

PUBH 711: Critical Issues in Global Health

Credit Hours: 3 hours
UNC Gillings School of Global Public Health
Public Health Leadership Program (PHLP)



Fall 2018 Syllabus

Class Location: Online

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Office Hours: By Appointment

Teaching Assistant:

Aninda Sen, MPH candidate

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COURSE OVERVIEW

This course explores contemporary issues, problems, and controversies in global health through an interdisciplinary perspective; examines the complex tapestry of social, economic, political, and environmental factors that affect global health; analyzes global health disparities through a social justice and human rights lens; and exposes students to opportunities in global health program and research.

COMPETENCIES AND LEARNING OBJECTIVES

This course is designed to help you achieve the following competencies and develop the following course learning objectives:

Association of Schools and Programs of Public Health (ASPPH) Global Health Competencies

This course builds competencies in the following three domains identified by ASPH as abilities required by Master's level students in Global Health Programs:

- **Domain 1: Analyze** the roles, relationships, and resources of the entities influencing global health
- **Domain 4: Propose** sustainable and evidence-based multi-sectoral interventions, considering the social determinants of health specific to the local area
- **Domain 6: Display** critical self-reflection, cultural humility, and ongoing learning in global health

UNC-CH Global Health Concentration Competency #1

1. **Analyze** how the roles, relationships, and resources of entities influencing global health policies and practices affect disparities in health outcomes.

Course Specific Learning Objectives

- To explore contemporary issues, problems, and controversies in global health through an interdisciplinary perspective
- To understand the roles and agendas of major players in global health
- To understand key global health problems, their distribution, and prevention strategies
- To examine social, economic, political, and environmental factors that affect public health outcomes
- To understand the complexities inherent in implementing health programs on a global scale

COURSE PREREQUISITES

There is no prerequisite for PUBH 711. Since this is an online course, students are expected to have access to the internet for the duration of the course.

ASSIGNMENTS AND EVALUATION

This course will include graded individual assignments, graded team assignments and discussions, discussion forums, peer evaluations and a semester paper and presentation/panel discussion. Brief summary of the assignments are provided below.

Component	Points
Module I: The Context of Global Health <ul style="list-style-type: none"> ○ Unit 1: Individual assignment and forum discussion (100 points) ○ Unit 2: Individual assignment with class component (100 points) ○ Unit 3: Individual assignment (100 points) 	300
Module II: Health Systems <ul style="list-style-type: none"> ○ Units 4 and 5: Team assignment (200 points) 	200
Module III: Critical Issues – Non-Communicable Diseases (NCDs) and Nutrition <ul style="list-style-type: none"> ○ Units 6 and 7: Individual assignment with forum discussion – <u>Choice</u> between NDC or nutrition assignment (200 points) 	200
Module IV: Critical Issues – Infectious Diseases <ul style="list-style-type: none"> ○ Units 8 and 9: Team assignment with individual component (200 points) 	200
Module V: Critical Issues – The Environment <ul style="list-style-type: none"> ○ Unit 10: Individual assignment – <u>Choice</u> between qualitative or quantitative assignment (100 points) ○ Unit 11: Individual assignment with class component (100 points) 	200
Module VI: Sexual and Reproductive Health and Rights <ul style="list-style-type: none"> ○ Unit 12: Team assignment (100 points) 	100
Module VII: Emerging Issues <ul style="list-style-type: none"> • Unit 13: N/A • Semester Project and Presentation/Panel Discussion (300 points) 	300
Peer Evaluation	100
TOTAL	1,600

Assignments

Assignment details are posted in Sakai. Once completed, assignments should be uploaded in Sakai, unless otherwise indicated. Only one team member needs to upload assignments on behalf of the team. Please request permission from the instructors for late submissions **prior** to the deadline.

Grading Notes

All members of a team will receive the same base grade for team assignments and, if required, adjusted down based on participation and punctuality on team assignments.

Final course grades will be determined using the following grading scale:

H	≥ 93/100	High Pass: Clear Excellence
P	70 – 100	Pass: Entirely Satisfactory Graduate Work
L	60 – 100	Low Pass: Inadequate Graduate Work
F	< 60	Fail

TEXTS AND RESOURCES

Required Text(s):

There is no textbook purchase required for this course.

Unless otherwise indicated, all course readings and materials will be available on the course Sakai site (<https://sakai.unc.edu/portal>). You will need a valid UNC Onyen and password in order to log in to this site.

Note: Some of the readings may be replaced by more recent or relevant readings during the course of the semester. We will rely extensively on the following textbooks to prepare lectures, but purchasing these textbooks is not required for the course.

- ⇒ DiPrete Brown, Lori (2018). *Foundation for Global Health Practice*. First Edition. John Wiley and Sons, Inc. 528 pages.
Link: <https://www.wiley.com/en-us/Foundations+for+Global+Health+Practice-p-9781118505564>
- ⇒ Jacobsen, Kathryn H (2019). *Introduction to Global Health*. Third Edition. Jones Bartlett Learning. 486 pages.
Link: <http://www.jblearning.com/catalog/9781284123890/>

Technology:

The PUBH 711 course will use Sakai, VoiceThread and online lectures via Zoom. You can access Sakai at <https://sakai.unc.edu>.

- Sakai Orientation: https://courses.sph.unc.edu/sakai_orientation/
- VoiceThread FAQ: <https://help.unc.edu/help/voicethread-faq/>
- Zoom Remote Conferencing Overview: <https://uncsph.zoom.us/>

Your Health Sciences Library (HSL) Librarian:

Mary White, MS, MSHI
Email: mwwhite@email.unc.edu
Phone: 919-966-0953

Library 101 Tutorial: http://media.sph.unc.edu/adobe/pubh690/library_basics/

COURSE REQUIREMENTS AND EXPECTATIONS

Appropriate Use of Course Materials

The materials used in this class, including, but not limited to, exams, quizzes, rubrics and homework assignments are copyright protected works. **Any unauthorized copying of the class materials is a violation of federal law and may result in disciplinary actions being taken against the student.** Additionally, the sharing of class materials without the specific, express approval of the instructor may be a violation of the University's Student Honor Code and an act of academic dishonesty, which could result in further disciplinary action. This includes, among other things, uploading class materials to websites for the purpose of sharing those materials with other current or future students.

Course Participation, Assumptions and Expectations

Students are expected to participate in team assignments and discussion forums, and engage with other students in the course.

Team Dynamics and Expectations

You will be assigned a team for the duration of the semester. Peer evaluations will be sent at the end of the semester. You will be peer-evaluated on the following criteria: 1) participation in team assignments, 2) timeliness of task completion, 3) level of thought and effort, 4) support to team efforts, 5) any additional qualitative feedback on team performance.

- How to Succeed in Group Work:
<https://studysites.sagepub.com/crispandturner2/downloads/How%20to%20Succeed%20in%20Group%20Work.pdf>
- 10 Tips for Working Effectively in Groups:
<https://learningmatters.viu.ca/sites/default/files/pdf/tips/10-tips-working-effectively-groups-web.pdf>

Written Assignments

All written assignments should be drawn extensively upon the assigned readings and other external sources, and **all references should be cited accordingly.**

Quizzes and Exams

There is no quiz or exam in this course.

Course Feedback

We encourage real-time feedback throughout the course. Please feel free to submit feedback to the course instructors at anytime during the semester.

Course Evaluation

During the last 2 weeks of this course, you will receive an email to participate in an online evaluation of this course. Please participate and provide feedback about your course experience as this helps us improve the excellence of our academic programs.

RECOGNIZING, VALUING AND ENCOURAGING DIVERSITY & INCLUSION IN THE CLASSROOM

We share the School's [commitment to diversity](#). We are committed to ensuring that the School is a diverse, inclusive, civil and welcoming community. Diversity and inclusion are central to our mission — to improve public health, promote individual well-being and eliminate health inequities across North Carolina and around the world. Diversity and

inclusion are assets that contribute to our strength, excellence and individual and institutional success. We welcome, value and learn from individual differences and perspectives. These include but are not limited to: cultural and racial/ethnic background; country of origin; gender; age; socioeconomic status; physical and learning abilities; physical appearance; religion; political perspective; sexual identity and veteran status. Diversity, inclusiveness and civility are core values we hold, as well as characteristics of the School that we intend to strengthen.

We are committed to expanding diversity and inclusiveness across the School — among faculty, staff, students, on advisory groups, and in our curricula, leadership, policies and practices. We measure diversity and inclusion not only in numbers, but also by the extent to which students, alumni, faculty and staff members perceive the School's environment as welcoming, valuing all individuals and supporting their development.”

In this class, we practice these commitments in the following ways:

- Develop classroom participation approaches that acknowledge the diversity of ways of contributing in the classroom and foster participation and engagement of *all* students.
- Structure assessment approaches that acknowledge different methods for acquiring knowledge and demonstrating proficiency.
- Encourage and solicit feedback from students to continually improve inclusive practices.

