

Introduction to Global Public Health (SPHG 700) - 3 credit hours Online Course Fall 2017

Course Instructor:

Karine Dubé, DrPH

Research Assistant Professor

Public Health Leadership Program (PHLP)

4108 McGavran-Greenberg Hall

Chapel Hill, NC, 27516

Email: karine_dube@med.unc.edu

Office Phone: 919-966-6617

A. Course Description: This graduate level course is an introduction to public health with an emphasis on global public health. The course begins with an introduction to online learning and use of UNC's Sakai website. The course then defines public health and global health and explores the history of public health, examines the key terms and concepts, and how the core areas of public health are integrated to promote health from a local to a global population level. The course looks at the key global forces that affect global health, including globalization, emerging infections and climate change and explores the future of global public health. Each student will be encouraged to gain a deeper understanding of his/her particular interests and how one's specific practice/research niche aligns with public health. During this class, students will be engaged in active independent and group learning through the use of media, innovative technology, and discussion groups.

Course Competencies:

1. Identify sentinel events in the history of public health; apply evidence-based principles and scientific knowledge to decision making in public health; embrace a definition of public health that captures the unique characteristics of the field (population focused, community oriented, prevention motivated and rooted in social justice); appreciate the importance of working collaboratively with diverse communities and constituencies; have an appreciation of the role of public health as a convener.
2. Understand the structure and organization of the U.S. Health System. Describe different approaches to compare the performance of various health systems and use these approaches to analyze the health systems of developed and developing countries in terms of their ability to deliver cost, quality and access.
3. Value the legal, ethical, economic, and regulatory dimensions of health care and public health policy; understand the roles, influences, and responsibilities of the different agencies and branches of government, and approaches to developing, evaluating, and advocating for public health policies.
4. Understand how public health issues, causes and solutions are viewed differently by people in different cultures, and develop approaches to designing, implementing and communicating public health interventions that are sensitive and respectful of local traditions.
5. Demonstrate leadership skills within and across organizations and as members of inter-disciplinary and inter-professional teams to solve real world public health problems.
6. Understand the major threats and opportunities presented by the processes of globalization and learn to develop transnational public health approaches to take advantage of the positive aspects of global change and to minimize the negative ones.

B: Course Prerequisites: There are no prerequisites for SPHG 700. Since this is an online course, students are expected to have access to the internet.

C. Course Resources: There will be no required textbook for this course. Course resources, including readings, lectures, videos, and podcasts will be available on the Sakai site. Students can also use the UNC Library site to access journal articles (<http://eresources.lib.unc.edu/ejournal/>). If you are having difficulty locating any of the course materials, please contact the Health Sciences Library or the instructors.

You are encouraged to seek resources outside of those listed in the syllabus to complete course assignments.

Health Sciences Library:

Your librarians:

Brenda Linares, MLIS
Email: blinares@email.unc.edu
Phone: 919-962-0801
Skype: brenda-linares

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/

D. Assignments: *Details for each assignment are contained on week's page. Submit all assignments as indicated on Sakai.*

E. Contents of the syllabus are subject to change at the professors' discretion.

1. Weekly Assignments: (approximately 70% of grade): Completion of all weekly assignments is required to ensure comprehension of the topic and to master application of the material to real world problems. Students are expected to be actively engaged in all class discussions on the Sakai discussion boards and to contribute to the discourse in a positive and valuable manner. In this course, there will be several assignments that involve students working together in a group. Students are expected to work collegially with the team and to participate fully in the group's activity by completing assigned tasks, providing meaningful and constructive feedback, and meeting pre-determined group deadlines. It will be required to log into the Sakai site several times during the week to facilitate work being done in a timely manner. Students who expect to be unable to log on to Sakai should inform the instructor and fellow group members in advance.

