"> a. What is your ultimate take-home message for readers? 	
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Topics, Learning Objectives, Activities & Resources

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
<p>Class #1 8/27 5:30-7:30 PM</p>	<p>Introduction to Global Health Principles and Global Health Governance</p>	<ul style="list-style-type: none"> • Discuss the history of the discipline of global health. • Define global health terms • Describe the basic principles of global health. • Describe the function and role of global health players in developing healthcare policies and practices • Review the three types of global health governance 	<p>Digital Resources (Required Reading)</p> <ul style="list-style-type: none"> • Beaglehole R & Bonita R. What is Global Health? Global Health Action 2010; 3:5142-3. • Arthur M, et al. Teaching the Basics: Core Competencies in Global Health. Infect Dis Clin NA 2011; 25:347-358. • Hoffman S. We already know how to save the world. Now we need a strategy to make it happen. Vox, May 26, 2015. • Frenk J and Moon S. Governance Challenges in Global Health. N Engl J Med 2013;368:936-42. <p>Digital Resources (Supplemental Reading)</p> <ul style="list-style-type: none"> • Brown TM, et al., The World Health Organization and the Transition From “International” to “Global” Public Health. Amer J of PH: 2006;96(1):62-72. 	<p>Introduction to Global Health Principles Elizabeth Keating, MD Pediatric Emergency Medicine and Global Health Fellow PGY-7 Pediatrics, Division of Pediatric Emergency Medicine</p> <p>Global Health Governance Reena Tam, MD, Assistant Professor of Pediatrics, Division of Pediatric Inpatient Medicine, Department of Pediatrics</p>

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
<p>Class #2 9/10 5:30- 7:30 PM</p>	<p>The Global Burden of Disease</p>	<ul style="list-style-type: none"> • Know the three major categories of morbidity and mortality used by the World Health Organization (WHO) and how they vary between high, middle and low-income regions • Describe the major causes of morbidity and mortality around the world, and how the risk of disease varies with regions • Understand how healthy life expectancy is calculated, recognize the importance of childhood mortality to calculating life expectancy and to identify examples of countries with high and low life expectancies <p>Be able to explain how life expectancy, QALY or DALY may be used to make general health comparisons within and/or between countries and regions</p> <ul style="list-style-type: none"> • Understand the role of measuring morbidity/mortality for health program monitoring, evaluation and priority setting • Identify health objective's from the UN Sustainable Development Goals • Discuss projections for global population growth and compare and contrast fertility rates among countries and regions • Discuss how global population growth and demographic changes may influence health and health care between 2015-2050 	<p>Digital Resources (Required Reading)</p> <ul style="list-style-type: none"> • Healthy Life Expectancy for 187 Countries 1990-2010: A Systematic Analysis for the Global Burden of Disease Study 2010. Soloman JA, et al. Lancet 2012; 380:2144-2162. <ul style="list-style-type: none"> • Measuring Burden of Disease: The Concept of QALYs and DALYs. Food Today; 5.2011. • WHO. Life Expectancy at Birth. Geneva, World Health Organization; 2006: pp. 1-4. <p>Digital Resources (Supplemental Reading)</p> <ul style="list-style-type: none"> • Sustainable Development Goals: Why 17 Goals & 169 Targets Might Not Be Such a Bad Thing. Norton A & Stuart E. The Economist, Nov 26, 2014. • Hopeful Message About the World's Poorest. Leonhardt L. New York Times Book Review, Mar 2011. • The Demographic Future: What Population Growth—and Decline—Means for the Global Economy; Eberstadt N. Foreign Affairs, Nov/Dec 2010. <p>Interactive Topic</p> <ul style="list-style-type: none"> • [DALYs or Deaths? Priority setting in global health, pros/cons of DALYs, artificial dichotomy between DALY or mortality focused outcomes? Does context matter...e.g., should Ghana focus on funding malaria before heart disease?] 	<p>The Global Burden of Disease in the 21st Century Jeff Robison, MD, MPH, FAAP University of Utah School of Medicine, Assistant Professor, Department of Pediatrics, Division of Pediatric Emergency Medicine</p>

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
Class #3 9/24 5:30- 7:30 PM	Working Towards a Global Health Perspective	<ul style="list-style-type: none"> • Add in 	Digital Resources (Required Reading) <ul style="list-style-type: none"> • Add Digital Resources (Supplemental Reading) <ul style="list-style-type: none"> • Add 	Working Towards a Global Health Perspective Sean Runnels, MD Associate Professor, Department of Anesthesiology

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
Class #4 10/1 5:30- 7:30 PM	Malnutrition & Food Insecurity Across the Globe	<ul style="list-style-type: none"> • Provide examples of the impact of limited access to adequate nutrition, insufficient quantities of water and potable water and inadequate sanitation on health <ul style="list-style-type: none"> o malnutrition and diseases including vitamin, protein and calorie deficiencies o inadequate clean water and sanitation and diarrheal and parasitic diseases • Provide one or more examples of a specific nutritional deficiency and a negative health outcome such as vitamin A deficiency and infant mortality • Be able to describe a public health effort to address one or more nutritional deficiencies, malnutrition or inadequate water or sanitation <ul style="list-style-type: none"> o Food fortification o vitamin A supplementation o iron supplementation o treatment of parasitic diseases • Millennium Development Goals 1 	Digital Resources (Required Reading) <ul style="list-style-type: none"> • Muller O & Krawinkel M. Malnutrition & Health in Developing Countries: A Review. CMAJ 2005; 173(3): 279-86. Supplemental Reading <ul style="list-style-type: none"> • WHO/WFP/UNICEF. Community- Based Management of Severe Acute Malnutrition. Geneva, World Health Organization; 2007. 	Malnutrition & Food Security: Protein Energy Malnutrition & Micronutrient Deficiencies in the Era of Obesity Ty Dickerson, MD, MPH, Assistant Dean of Global Health Education, Associate Professor of Pediatrics, Adjunct Assistant Professor of Public Health Elizabeth Keating, MD Pediatric Emergency Medicine and Global Health Fellow PGY-7 Pediatrics, Division of Pediatric Emergency Medicine Case Studies Presentations today groups 1-2 Talk about final op-ed