As a student in the class, you are also expected to understand and uphold the following UNC policies:

- **Diversity and Inclusion at the Gillings School of Global Public Health:**
<http://sph.unc.edu/resource-pages/diversity/>
- **UNC Non-Discrimination Policies:**
<http://policy.sites.unc.edu/files/2013/04/nondiscrim.pdf>
- **Prohibited Discrimination, Harassment, and Related Misconduct at UNC:**
<https://deanofstudents.unc.edu/incident-reporting/prohibited-harassmentsexual-misconduct>

UNC HONOR CODE

As a student at UNC-Chapel Hill, you are bound by the university's Honor Code, through which UNC maintains standards of academic excellence and community values. It is your responsibility to learn about and abide by the code. All written assignments or presentations (including team projects) should be completed in a manner that demonstrates academic integrity and excellence. Work should be completed in your own words, but your ideas should be supported with well-cited evidence and theory. To ensure effective functioning of the Honor System at UNC, students are expected to:

- a) Conduct all academic work within the letter and spirit of the Honor Code, which prohibits the giving or receiving of unauthorized aid in all academic processes.
- b) Learn the recognized techniques of proper attribution of sources used in written work; and to identify allowable resource materials or aids to be used during completion of any graded work.
- c) **Sign a pledge on all graded academic work certifying that no unauthorized assistance has been received or given in the completion of the work.**
- d) Report any instance in which reasonable grounds exist to believe that a fellow student has violated the Honor Code.

Instructors are required to report suspected violations of the Honor Code, including inappropriate collaborative work or problematic use of secondary materials, to the Honor Court. Honor Court sanctions can include receiving a zero for the assignment, failing the course and/or suspension from the university. If you have any questions about your rights and responsibilities, please consult the Honor Code at: <http://honor.unc.edu/>, or consult these other resources:

- Honor system [tutorial](#)
- UNC library's [plagiarism tutorial](#)
- UNC Writing Center [handout on plagiarism](#)

ACCESSIBILITY

UNC-CH supports all reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability, or a pregnancy complication resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the UNC Office of Accessibility Resources & Services (ARS), <http://accessibility.unc.edu>; phone 919-962-8300, email accessibility@unc.edu. Students must document/register their need for accommodations with ARS before accommodations can be implemented.

JOIN THE GLOBAL HEALTH COMMUNITY

- ⇒ **Subscribe to Devex for daily news digest.** <https://www.devex.com/>
“Devex is the media platform for the global development community... A social enterprise, we connect and inform 700,000+ global development professionals through news, business intelligence, and funding & career opportunities.”
- ⇒ **Join the Triangle Global Health Consortium (TGHC)**
<http://www.triangleglobalhealth.org/>
UNC is a founding member of the TGHC and there are events, newsletters and job postings from member organizations through their email listserv. There are a number of networking opportunities available throughout the year.

This year, the annual TGHC conference will take place on **September 27, 2018** in Raleigh, NC. For details: <http://www.triangleglobalhealth.org/annual-conference>
- ⇒ **Science Speaks – Global Infectious Diseases (ID) News:**
<http://sciencespeaksblog.org/>
Source of infectious diseases and policy update. We recommend subscribing to the daily newsletter for global health updates.
- ⇒ **Global Health Learning Center online courses:** <https://globalhealthlearning.org/>
- ⇒ **Consortium of Universities for Global Health (CUGH):** <http://cugh.org/>
UNC-CH is a member of the CUGH. You do not need to join as an individual if you have a UNC email address.

PUBH 711 FALL 2018 SEMESTER-AT-A-GLANCE

Module/Unit	Topic	Assignment Due
MODULE I: THE CONTEXT OF GLOBAL HEALTH		
Unit 1: August 21 – 27, 2018	Introduction to Global Health	Individual assignment (100 points) – Introduction and Global Health Definition Due: Monday August 27, 2018 11:55 PM ET Research potential topic for semester project Synchronous Lecture: Thursday August 23, 2018 at 7:00 pm ET (Zoom details available in Sakai)
Unit 2: August 28 – September 3, 2018	Global Burden of Disease	Individual assignment with class component (100 points) – Introduction to Global Burden of Disease (GBD) Data Visualization Tools Due: Monday September 3, 2018 11:55 pm ET Potential topic for semester project Synchronous Lecture: Thursday August 30, 2018 at 5:00 pm ET (Zoom details available in Sakai)
Unit 3: September 4 – 10, 2018	Globalization and Global Health Players, Payers and Policy	Individual assignment (100 points) – Analyzing Global Health Funding Patterns Due: Monday September 10, 2018 11:55 pm ET Topic for Semester Project Due: Monday September 10, 2018 11:55 pm ET Synchronous Lecture : Thursday September 6, 2018 at 5:00 pm ET (Zoom details available in Sakai)
MODULE II: HEALTH SYSTEMS		
Unit 4: September 11 – 17, 2018	Delivering Health – Overview, Components and Financing	Begin work on team project on health systems Work on Semester Project: Reference List Synchronous Lecture: Wednesday September 12, 2018 at 5:00 pm ET (Zoom details available in Sakai)
Unit 5: September 18 – 24, 2018	Delivering Health – Health Systems Strengthening, Performance and Resilience	Team assignment (200 points) – Analysis and Comparison of Health Systems Due: Monday September 24, 2018 11:55 pm ET

		<p>Work on Semester Project: Reference List Due: Monday September 24, 2018 11:55 pm ET</p> <p>Synchronous Lecture: Wednesday September 19, 2018 at 5:00 pm ET (Zoom details available in Sakai)</p>
MODULE III: CRITICAL ISSUES – NUTRITION		
<p>Unit 6: September 25 – October 1, 2018</p>	<p>Non-Communicable Diseases: Malignant Neoplasms, Cardiovascular Disease, Mental Health and Wellness</p>	<p>Individual assignment and forum discussion (200 points) – <u>Choice</u> between NDC (Unit 6) OR nutrition assignment (Unit 7) Due: Monday October 8, 2018 11:55 pm ET</p> <p>Work on Semester Project: Outline</p> <p>Guest Expert Lectures: Most Likely Pre-Recorded</p>
<p>Unit 7: October 2 – 8, 2018</p>	<p>The Paradox of Nutrition: Nutrition Policies and Interventions</p>	<p>Individual assignment and forum discussion (200 points) – <u>Choice</u> between NDC (Unit 6) OR nutrition assignment (Unit 7) Due: Monday October 8, 2018 11:55 pm ET</p> <p>Work on Semester Project: Outline</p> <p>Synchronous Lecture: Wednesday October 3, 2018 at 5:00 pm ET (Zoom details available in Sakai)</p>
MODULE IV: CRITICAL ISSUES – INFECTIOUS DISEASES		
<p>Unit 8: October 9 – 15, 2018</p>	<p>Infectious Diseases – Chronic and Epidemic</p>	<p>Begin work on team assignment on infectious diseases</p> <p>Work on Semester Project: Outline</p> <p>Synchronous Lecture: Tuesday October 9, 2018 at 5:00 pm ET (Zoom details available in Sakai)</p>
<p>Unit 9: October 16 – 22, 2018</p>	<p>Infectious Diseases – The Need for Complex Interventions</p>	<p>Team assignment with individual component (200 points) – Designing interventions for complex infectious diseases Due: Monday October 22, 2018 11:55 pm ET</p> <p>Work on Semester Project: Outline Due: Monday October 22, 2018 11:55 pm ET</p> <p>In Person and Synchronous Lecture: Monday October 15, 2018 at 5:00 pm ET (Details for in person lecture to follow) (Zoom details available in Sakai)</p>

MODULE V: CRITICAL ISSUES – THE ENVIRONMENT		
<p>Unit 10: October 23 – 29, 2018</p>	<p>Engineering, Economics and Health – Water and Sanitation</p>	<p>Individual water assignment (100 points) – <u>Choice</u> between qualitative or quantitative assignment Due: Monday October 29, 2018 11:55 pm ET</p> <p>Work on Semester Project: Paper, Fact Sheet, Presentation/Panel</p> <p>Synchronous Lecture: Tuesday October 23, 2018 at 5:00 pm ET (Zoom details available in Sakai)</p>
<p>Unit 11: October 30 – November 5, 2018</p>	<p>The Health Effects of Climate Change</p>	<p>Individual climate change assignment with class component (100 points) – Due: Monday November 5, 2018 11:55 pm ET</p> <p>Work on Semester Project: Paper, Fact Sheet, Presentation/Panel</p> <p>Synchronous Lecture: Thursday November 1, 2018 at 5:00 pm ET (Zoom details available in Sakai)</p>
MODULE VI: CRITICAL ISSUES – SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS		
<p>Unit 12: November 6 – 12, 2018</p>	<p>Sexual and Reproductive Health and Rights</p>	<p>Team assignment (100 points) – SRH Data Trends Due: Monday November 12, 2018 11:55 pm ET</p> <p>Work on Semester Project: Paper, Fact Sheet, Presentation/Panel</p> <p>Guest Expert Lecture: Will be recorded in advance and made available in Sakai</p>
MODULE VII: EMERGING ISSUES IN GLOBAL HEALTH		
<p>Unit 13: November 13- 19, 2018</p>	<p>Emerging Issues in Global Health</p>	<p>Semester Project: Paper, Fact Sheet, Presentation/Panel (300 points) Due: Wednesday December 5, 2018 11:55 pm ET</p> <p>Synchronous Sessions for Student Presentations/Panel Discussions Tuesday November 27, 2018 Thursday November 29, 2018 Tuesday December 4, 2018</p>
<p>Semester Paper and Presentations/Panel Discussions</p>		<p>Wednesday December 5, 2018 11:55 pm ET (last day of classes)</p>