2. Final paper (approximately 30% of grade): Students will select an issue/problem in global public health that was not addressed in the semester to create a "call to action" briefing that is concise, comprehensive and contains actionable recommendations. Identify the target audience for the briefing – for example, health department director, ministry of health, or CEO of an NGO. The following components should be included in the briefing: target audience, rationale for topic selection; describe the local and global interconnectivity, characteristics of the issue (e.g. population most affected by the issue); state the social-behavioral determinants of the problem; discuss the underlying biological mechanisms; describe current public health interventions; present public health policies relevant to the issue; and propose what you feel

should be the next steps to eliminate/or curtail the issue. You may draw from any of the tools and methods presented in the course. A 10 page double-spaced paper (12 point font, with 1 inch margins) will be turned in **by midnight EST on Sunday December 3, 2017.**

Note: Individual assignments that are late will lose 5 points for every day late unless otherwise prearranged.

F. Final grade scale: Details on how grades will be determined for each assignment will be posted in the assignment folder on Sakai. The final grade will be based on the individual assignment grades and the final paper. The letter grade equivalence to the graduate scale that will be used in the course is: H (94 – 100%); P (75 – 93%); L (70 – 75%); F (<70%).

G. Honor System: As part of the UNC Honor Code as set forth in the [Instrument of Student Judicial Government](#), Carolina students pledge to maintain ideals of academic honesty, personal integrity, and responsible citizenship. When a student applies to Carolina, s/he undertakes a commitment to the Honor Code principles. The University endeavors to instill in each student a love of learning, a commitment to fair and honorable conduct, and respect for the safety and welfare of others. It also strives to protect the community from those who, for whatever reason, do not embody these values in their conduct, and to protect the integrity of the University and its property for the benefit of all.

H. On-line Course Evaluation: The Gillings School uses an **anonymous** on-line evaluation system to assess the quality of instruction and learning. The system opens during the last week of class. The instructors will only see the aggregate data with any comments at the end of the course and after grades are turned in. It is your responsibility as a student to complete the evaluations. You will be sent multiple email reminders until it is completed.

I. Valuing, Recognizing, and Encouraging Diversity: Promoting and valuing diversity in the classroom enriches learning and broadens everyone’s perspectives. Inclusion and tolerance can lead to respect for others and their opinions and is critical to maximizing the learning that we expect in this course. Our own closely held ideas and personal comfort zones may be challenged. The results, however, create a sense of community and promote excellence in the learning environment. Diversity includes consideration of (1) the variety of life experiences others have had, and (2) factors related to “diversity of presence,” including, age, economic circumstances, ethnic identification, disability, gender, geographic origin, race, religion, sexual orientation, social position. **This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.**

J. Course Feedback: We encourage real-time feedback throughout the course. Please feel free to submit feedback or questions using this anonymous link:

https://unc.az1.qualtrics.com/jfe/form/SV_a9mgVa3dpypRvvnv

Week 1 | August 22 – 27 | Welcome to SPHG 700 – Course Orientation and Self-Introductions, Defining Public Health

Objectives: After completing this module, students will improve their understanding of online learning skills, develop their own strategy for online learning and for group learning, improve their online communications skills and become familiarized with the Sakai site and have a better understanding of evidence-based public health.

Read:

Five-Step Strategy for Student Success with Online Learning

<https://onlinelearninginsights.wordpress.com/2012/09/28/five-step-strategy-for-student-success-with-online-learning/>

How to Succeed in Group Work

<http://www.sagepub.com/crispandturner2/downloads/How%20to%20Succeed%20in%20Group%20Work.pdf>

Communicating Effectively

<http://learningcommons.ubc.ca/student-toolkits-2/working-in-groups/communicating-effectively/>

Sakai Frequently Asked Questions

http://sakaitutorials.unc.edu/module_build.php?tag=syllabus

VoiceThread Tutorial

<http://help.unc.edu/help/voicethread-faq/>

Brownson RC, Fielding JE, Maylahn CM. Evidence-Based Public Health: A Fundamental Concept for Public Health Practice. *Ann Rev Public Health* 2009; 30: 165-201

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/19296775>

Watch these videos:

Gillings School of Global Public Health 75th Year Anniversary-Overview of focus of UNC Gillings School of Global Public Health (8:05)

<https://www.youtube.com/watch?v=RMYWbC6UISc>

What is Public Health? (3:37)

<https://www.youtube.com/watch?v=oY8A58Hlwjs&feature=youtu.be&list=UUHlzppBTg2w8%20bZOIWbb5Yg>

Library 101 Tutorial (24:00)

http://media.sph.unc.edu/adobe/pubh690/library_basics/

Activities:**Synchronous Session (1 Hour) | Proposed for Thursday August 24 at 7 pm ET (Zoom)**

Overview: During this course meeting, we will introduce ourselves face-to-face. The course instructor(s) will go over course syllabus, expectations, and answer questions. We will engage in an activity to get a better understanding of who our classmates are, what our common interests in global public health are, and to answer general course questions.