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
Class #5 10/8 5:30- 7:30 PM	Climate Change and Human Health	<ul style="list-style-type: none"> • Describe the factors involved in climate change • Recognize the current policies surrounding climate change • Identify the main players involved in climate change • Recognize the effects of climate change on human health 	Digital Resources (Required Reading) <ul style="list-style-type: none"> • Add in Digital Resources (Supplemental Reading) <ul style="list-style-type: none"> • Add in 	Climate Change and Human Health Andrea Brunelle, Ph.D. Chair and Professor, Department of Geography Simon Brewer, Ph.D. Assistant Professor, Department of Geography Op-ed topics due during this class

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
<p>Class #6 10/15 5:30- 7:30 PM</p>	<p>Health and Human Rights: Implications of Migration, Travel, War & Displacement</p>	<ul style="list-style-type: none"> • Describe the epidemiology of displacement due to forced migration, war or civil strife for WHO regions • Describe the current status of refugee resettlement in the U.S., including the origin & placement of refugees by region and the process of selecting refugees for entry to the U.S. • Discuss the major private & public sector organizations which provide refugee services in the U.S. • Recognize when travel or foreign birth places a patient a risk for unusual diseases 	<p>Required Reading</p> <ul style="list-style-type: none"> • Martin S. War, Natural Disasters & Forced Migration, pp. 53-73. The Oxford Handbook of the Politics of International Migration, Oxford University Press 2012. • Salama P, et al. Lessons Learned From Complex Emergencies Over Past Decade. Lancet 2004; 364:1801–13. 	<p>Health and Human Rights: Implications of Migration, Travel, War & Displacement Michael Morgan, MD Assistant Professor, Emergency Medicine</p>

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
<p>Class #7 11/5 5:30-7:30 PM</p>	<p>Determinants of Health</p>	<p>Determinants of Health</p> <ul style="list-style-type: none"> • List major social determinants of health and their impact on differences in life expectancy between and within countries. <ul style="list-style-type: none"> o absolute poverty o socioeconomic inequity---i.e. relative poverty or the degree of social gradient within a country or community o urbanization, crowding o lack of education, particularly female education o discrimination based on race and ethnicity and gender inequity • Describe the impact of low income, education and communication factors on access to and quality of health care <ul style="list-style-type: none"> o opportunity costs o lost earnings o literacy levels o language & cultural barriers • Demonstrate an understanding of how major socio-political-economic factors impact social determinants of health <ul style="list-style-type: none"> o Globalization o Conflict/War o Inequitable distribution of wealth • Understand key areas for action to impact social determinants • Describe the impact of climate change and/or extreme weather events (floods, hurricanes, heat waves) on health • Understand the differential impact of natural disasters and environmental and climate problems on the health of the poor 	<p>Digital Resources (Required Reading)</p> <ul style="list-style-type: none"> • Braveman P, Gottlieb L. The social determinants of health: it's time to consider the causes of the causes. Public Health Rep. 2014 Jan-Feb;129 Suppl 2:19-31. • McMichael AJ. Globalization, climate change, and human health. N Engl J Med. 2013 Apr 4; 368(14):1335-43. <p>Digital Resources (Supplemental Reading)</p> <ul style="list-style-type: none"> • Pinker S. Violence Vanquished. WSJ, Sept 24, 2011. • McMichael AJ & Lindgren E. Climate change: present and future risks to health, and necessary responses. Journal of Internal Medicine 2011; 270(5); 401–413. 	<p>Determinants of Health Reena Tam, MD, Assistant Professor of Pediatrics, Division of Pediatric Inpatient Medicine, Department of Pediatrics</p> <p>Case Studies Presentations today groups 3-4</p>

Time & Location	Class Title	Learning Objectives	Learning Activities & Resources	Presentations
<p>Class #8 11/12 5:30-7:30 PM</p>	<p>Global Health Economics</p>	<ul style="list-style-type: none"> • Discuss health & health care access in relation to international laws and barriers to universal access to health care • Discuss an example of a cost-effective public health intervention and how cost-effectiveness is determined 	<p>Digital Resources (Required Reading)</p> <ul style="list-style-type: none"> • Williams JR. The Declaration of Helsinki and Public Health. BHWO 2008; 86(8): 650-652. • Meier BM & Onzivu W2. The Evolution Of Human Rights In World Health Organization Policy And The Future Of Human Rights Through Global Health Governance. Public Health 2014; 128(2):179-87. 	<p>Global Health Economics Juan Carlos Negrette, MBA Director of Global Health</p> <p>Op-ed due this class</p>