MODULE I: THE CONTEXT OF GLOBAL HEALTH

Unit 1: Introduction to Global Health

Dates: August 21 – 27, 2018

Learning Objectives:

After completing this module, students will be able to:

- Define global health and understand it as an evolving concept
- Describe the linkages between global health and local health
- Consider health and well-being through an inter-disciplinary lenses
- Identify current health challenges, emerging trends and priorities in global health and sources of disparities in health

Key Topics:

- Definitions of global health
- Global to local/local to global
- Global health from an interdisciplinary perspective
- Trends and priorities in global health

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE: Course and Global Health Overview
Karine Dubé, DrPH and Jim Herrington, PhD, PUBH 711 Course Instructors
Date/Time: Thursday August 23, 2019 at 7 pm ET (Zoom details available in Sakai)

REQUIRED READINGS:

- Fried LP, Bentley ME, Buekens P, Burke DS, Frenk JJ, Klag MJ et al. (2010). Global Health is Public Health. *Lancet* 375, 535 – 7.
- Koplan JP, Bond TC, Merson MH, Reddy KS, Rodriguez MH, Sewankambo NK et al. (2009). Towards a Common Definition of Global Health. *Lancet* 373, 1993 – 5.
- Beaglehole R, Bonita R. (2010). What is Global Health? *Global Health Action* 3, 5142, 1 – 2.
- Bentley ME, Van Vliet G. Global Health is (Local) Public Health. *NC Med J* 2010; 71(5): 448 – 51.
- The National Academies Press. Global Health and the Future Role of the United States. Report Summary pp. S1 – S6. <https://www.nap.edu/download/24737>
- Birn AE. (2009). The Stages of International (Global) Health: Histories of Success or Successes of History? *Global Public Health* 4:1: 50 – 68.
- Bernaert A. (2015). Five Global Health Trends You Just Can't Ignore. World Economic Forum. <https://www.weforum.org/agenda/2015/04/five-global-health-trends-you-just-cant-ignore/>

OPTIONAL READINGS:

- Huber M, Knottnerus JA, Green L, van der Horst H, Jadad AR, et al. (2011). How Should We Define Health? *BMJ* 343, d4163. <https://www.bmj.com/content/bmj/343/bmj.d4163.full.pdf>
- Susser M and Susser E. (2015). Choosing a Future for Epidemiology. *Am J Public Health* 105(7): 1313-5. <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2015.10571313>
- Brown ER. Public Health in Imperialism: Early Rockefeller Programs at Home and Abroad. (1976). *Am J Public Health* 66(9): 897 – 903. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1653469/pdf/amjph00496-0065.pdf>
- Hoffmann SJ. (2010). The Evolution, Etiology and Eventualities of the Global Health Security Regime. *Health Policy Plan* 25(6): 510-22. <https://www.ncbi.nlm.nih.gov/pubmed/20732860>
- Lakoff A. (2010). Two Regimes of Global Health. <http://humanityjournal.org/wp-content/uploads/2014/06/1.1.lakoff.pdf>
- Dzau V, Fuster V, Frazer J, Snair M. (2017). Investing in Global Health for Our Future. *New Engl J Med* 377; 13: 1292 – 6. <https://www.nejm.org/doi/full/10.1056/NEJMSr1707974>

- Yamey G, Morel C. (2016). Investing in Health Innovation: A Cornerstone to Achieving Global Health Convergence. *PLoS Biology* 14(3): e1002389.
<http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1002389>
- Garrett L. (2013). Existential Challenges to Global Health. NYU Center on International Cooperation.
http://cic.nyu.edu/sites/default/files/garrett_challenges_global_health.pdf

Assignment:

- Individual Assignment (100 points) – see details on Sakai
 - Introduction and Global Health Definition
- Start thinking about potential topic for semester project.

Unit 2: Global Burden of Disease

Dates: August 28 – September 3, 2018

Learning Objectives:

After completing this module, students will be able to:

- Define the global burden of disease (GBD)
- Name data sources used to estimate the global burden of disease
- Name key indicators for measuring the global burden of disease and explain what they stand for (e.g. disability-adjusted life years (DALYs))
- Describe the leading causes of morbidity and mortality around the world and key findings from the GBD study
- Explain how the global burden of disease can inform decision making and prioritization of scarce resources
- Recognize good data visualization techniques

Key Topics:

- Global burden of disease project overview
- Global burden of disease tools
- Global transitions in health
- Global disparities in health
- Data visualization

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Rohit Ramaswamy, PhD: Global Burden of Disease Demonstration and Discussion

Date/Time: Thursday August 30, 2018 at 5 pm ET (Zoom details available in Sakai)

VIDEO LECTURES:

- Causes of Death: Global Burden of Disease Study 2015.
<http://www.healthdata.org/video/causes-death-global-burden-disease-study-2015>
Playing Time: 2 min 15 sec
- Video of Chris Murray on the Use of the GBD Tools
<https://www.youtube.com/watch?v=wRFc6V8tBJY>
Playing Time: 1 hr 32 min 20 sec
- The Global Burden of Disease Study: What Does it Mean for NIH and Global Health Research?
<https://www.youtube.com/watch?v=Exce4gy7aOk>
Playing Time: 9 min 08 sec

REQUIRED READINGS:

- Reddy RS. Global Burden of Disease Study 2015 Provides GPS for Global Health 2030. (2016) *Lancet* 388. 1448 – 9. <http://www.thelancet.com/gbd/2015>
- GBD 2015 Mortality and Causes of Death Collaborators, and others. (2016). Global, Regional, and National Life Expectancy, All-Cause Mortality, and Cause-Specific Mortality for 249 Causes of Death, 1980 – 2015: A Systematic Analysis for the Global Burden of Disease Study 2015. *Lancet* 388, No, 10053. <http://www.thelancet.com/gbd/2015> (Students are not expected to read the entire file; please observe main trends and data visualization techniques)

OPTIONAL READINGS:

- IHME. Rethinking Development and Health. Findings from the Global Burden of Disease Study (2016). http://www.healthdata.org/sites/default/files/files/images/news_release/2016/IHME_GBD2015.pdf
- Watts C, Cairncross S. Should the GBD Risk Factor Rankings be used to Guide Policy? *Lancet* 2012; 380: 2060 – 1.

Assignment:

- Individual Assignment with class component (100 points) – details on Sakai
 - Introduction to Global Burden of Disease (GBD) data visualization tools
- Continue researching topic for semester project

Unit 3: Globalization and Global Health Players, Payers, and Policy

Date: September 4 – 10, 2018

Learning Objectives:

After completing this module, students will be able to:

- Describe key aspects of globalization and explain the linkages between globalization and health
- Name key entities and funding agencies active in the global health landscape and describe their role in broad terms
- Explain some of the essential elements of the Sustainable Development Goals (SDGs) and describe how they may be important in strengthening public health systems in low- and middle-income countries (LMICs)
- Identify criteria for allocating resources to respond to global health priorities

Key Topics:

- Globalization and trade
- Governance for global health
- Key entities active in the global health landscape
- Sustainable Development Goals (SDGs)
- Health disparities versus health equity
- Global health funding mechanisms
- Effectiveness of international aid
- Setting global health priorities

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Bruce Fried, PhD: Globalization and Health

Date/Time: Thursday September 6, 2018 at 5 pm ET (Zoom details available in Sakai)

VIDEO LECTURES:

- Video of Sustainable Development Goals Explained, 2015
https://www.youtube.com/watch?v=NkAv9L1_r1M
Playing Time: 4 min and 13 sec
- OPTIONAL: Video of Laurie Garrett's lecture, Columbia University, September 2011.
<https://www.youtube.com/watch?v=S3EByJ5uWAs>
Playing Time: 1 hr 21 min 46 sec
- OPTIONAL: Video from TED Talk: Andrew Mwende: Let's Take a New Look at Africa Aid, 2007
<https://www.youtube.com/watch?v=RfobLjsj230>
Playing Time: 19 min and 04 sec

REQUIRED READINGS:

- Huynen M, Martins P, Hilderink HBM. (2005). The Health Impacts of Globalisation: A Conceptual Framework. *Globalization and Health* 1:14. <http://www.globalizationandhealth.com/content/1/1/14>
- Frenk J, Moon S (2013). Governance Challenge in Global Health. *N Engl J Med* 368. 936 – 42
- McCoy D, Chand S, Sridhar D. (2009). Global Health Funding: How Much, Where it Comes from and Where it Goes. *Health Policy and Planning* 24(6): 407 – 17.
- The Guardian (2015). Sustainable Development Goals: All You Need to Know.
<https://www.theguardian.com/global-development/2015/jan/19/sustainable-development-goals-united-nations>
- Buse K, Hawkes S. (2015). Health in the Sustainable Development Goals: Ready for a Paradigm Shift? *Globalization and Health* 11(13), 1-8.
- Braveman P. (2014). What Are Health Disparities and Health Equity? We Need to Be Clear. *Public Health Reports* Supp 2(129): 5 – 8.

OPTIONAL READINGS:

- Moran M. (2016). The Grand Convergence. Closing the Divide Between Public Health Funding and Global Health Needs. *PLoS Biology* 14(3): e1002363.
<http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1002363>
- The National Academies Press. Global Health and the Future Role of the United States. Investing in Global Health for America. Chapter 2. <https://www.nap.edu/download/24737>
- The National Academies Press. Global Health and the Future Role of the United States. Smart Financing Strategies. Chapter 8. <https://www.nap.edu/download/24737>
- United Nations. (2017). The Sustainable Development Goals Report.
<https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf>
- Kaiser Family Foundation. (2016). The Future of Global Health Policy and Programs. Recording and Presentation Slides: <http://kff.org/global-health-policy/event/the-future-of-u-s-global-health-policy-programs/>
- Financing the Response to AIDS in Low- and Middle-Income Countries: International Assistance from Donor Governments in 2015. (2016) Kaiser Family Foundation and UNAIDS.
http://www.unaids.org/sites/default/files/media_asset/financing-the-response-to-HIV-in-low-and-middle-income-countries_en.pdf
- Michaud J, Kates J. (2013). Global Health Diplomacy: Advancing Foreign Policy and Global Health interests. *Global Health: Science and Practice* 1(1): 24 – 31.

Assignment:

- Individual Assignment (100 points) – details on Sakai
 - Analyzing global health funding patterns
- Topic for semester project – due **Monday September 10, 2018 11:55 pm ET** (must be approved by instructors)

MODULE II: HEALTH SYSTEMS

Unit 4: Delivering Health – Overview, Components and Financing

Date: September 11 – 17, 2018

Learning Objectives:

After completing this module, students will be able:

- Define a health care system and its functions
- Define the role governments play in delivering health
- List the key components of public health infrastructure and understand how they might be in flux
- Describe the role of WHO and other key players in global health
- Discuss the importance of human resources and information systems in global health infrastructure
- Define universal health care and discuss program in realizing universal health care in low- and middle-income countries (LMICs)

Key Topics:

- Overview of health systems
- Components of a health system
- Financial models of health care
- Service delivery models
- Health resources for health
- Health information systems
- Health system reform
- Universal health care

Readings/Videos/Presentations:**SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:**

Sean Sylvia, PhD: Primary Health Care in Low-Income Countries

Date/Time: Wednesday September 12, 2018 at 5 pm ET (Zoom details available in Sakai)

REQUIRED READINGS:

- World Health Organization (2010). Key Components of a Well-Functioning Health System. http://www.who.int/healthsystems/publications/hss_key/en/
- ***Kruk ME, Freedman LP (2008) Assessing Health System Performance in Developing Countries: A Review of the Literature. *Health Policy* 85, 263 – 76.
- Das J, Hammer J. Quality of Primary Care in Low-Income Countries: Facts and Economics. *Ann Rev Econ* 2014; 6: 525-53.
- Bloland P, Simone P, Burkholder B, Slutsker L, De Cock KM. The Role of Public Health Institutions in Global Health System Strengthening Efforts: The U.S. CDC's Perspective. *PLoS Medicine* 2012; 9(4): e1001199.
- Peters DH. (2014). The Application of Systems Thinking in Health: Why Use Systems Thinking? *Health Res Policy Syst* 12(51).
- World Bank (2006). Collecting Revenue, Pooling Risk and Purchasing Services. Extract from Health Financing Revisited.
- World Health Organization (2006). Human Resources for Health. Extract from Working Together for Health.

- World Health Organization (2007). Components and Standards of a Health Information System. Extract from Framework and Standards for Country Health Information Systems.

OPTIONAL RESOURCES:

- Commonwealth Fund. 2015 International Profiles of Health Care Systems (2016). http://www.commonwealthfund.org/~media/files/publications/fund-report/2016/jan/1857_mossialos_intl_profiles_2015_v7.pdf
- Scott A, Jan S. Primary Care. *The Oxford Handbook of Health Economics*. September 2012.
- Paina L, Peters DH. (2011). Understanding Pathways for Scaling Up Health Services through the Lens of Complex Adaptive Systems. *Health Policy Plan* 27(5): 365-73.
- Paina L, Bennett S, Ssengooba F, Peters DH. (2014). Advancing the Application of Systems Thinking in Health: Exploring Dual Practice and Its Management in Kampala, Uganda. *Health Res Policy Syst* 12(41).

Assignment:

- Begin work on team project on health systems
- Work on semester project – reference list

Unit 5: Delivering Health – Health Systems Strengthening (HSS), Performance and Resilience

Date: September 18 – 24, 2018

Learning Objectives:

After completing this module, students will be able to:

- Discuss key elements involved in health systems strengthening
- Make basic comparisons of public health infrastructure of selected countries
- Make recommendations for improving the infrastructure of selected countries based on lessons learned in other countries
- Numerate essential features of resilient health care systems

Key Topics

- Health systems strengthening (HSS)
- Health systems performance
- Health systems resilience
- Quality Improvement

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Rohit Ramaswamy, PhD: Quality Improvement in Low- and Middle-Income Countries

Date/Time: Wednesday September 19, 2018 at 5 pm ET (Zoom details available in Sakai)

VIDEO LECTURES:

- Janet Hatcher Roberts on Health Systems Strengthening
<https://www.youtube.com/watch?v=2AAx7cT5j2I>
Playing Time: 11 min 57 sec
- Systems Thinking for Health Systems Strengthening
<https://www.youtube.com/watch?v=ils6zQXUpAU&feature=youtu.be>
Playing Time: 6 min 30 sec
- Strengthening Human Resources for Health in Ivory Coast
<https://www.youtube.com/watch?v=OzvlpFPx-hU&feature=relmfu>
Playing Time: 4 min 37 sec

- OPTIONAL: YouTube Video: Registering Community Members for National Health Insurance in Ghana
<https://www.youtube.com/watch?v=JvRK5p2jMFo>
Playing Time: 4 min 15 sec
- OPTIONAL: YouTube Video: Efficient Service Delivery at Aravind Eye Clinics in India
<https://www.youtube.com/watch?v=3cjinNPua7Ag>
Playing Time: 6 min 07 sec

REQUIRED READINGS:

- ***Kruk ME, Freedman LP (2008) Assessing Health System Performance in Developing Countries: A Review of the Literature. *Health Policy* 85, 263 – 76.
- USAID. USAID's Vision for Health Systems Strengthening 2015 – 2019.
<https://www.usaid.gov/sites/default/files/documents/1864/HSS-Vision.pdf>
- World Health Organization (2007). Service Delivery. Extract from Everybody's Business. Strengthening Health Systems to Improve Health Outcomes.
- Kruk ME, Myers M, Varpilah ST, Dahn BT (2015). What is a Resilient Health System? Lessons from Ebola. *Lancet*, 385, 1910 – 2.

OPTIONAL READINGS:

- World Health Organization (2007). Strengthening Health Systems to Improve Health Outcomes. WHO's Framework for Action. http://www.who.int/healthsystems/strategy/everybodys_business.pdf
- Khan S. (2017). It Takes a Village: Communities are Key to a Resilient Health System.
https://www.newsecuritybeat.org/2017/10/takes-village-communities-key-resilient-health-system/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+TheNewSecurityBeat+%28New+Security+Beat%29

Assignment:

- Team Assignment (200 points) – details on Sakai
 - Analysis and comparison of health systems
- Work on semester project – reference list due **Monday September 24, 2018 11:55 pm ET**

MODULE III: CRITICAL ISSUES – NON-COMMUNICABLE DISEASES (NCDs) AND NUTRITION

Unit 6: Non-Communicable Diseases (NCDs): Malignant Neoplasms, Cardiovascular Disease, Mental Health and Wellness

Date: September 25 – October 1, 2018

Learning Objectives:

After completing this module, students will be able to:

- Define a non-communicable disease (NCD)
- Understand why NCDs represent a current and growing challenge in developed and low- and middle-income countries
- Identify and use data sources that measure and track NCDs
- Describe the contribution of cancer, CVD, and mental health to global mortality and morbidity in high, middle, and low-resource countries
- Compare and contrast an NCD's epidemiology in a developed and LMIC country and describe 3 – 4 factors that might explain differences in disease prevalence between the two countries

Key Topics:

- Cardiovascular health
- Cancer
- Aging
- Mental health and wellness
- Aging
- Physical (in)activity

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKERS:

Likely pre-recorded

REQUIRED READINGS:

Cancer:

- World Health Organization. Cancer – Key Facts. <http://www.who.int/en/news-room/fact-sheets/detail/cancer>
- Moten A, Schafer D, Ferrari M. (2014) Redefining Global Health Priorities: Improving Cancer Care in Developing Settings. *J Glob Health* 4(1): 010304.
- de Souza J, Hunt B, Asirwa FC, Adebamowo C, Lopes G. (2016). Global Health Equity: Cancer Care Outcome Disparities in High-, Middle-, and Low-Income Countries. *Journal of Clinical Oncology*; 31(1); 6 – 13.
- World Health Organization. (2003). World Cancer Report. <https://www.iarc.fr/en/publications/pdfs-online/wcr/2003/WorldCancerReport.pdf>

Cardiovascular Health:

- World Health Organization. Cardiovascular Disease. http://www.who.int/cardiovascular_diseases/en/
- World Health Organization. Global Hearts Initiative. http://www.who.int/cardiovascular_diseases/global-hearts/en/
- Mozaffarian D. (2017). Global Scourge of Cardiovascular Disease. Time for Health Care Systems Reform and Precision Population Health. *Journal of the American College of Cardiology* 70(1): 26 – 8.
- Council on Foreign Relations. (2014). The Emerging Global Health Crisis. Non-Communicable Diseases in Low- and Middle-Income Countries. Independent Task Force Report No. 72. https://www.cfr.org/sites/default/files/report_pdf/TFR72_NCDs.pdf
- The National Academies Press. Global Health and the Future Role of the United States. Promoting Cardiovascular Health and Preventing Cancer. Chapter 6. <https://www.nap.edu/download/24737>

Mental Health and Wellness:

- Patel V, Prince M. (2010). Global Mental Health. A New Global Health Field Comes of Age. *JAMA* 303(19): 1976 – 7.
- World Health Organization. (2013). Mental Health Action Plan 2013 – 2020. http://apps.who.int/iris/bitstream/handle/10665/89966/9789241506021_eng.pdf?sequence=1
- de Menil V, Glassman A. (2016) Making Room for Mental Health: Recommendations for Improving Mental Health Care in Low- and Middle-Income Countries. Center for Global Development. <https://www.cgdev.org/publication/ft/making-room-mental-health-recommendations-improving-mental-health-care-low-and-middle>
- OPTIONAL:
 - NY Times Part 1. “The Chains of Mental Illness in West Africa,” 12 Oct, 2015: http://www.nytimes.com/2015/10/12/health/the-chains-of-mental-illness-in-west-africa.html?_r=0
 - NY Times Part 2. “Mental Health Care in West Africa is Often a Product of Luck,” 13 Oct 2015: <http://www.nytimes.com/2015/10/13/health/mental-health-care-in-west-africa-is-often-a-product-of-luck.html>
 - “NYTimes video, which is associated with the other articles <http://www.nytimes.com/video/health/100000003764816/praying-for-a-cure.html>
 - Still We Rise” Documentary
FilmLiberia: <https://www.youtube.com/watch?NR=1&v=kWTyvblhAjQ&feature=endscreen>
 - PBS on Mental Health PTSD in Liberia, 2011 Pre-Ebola: http://www.pbs.org/newshour/bb/world-july-dec11-liberia_10-05/
 - Renewed Agenda for Global Mental Health, *Lancet* series, 2011: <http://www.sciencedirect.com/science/article/pii/S0140673611613858>

Physical (In)activity:

- Kohl HW 3rd, Craig CL, Lambert EV, Inoue S, Alkanradi JR, Leetongin G, Kahlmeier S, for the Lancet Physical Activities Series Working Group. (2012) The Pandemic of Physical Inactivity: Global Action for Public Health. *Lancet* 380; 294 – 305. <https://www.ncbi.nlm.nih.gov/pubmed/22818941>
- Ding D, Lawson KD, Kolbe-Alexander TL, Finkelstein EA, Katzmarzyk PT, et al. The Economic Burden of Physical Inactivity: A Global Analysis of Major Non-Communicable Diseases. *Lancet* 2016; 388: 1311 – 24.

Aging:

- Cire B. (2016) World’s Older Population Grows Dramatically. National Institute on Aging. <https://www.nia.nih.gov/newsroom/2016/03/worlds-older-population-grows-dramatically> (see corresponding report “An Aging World: 2015” - <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p95-16-1.pdf>).

Assignment:

- Choice of individual assignment between NDC (Unit 6) and nutrition (Unit 7) (200 points) – see details on Sakai

Unit 7: The Paradox of Nutrition and Nutrition Interventions and Policies

Date: October 2 – 8, 2018

Learning Objectives:

After completing this module, students will be able to:

- Summarize key tenets of the double burden of malnutrition (undernutrition coupled with overweight and obesity)
- Define various dimensions of food security
- Name some of the micronutrient deficiencies and short-term and long-term impacts of undernutrition
- Explain the nutrition transition
- Describe global patterns and trends relate to nutrition, such as over nutrition and the global obesity pandemic
- Describe some of the interventions and policies to address undernutrition and their pros and cons
- Compare national nutrition action plans between countries and make recommendations for improvement

Key Topics:

- Double burden of malnutrition
- Food security and undernutrition
- Maternal and child undernutrition: global patterns and trends
- Micronutrient deficiencies
- Short-term impacts of undernutrition
- Long-term impacts of undernutrition
- Nutrition transition
- Over nutrition: global patterns and trends
- Nutrition-related non-communicable diseases (NDCs)
- Interventions to address undernutrition
- Interventions to address poor dietary habits and chronic diseases
- National and global policies: what works and what still needs to be done

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Margaret (Peggy) Bentley, PhD and Stephanie L. Martin, PhD

Date/Time: Wednesday October 3, 2018 at 5 pm ET (Zoom details available in Sakai)

VIDEO LECTURES:

- Lancet Maternal and Child Nutrition Series – Watch video 2 (Robert Black's presentation of paper 1 (27 min 33 sec)), video 3 (Robert Black Q&A – 20 min 53 sec) and video 10 (Robert Black's Call to Action – 21 min 25 sec)
<http://www.thelancet.com/series/maternal-and-child-nutrition>
- Dynamics of US and Global Nutrition: The World Is Fat (2011). Video Lecture by Dr. Barry Popkin of UNC at University of Michigan School of Kinesiology.
<https://www.youtube.com/watch?v=Y8lISawaga8&feature=related>
Playing Time: 1 hr 12 min
- OPTIONAL: Small Towns Struggle with Food Deserts (2010). Video clip from PBS News Hour.
http://newshour-tc.pbs.org/newshour/video/2010/06/03/20100603_5_food.mp4
Playing Time: 6 min 25 sec
- OPTIONAL: Plumpy'nut: the miracle food that is saving lives (2010). Video clip from The Guardian.
<https://www.theguardian.com/society/video/2009/oct/11/plumpynut-ethiopia-food-hunger>
Playing Time: 3 min 15 sec

REQUIRED READINGS:

- World Health Organization. (2017) Double Burden of Malnutrition. <http://www.who.int/nutrition/double-burden-malnutrition/en/>
- ***Black RE, Victora CJ, Walker SP et al. (2013). Maternal and Child Undernutrition and Overweight in Low- Income and Middle-Income Countries. *Lancet*, 382(9890), 427 – 51.
- Bhutta Z et al (2013). Evidence-Based Interventions for Improvement of Maternal and Child Nutrition: What Can be Done and at What Cost? *Lancet* 382: 452–77.
- Swinburn BA, Sacks G, Hall KD et al. (2011). The Global Obesity Pandemic: Shaped by Global drivers and Local Environments? *Lancet*, 378(9793), 804 – 14.

OPTIONAL READINGS:

- Lassi ZS, Bhutta Z (2013). Under and Over Nutrition in the First Thousand Days: The Importance of the Problem and the Interventions. *The Nest*, 2 – 3.
- Menon K, Puthusseri S , Ravalia A, Panchal P, Rana R, Mistry S, Tseng P, Bhandol J, Mavalankar D (2018). Effectiveness of Nutrition Interventions in Low and Middle Income Countries: An Evidence Summary. London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London. <https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3718>
- Global Burden of Metabolic Risk Factors for Chronic Diseases Collaboration. Cardiovascular Disease, Chronic Kidney Disease, and Diabetes Mortality Burden of Cardiometabolic Risk Factors from 1980 to 2010: A Comparative Risk Assessment. *Lancet Diabetes Endocrinol* 2014; 2: 634 – 47.
- Food and Agriculture Organization (FAO) of the United Nations (2013). The Role of Food Systems in Nutrition (Ed.), *Food Systems for Better Nutrition* (pp. 3 – 12). Rome, Italy: FAO Publications.

Assignment:

- Choice of individual assignment between NDC (Unit 6) and nutrition (Unit 7) (200 points) – see details on Sakai
- Work on semester project – outline

MODULE IV: CRITICAL ISSUES – INFECTIOUS DISEASES

Unit 8: Infectious Diseases – Chronic and Epidemic

Date: October 9 – 15, 2018

Learning Objectives:

After completing this module, students will be able to:

- Enumerate characteristics of infectious diseases that set them apart from other diseases and make their control difficult
- Name key infectious diseases that are leading causes of deaths worldwide
- Describe the concept of “One Health”

Key Topics:

- Perpetual challenge of infectious diseases
- Diseases of poverty
- Zoonoses and “One Health”
- Global Health Security

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKERS:

Jim Herrington, PhD

Date/Time: Tuesday October 9, 2018 at 5 pm ET (Zoom details available in Sakai)

WEBSITES:

- Global HIV/AIDS Overview: <https://www.aids.gov/federal-resources/around-the-world/global-aids-overview/>
- PEPFAR: <https://www.pepfar.gov/>
- WHO World Malaria Report: <http://www.who.int/malaria/publications/world-malaria-report-2017/en/>
- President's Malaria Initiative: <https://www.pmi.gov/>

PODCASTS:

- OPTIONAL: WHO Postcast Episodes (2017). Zika Series (Zika Epidemiology, Long-Term Management of Congenital Zika Virus Syndrome, Ethics of Zika Virus, Zika Virus Research) <http://www.who.int/mediacentre/multimedia/podcasts/2017/en/>

REQUIRED READINGS:

- Fauci AS, Morens DM. (2012) The Perpetual Challenge of Infectious Diseases. *N Engl J Med* 366: 454 – 61.
- Fauci AS, Marston HD. (2014) The Perpetual Challenge of Antimicrobial Resistance. *JAMA* 311(18): 1853 – 4.
- Heymann DL, Chen L, Takemi K, Fidler DP, Tappero JW et al. (2015). Global Health Security: The Wider Lessons from the West African Ebola Virus Disease Epidemic. *Lancet* 385: 1884 – 901.
- World Health Organization. One Health. <http://www.who.int/features/qa/one-health/en/>
- Beaubien J. (2015) 'TB is Now The Top Infectious Killer (Even Though Deaths are Down)' <http://www.npr.org/sections/goatsandsoda/2015/10/28/452565249/tb-is-now-the-top-infectious-killer-even-though-deaths-are-down>

OPTIONAL READINGS:

- Keusch GT, Kilama WL, Moon S, Szlezák NA, Michaud CM (2010) The Global Health System: Linking Knowledge with Action—Learning from Malaria. *PLoS Med* 7(1): e1000179. <https://doi.org/10.1371/journal.pmed.1000179>
- Parascandola J. (1996). From MCWA to CDC—Origins of the Centers for Disease Control and Prevention. *Public Health Reports* 111(6):549-51. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1381908/>
- Bhutta ZA, Sommerfeld J, Lassi ZS, Salam RA, Das JK. (2014). Global Burden, Distribution, and Interventions for Infectious Diseases of Poverty. *Infectious Diseases of Poverty* 3:21.
- Lengeler C. (2004). Insecticide-Treated Bed Nets and Curtains for Preventing Malaria. *Cochrane Database of Sys Rev* Issue 2. Art. No.: CD000363.
- Bhatt S, Gething PW, Brady OJ, Messina JP, Farlow AW, et al. (2013). The Global Distribution and Burden of Dengue. *Nature*.496(7446):504-507. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3651993/>
- Hayes EB. (2009). Zika Virus Outside Africa. *Emerg Infect Di* 2009;15(9):1347 –50. doi:10.3201/eid1509.090442. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2819875/>
- Ramaiah KD, Ottesen EA. (2014). Progress and Impact of 13 Years of the Global Programme to Eliminate Lymphatic Filariasis on Reducing the Burden of Filarial Disease. Bockarie M, ed. *PLoS Negl Trop Dis* 8(11):e3319. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4239120/>
- WHO. Progress Report on the Elimination of Human Onchocerciasis, 2016–2017. *Weekly Epidemiological Record* http://www.who.int/onchocerciasis/resources/who_wer9245/en/
- Hopkins DR. (2013). Disease Eradication. *N Engl J Med* 368:54-63 <https://www.nejm.org/doi/pdf/10.1056/NEJMra1200391>
- Breman JG, Henderson DA. (2002) Diagnosis and Management of Smallpox. *N Engl J Med* 25;346(17):1300-8. <https://www.nejm.org/doi/pdf/10.1056/NEJMra020025>.
- Patel M, Orenstein W. (2016). A World Free of Polio--The Final Steps. *N Engl J Med*. 374(6):501-3. <https://www.nejm.org/doi/pdf/10.1056/NEJMp1514467>.
- Gostin LO. Our Shared Vulnerability to Dangerous Pathogens. *Medical Law Review* 2017; 1 – 15.
- Coltart CEM, Lindsey B, Ghinai I, Johnson AM, Heymann DL. (2017) The Ebola Outbreak, 2013 – 2016: Old Lessons for New Epidemics. *Phil. Trans. R. Soc.* 372: 20160297.

- Marston HD, Pauloes CI, Fauci AS. (2017). The Critical Role of Biomedical Research in Pandemic Preparedness. *JAMA*; E1 – 2.
- Hotez P, Asoy S. PLoS Neglected Tropical Diseases: Ten Years of Progress in NTD Control and Elimination... More or Less. (2017). *PLoS Negl Trop Dis* 11(4): e0005355. <http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0005355>
- The National Academies Press. Global Health and the Future Role of the United States. Infectious Disease, Pandemic Influenza, and Antimicrobial Resistance: Global Health Security is National Security. Chapter 3. <https://www.nap.edu/download/24737>
- The National Academies Press. Global Health and the Future Role of the United States. Addressing Continuous Threats: HIV/AIDS, Tuberculosis, and Malaria. Chapter 4. <https://www.nap.edu/download/24737>

OPTIONAL RESOURCES:

- Global Health Security Agenda: <https://www.ghsagenda.org/>

Assignment:

- Begin work on infectious disease team assignment
- Work on semester project – draft outline

Unit 9: Infectious Diseases – The Need for Complex Interventions

“A health intervention is an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions.”

<http://www.who.int/classifications/ichi/en/>

Date: October 16 – 22, 2018

Learning Objectives:

After this module, students will be able to:

- Understand the complexity of preventing, treating and curing infectious diseases
- Apply principles learned in the course to combat transmission of infectious diseases
- Explain the difference between biomedical, behavioral, structural and integrated or combination interventions
- Propose and prioritize interventions to respond to infectious disease threats around the world

Key Topics:

- Complexity of prevention and treatment interventions
- Biomedical interventions
- Behavioral interventions
- Structural interventions
- Integrated interventions

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Timothy Mastro, MD, FACP, DTM&H

Chief Science Officer, FHI 360

Monday October 15, 2018 at 5 pm ET – In Person and Online Synchronous Lecture

(Details for in-person lecture to follow)

(Zoom details available in Sakai)

VIDEO LECTURE:

- OPTIONAL: Finding the Next Patient Zero: The Global Virome Project. (2017) <http://www.worldaffairs.org/events/event/1629#.WSMPV2jys2w>

REQUIRED READINGS:

- Piot P, Bartos M, Larson H, Zewdie D, Mane P. (2008) Coming to Terms with Complexity: A Call to Action for HIV Prevention. *Lancet* 372; 845 – 59.
- Iskarpatyoti BS, Lebov J, Hart L, Thomas J, Mandal M. Evaluations of Structural Interventions for HIV Prevention: A Review of Approaches and Methods. *AIDS and Behavior* 2018; 22: 1253 – 64.
- Roberts ET and Matthews DD (2012). HIV and Chemoprophylaxis, The Importance of Considering Social Structures alongside Biomedical and Behavioral Intervention. *Soc Sci Med* 75:1555 – 61.
- Grabowski MK, Serwadda RH, Gray G, Nakigozi G, Kigozi J et al. (2017). HIV Prevention Efforts and Incidence of HIV in Uganda. *New Engl J Med* 377(22); 2154 – 66.
- WHO. Zika Strategic Response Plan. (2016). <http://www.who.int/emergencies/zika-virus/strategic-response-plan/en/>
- Heuvelings CC, de Vries SG, Greve PF, Visser BJ, B elard S, et al. (2017). Effectiveness of Interventions for Diagnosis and Treatment of Tuberculosis in Hard-to-Reach Populations in Countries of Low and Medium Tuberculosis Incidence. A Systematic Review. *Lancet Infect Dis* 17: e144 – 58.

OPTIONAL READINGS:

- Heise Lori, Watts C. (2013). Intervening Upstream: A Good Investment for HIV Prevention. Structural Approaches to HIV Prevention Position Paper Series. Arlington, VA: USAID’s AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1, and London: UKaid’s STRIVE research Consortium. <https://aidsfree.usaid.gov/resources/intervening-upstream-good-investment-hiv-prevention>
- Chang LW, Serwadda D, Quinn TC, Wawer MJ, Gray RH, Reynolds SJ (2013). Combination Implementation for HIV Prevention: Moving from Clinical Trial Evidence to Population-Level Effects. *Lancet Infect Dis* 13: 65 – 76.
- Coates TJ, Richter L, Caceres C. (2008). Behavioural Strategies to Reduce HIV Transmission: How to Make Them Work Better. *Lancet*, 372(9638), 669 – 84.
- UNAIDS. (2016). 90-90-90. On the Right Track Towards the Global Target. https://reliefweb.int/sites/reliefweb.int/files/resources/90_90_90_Progress_ReportFINAL.pdf or Granich R, Gupta S, Hall I, Aberle-Grasse J, Hader S, Mermin J. Status and Methodology of Publicly Available National HIV Care Continua and 90-90-90 Targets: A Systematic Review. (2017). *PLoS Medicine* 14(4): e1002253.
- Dye C, Floyd K. (2006). Tuberculosis. Disease Control Priorities in Developing Countries. 2nd Edition. <https://www.ncbi.nlm.nih.gov/books/NBK11724/>

Assignment:

- Team assignment with individual component (200 points) – details on Sakai
 - Designing interventions for complex infectious diseases: HIV, Tuberculosis, Malaria, Ebola, Zika, Dengue, Antimicrobial Resistance
- Work on semester project: outline due **Monday October 22, 2018 11:55 pm ET**

MODULE V: CRITICAL ISSUES – THE ENVIRONMENT

Unit 10: Engineering, Economics and Health – Water and Sanitation

Date: October 23 – 29, 2018

Learning Objectives:

- Describe key aspects of water and sanitation from a global health perspective
- Understand the basic causes of and types of diseases associated with water and sanitation and how they account for the global burden of disease
- Recognize Sustainable Development Goal #6 focused on water and sanitation
- Explain some issues around supplying water on a global level
- Interpret basic data and metrics related to water and sanitation

Key Topics:

- Effect of water and sanitation on global health
- Water and sanitation development goals and progress
- Global water supply: issues and intervention
- Improving sanitation and hygiene: issues and intervention

Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Michael Fisher, PhD, UNC Water Institute – Global Health, Water and Sanitation

Date/Time: Tuesday October 23, 2018 at 5 pm ET (Zoom details available in Sakai)

TOPIC: Overview

- Institute of Medicine (US) Roundtable on Environmental Health Sciences, Research, and Medicine. Global Environmental Health: Research Gaps and Barriers for Providing Sustainable Water, Sanitation, and Hygiene Services: Workshop Summary. Washington (DC): National Academies Press (US); 2009. Chapter 5 (pp. 51 – 76), Achieving Water and Sanitation Services for Health in Developing Countries. <https://www.ncbi.nlm.nih.gov/books/NBK50770/>

TOPIC: Effect of Water and Sanitation on Global Health

- Prüss-Üstün A, Bos R, Gore F, Bartram J. (2008) Safer Water, Better Health: Costs, Benefits and Sustainability of Interventions to Protect and Promote Health. World Health Organization, Geneva. http://apps.who.int/iris/bitstream/10665/43840/1/9789241596435_eng.pdf (pages 7-26) (This article may look old but it was the last time that the WHO wrote something this all-encompassing for WaSH).

TOPIC: Water and Sanitation Development Goals and Progress

- WHO/UNICEF Joint Monitoring Programme (2017). Launch version July 12, 2017. Progress on Drinking Water, Sanitation and Hygiene. https://data.unicef.org/wp-content/uploads/2017/07/JMP-2017-report-launch-version_0.pdf (please focus on first three chapters (pp. 2 – 21).
- Sustainable Development Goals: Goal 6: Ensure Access to Water and Sanitation for all <http://www.un.org/sustainabledevelopment/water-and-sanitation/> (read the pdf file, Facts and Figures, and Goal 6 Targets).

TOPIC: Global Water Supply: Issues and Intervention

- Bartram J and Godfrey S. (2015). 'Drinking-Water Supply', in Bartram J with Baum R, Coclanis PA, Gute DM, Kay D, McFadyen S, Pond K, Robertson W, and Rouse MJ. (eds) Routledge Handbook of Water and Health. London and New York: Routledge. Can access this book online at: <http://search.lib.unc.edu/search?R=UNCb8385388> and log into by using UNC onyen. This is Chapter 18 (pages 191 – 202).

TOPIC: Improving Sanitation and Hygiene: Issues and Intervention

- Cronin AA and Dooley T. (2015). 'Water for Hygiene', in Bartram J with Baum R, Coclanis PA, Gute DM, Kay D, McFadyen S, Pond K, Robertson W, and Rouse MJ. (eds) Routledge Handbook of Water and Health. London and New York: Routledge. Can access this book online at: <http://search.lib.unc.edu/search?R=UNCb8385388> and log into by using UNC onyen. This is Chapter 22 (pages 234-244).

OPTIONAL READINGS:

- Cutler D and Miller G (2005). The Role of Public Health Improvements in Health Advances: The Twentieth-Century United States. *Demography*, 42(1), 1-22. https://scholar.harvard.edu/cutler/files/cutler_miller_cities.pdf (or download the actual Demography article and request permission from the journal to share with the students).
- Fewtrell L, Kaufmann RB, Kay D, Enanoria W, Haller L and Colford, J. M. (2005). Water, Sanitation, and Hygiene Interventions to Reduce diarrhoea in Less Developed Countries: A Systematic Review and Meta-Analysis. *Lancet Infectious Diseases*, 5(1), 42-52. <http://www.susana.org/resources/documents/default/3-2152-7-1422029615.pdf>
- WHO (2014). Preventing Diarrhoea through Better Water, Sanitation and Hygiene: Exposures and Impacts in Low-and Middle-Income Countries. http://www.who.int/water_sanitation_health/publications/preventing-diarrhoea/en/
- The SDGs for Water and Sanitation: Big Promises, Big Challenges. IRC, September 2015. <https://www.ircwash.org/blog/sdg-water-and-sanitation-big-promises-big-challenges> (listen to the video at the bottom of the article)

WEBSITES WITH GLOBAL (COUNTRY-LEVEL) DATA:

- WHO: Burdens of disease estimates: http://www.who.int/gho/phe/water_sanitation/burden/en/
- WHO / UNICEF Joint Management Programme (JMP): Data on the MDGs (in 2015 – final assessment) <https://www.wssinfo.org/data-estimates/>
- UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS): Data on financial investments in water, health statistics, coverage http://www.who.int/water_sanitation_health/monitoring/investments/glaas/en/

Assignment:

- Individual assignment (100 points) – details on Sakai
 - Choice between qualitative or quantitative assignment
- Work on semester project: paper (12 pages), critical issues fact sheet (1-page), presentation (3-slides)

Unit 11: The Health Effects of Climate Change

Date: October 30 – November 5, 2018

Learning Objectives:

After completing this module, students will be able to:

- Define climate change, explain its basic mechanisms and how weather differs from climate
- Explain the health effects of global climate change and the direct and indirect ways in which it threatens global public health
- Identify major actors and initiatives in the current climate change policy landscape as well as measure to mitigate the effects of climate change

Key Topics:

- Global climate change and health effects
- Planetary health
- Environmental security

Required Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Kimberly Thigpen, JD, National Institute of Environmental Health Sciences (NIEHS)

Date/Time: Thursday November 1, 2018 at 5 pm ET (Zoom details available in Sakai)

VIDEOS

- Human Support Systems: Risks to Human Health
http://www.youtube.com/watch?v=LoLP-zUBH_k
Playing Time: 6 min 34 sec
- World Bank: Warmer World Will Trap Millions in Poverty
https://www.youtube.com/watch?feature=player_embedded&v=REFEgy6jUVU
Playing Time: 4 min 28 sec

READINGS:

- WHO. Global Climate Change: Implications for International Public Health Policy.
<http://www.who.int/bulletin/volumes/85/3/06-039503/en/>
- McMichael AJ. (2013). Globalization, Climate Change, and Human Health. *N Engl J Med* 369(1): 96.
<https://www.nejm.org/doi/pdf/10.1056/NEJMr1109341>
- Costello A, Abbas M, Allen A, Ball S, Bellamy R et al. (2009). Managing the Health Effects of Climate Change. *Lancet* 373: 1693 – 1733.
- Jamison DT, Summers LH, Alleyne G, Arrow KJ, Berkley S, et al. (2013). Global Health 2035: A World Converging within a Generation. *Lancet* 382: 1898 – 955.

OPTIONAL READINGS:

- Watson JT, Gayer M, Connolly MA. Epidemics after Natural Disasters. *Emerging Infectious Diseases* 2007; 13(1): 1 – 5.
- USGCRP (2016). The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. U.S. Global Change Research Program, Washington, DC, 312 pages.
<https://health2016.globalchange.gov/> (skim this report and website at your leisure)

Assignment:

- Individual assignment with class component (100 points) – details on Sakai
 - Climate change blog and call to action
- Continue work on semester project: paper (12 pages), critical issues fact sheet (1-page), presentation (3-slides)

MODULE VI: CRITICAL ISSUES – SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS

Unit 12: Sexual and Reproductive Health and Rights

Date: November 6 – 12, 2018

Learning Objectives:

After completing this module, students will be able to:

- Discuss key issues related to sexual and reproductive health, contraception and family planning, safe motherhood, and abortion
- Explain why sexual and reproductive health should be understood with the lenses of human rights and equity
- Describe why investing in family planning can contribute to achieving the Sustainable Development Goals
- Name policies that prevent the effective attainment of reproductive health (e.g., Global Gag rule or Mexico Policy)
- Identify sources of sexual and reproductive health data, describe trends over time and possible causes of those trends

Key Topics:

- Contraception and family planning
- Safe motherhood
- Elimination of unsafe abortion
- Prevention and treatment of STIs, cervical cancer and other gynecological morbidities
- Promotion of healthy sexuality (sexual health, sexuality and sexual rights)
- Sexual and reproductive rights and the SDGs
- Disparity in access to sexual and reproductive health
- Policies and social forces that prevent effective attainment of reproductive health

Required Readings/Videos/Presentations:

SYNCHRONOUS LECTURE/GUEST EXPERT SPEAKER:

Ilene Speizer, PhD, UNC Chapel Hill

Lecture will be recorded in advance and made available in Sakai

VIDEO LECTURES:

- Tavrow, P (2012). Adolescent Reproductive Health in Sub-Saharan Africa. Video from Webinar at the UCLA School of Public Health.
<https://vimeo.com/36926096>
Playing time: 56 min 22 sec
- CARE (2010). Engendering Change. YouTube video
https://www.youtube.com/watch?v=h4O0vqZ-lfY&feature=player_embedded
Playing Time: 20 min, 23 sec
- International Planned Parenthood Federation (2010). Declaration of Sexual Rights.
<http://www.ippf.org/resource/ippfs-sexual-rights-declaration>
Playing Time: 20 min 11 sec

REQUIRED READINGS:

- Starbird E, Norton M, Marcus R. Investing in Family Planning: Key to Achieving the Sustainable Development Goals. (2016) *Global Health: Science and Practice* 4(2): 191–210.
- Glasier, A, Glumezoglu, AM, Schmid, GP, Moreno, CG, and Van Look, PF. (2006). Sexual and Reproductive Health: A Matter of Life and Death. *Lancet*, 268, 1595-1607.
- Cleland, J, Conde-Agudelo A, Peterson H et al. (2012). Contraception and Health. *Lancet*, 380(9837), 149 – 56.
- Grimes, DA, Benson J, Singh, S, Romero, M, Ganatra, B, Okonofua, FE, Shah, IH (2006). Unsafe Abortion, The Preventable Pandemic. *Lancet*, 368, 1908 – 19.
- Orza L, Crone T, Mellin J, Westerhof N, Stackpool-Moore L, et al. (2017). Searching for the Second R in Sexual and Reproductive Health and... Rights. *J Adolesc Health* 60(2S2): S10 – 14.
- Austveg B (2011). Perpetuating Power: Some Reasons Why Reproductive Health Has Stalled. *Reproductive Health Matters* 19(38): 26 – 34.

OPTIONAL READINGS:

- International Conference on Family Planning (2013). 'The Potential of Youth for a Demographic Dividend.' http://fpconference.org/2013/wp-content/uploads/2013/07/EN-HLMM_YOUTH.pdf
- Palitto CC et al. (2012) Intimate Partner Violence, Abortion, and Unintended Pregnancy: Results from the WHO Multi-Country Study on Women's Health and Domestic Violence. *International Journal of Obstetrics and Gynecology* 120(1): 3-9

WEBSITES OF INTEREST:

- WHO – Sexual Health Issues: http://www.who.int/reproductivehealth/topics/sexual_health/issues/en/
- United Nations Population Fund – Sexual and Reproductive Health: <http://www.unfpa.org/sexual-reproductive-health>
- American Public Health Association – Reproductive and Sexual Health: <https://www.apha.org/topics-and-issues/reproductive-and-sexual-health>
- Guttmacher Institute: <https://www.guttmacher.org/>
- Center for Health and Gender Equity (CHANGE): <http://www.genderhealth.org/>

Assignment:

- Team assignment (100 points) – see details on Sakai
- Continue on semester project: paper (12 pages), critical issues fact sheet (1-page), presentation (3-slides)

MODULE VII: EMERGING ISSUES IN GLOBAL HEALTH

Unit 13: Emerging Issues in Global Health

Date: November 13 – 19, 2018

Learning Objectives:

After completing this module, students will be able to:

- Identify and describe emerging issues in global health
- Describe the local and global interconnectivity of emerging issues in global health
- Identify some of the key global health players and their role in this area
- Summarize some of the key characteristics of these emerging issues in global health
- Identify criteria to help prioritize funding and resources to help tackle these emerging global health issues
- List possible interventions to respond to these global health priorities
- Identify priorities to help advance practice and/or knowledge related to these emerging topics
- Envision a career in global public health focusing on a possible topic of passion

Key Topics:

- Injuries and traffic crashes
- Falsified medicines
- Electronic Waste, Pesticides and Globalization
- Refugee and migrant health
- Emergency and crisis management
- Technology (fourth revolution) and its role in global health and mHealth

Readings/Videos/Presentations:

Synchronous student presentations: slots will be assigned

- ⇒ Tuesday November 27, 2018
- ⇒ Thursday November 29, 2018
- ⇒ Tuesday December 4, 2018

Injuries:

- CDC. Road Traffic Injuries and Deaths – A Global Problem. <https://www.cdc.gov/features/globalroadsafety/index.html>
- Norton R, Kobusingye O. (2013). Global Health. Injuries. *N Engl J Med* 368; 1723 – 30.
- Gosselin RA, Spiegel DA, Coughlin R, Zirkle LG. (2009) Injuries: The Neglected Burden in Developing Countries. *Bull World Health Organ* 87(4): 246.

Falsified Medicines:

- World Health Organization. Substandard and Falsified Medical Products. <http://www.who.int/en/news-room/fact-sheets/detail/substandard-and-falsified-medical-products>
- Ozawa S, Evans DR, Bessias S, Haynie DG, Yemeke TT, Laing SK, Herrington JE. Prevalence and Estimated Economic Burden of Substandard and Falsified Medicine in Low- and Middle-Income Countries. A Systematic Review and Meta-Analysis. *JAMA Network Open* 2018; 1(4): e181662.
- Nayyar GML, Breman JG, Herrington JE. (2015) The Global Pandemic of Falsified Medicines: Laboratory and Field Innovations and Policy Perspectives. *Am J Trop Med* 92 (Suppl 6): 2 – 7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4455081/>

Electronic Waste, Pesticides, and Globalization:

- France24, E-Waste in Lagos, Nigeria. <https://www.youtube.com/watch?v=ZZ4J9fDXHJA>
- Beck M. (2016). The Risk Implications of Globalisation: An Exploratory Analysis of 105 Major Industrial Incidents (1971–2010). Watterson A, ed. *International Journal of Environmental Research and Public Health* 13(3):309.
- Bornman MS, Aneck-Hahn NH, de Jager C, et al. (2017). Endocrine Disruptors and Health Effects in Africa: A Call for Action. *Environmental Health Perspectives*. 125(8):085005.

Refugee and Migrant Health:

- World Health Organization. Refugee and Migrant Health. <http://www.who.int/migrants/en/>
- Spiegel PB, Checchi F, Colombo S, Paik E. (2010). Health-Care Needs of People Affected by Conflict: Future Trends and Changing Frameworks. *Lancet* 375; 341 – 5.
- Brolan CE, Forman L, Dagron S, Hammonds R, Waris A, Latif L, Ruano AL. The Right to Health of Non-Nationals and Displaced Persons in the Sustainable Development Goals Era: Challenges for Equity in Universal Health Care. *Int J Equity Health* 2017; 16(1): 14. <https://www.ncbi.nlm.nih.gov/pubmed/28219374>

Technology:

- Howitt, P, Darzi A, Yang GZ, Ashrafian H, Atun R et al. Technologies for Global Health. *Lancet* 2012; 380: 507 – 35.
- World Health Organization. (2011). mHealth. New Horizons for Health through Mobile Technologies. http://www.who.int/goe/publications/goe_mhealth_web.pdf
- World Economic Forum. These are the Top 10 Emerging Technologies of 2017. <https://www.weforum.org/agenda/2017/06/these-are-the-top-10-emerging-technologies-of-2017/>
- The National Academies Press. Global Health and the Future Role of the United States. Catalyzing Innovation. Chapter 6. <https://www.nap.edu/download/24737>

Assignment:

- Work on semester project: paper (12 pages), critical issues fact sheet (1-page), presentation (3-slides)
- Student presentations begin (we will encourage panel discussions between team members with similar topics)

Semester Project and Presentation/Panel Discussions (300 points)

Details posted in Sakai (300 points)

Due: **December 5, 2018 11:55 pm ET**

Student Presentations/Panel Discussions: **November 27, November 29 and December 4, 2018**