1. Your Public Health Issue:

In Voicethread, create an audio or video post (less than two minutes) describing a particular issue that you are working on or that interests you and share some background on what you have been able to accomplish, what you hope to accomplish or a goal towards addressing a particular issue. Please be sure to upload a photo for your profile in Voicethread so we can get to know one another. See Sakai site for details on how to access Voicethread.

Due by midnight, Saturday, August 26, 2017.

2. Get to Know Your Classmates:

Where colleagues have posted regarding their interests and/or accomplishments in public health, comment on at least one colleague's post that is of common interest, or applied to your work in some way, or has a personal connection for you. You are welcome to connect with more than one person and/or idea.

Due by midnight, Monday August 28, 2017.

Week 2 | August 28 – September 3 | What is Public Health and Global Health?

Objectives: After completing this module, students will be able to define public health and global health; describe the linkages between global health and local health, enumerate the key achievements of public health in the 20th century, and describe the public health system and its key actors and the broad trends in the health of the global population.

Read:

CDC Definition of Public Health:

<http://www.cdcfoundation.org/content/what-public-health>

United States Public Health 101 (Power Point Presentation)

<http://www.cdc.gov/stltpublichealth/docs/usph101.pptx>

The Ten Great Achievements of Public Health in the 20th Century

<http://www.cdc.gov/about/history/tengpha.htm>

Global Health is (local) Public Health

Bentley ME, Van Vliet G. Global Health is (Local) Public Health. NC Med J 2010; 71(5): 448 – 51.

PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/21473547>

Global Health is Public Health

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(10\)60203-6/fulltext?_eventId=login](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)60203-6/fulltext?_eventId=login)

Towards a Common Definition of Global Health

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)60332-9/fulltext?_eventId=login](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60332-9/fulltext?_eventId=login)

World Health Organization (WHO). (2011) Social Determinants Approaches to Public Health: From Concept to Practice. Chapter 1 (pp. 1 – 8).

http://www.who.int/social_determinants/tools/SD_Publichealth_eng.pdf

Public Health and Medicine: Distinctions between Public Health and Medicine

<https://www.hsph.harvard.edu/about/public-health-medicine/>

Association of Schools and Programs in Public Health (ASPPH):

<http://www.aspph.org/discover/> (Feel free to sign up for the Friday Letter)

Watch this video (OPTIONAL):

The History of Public Health (7:22)

<https://www.youtube.com/watch?v=fTIREIMBQk0&list=PLED345F7COD90B196>

Assignment:

1. Using VoiceThread, post a picture, chart, graph, illustration, or news article from your own environment (country, work, research, clinical practice or daily life) that illustrates the connection between local and global health. In your own words (200 words minimum), describe to us how local health and global health are connected through this one example. Please also explain what public health means to you.
Post your personal artifact and meaning of public health by **midnight Saturday, September 2, 2017**.
2. Then review the postings of your classmates and make a comment(s) on at least one other classmate's post. Comments on classmates' work are **due by midnight, Monday September 4, 2017**.

Week 3 | September 4 – 10 | Global Health from an Ecological Perspective and the Global Burden of Disease

Objectives: After completing this module, students will be able to describe the importance of global health, define the key indicators for measuring the global burden of disease, describe the leading causes of morbidity and mortality around the globe, and discuss the origins of health inequities across countries and regions.

Read:

The Future of the Public's Health in the 21st Century Chapter 2 "Understanding Population Health and Its Determinants"

You can download the full book after establishing an account or you can read the book on line at:

http://books.nap.edu/catalog.php?record_id=10548

Richard L., Gauvin L., Raine K. (2011) Ecological Models Revisited: Their Uses and Evolution in Health Promotion Over Two Decades. Annual Review of Public Health 32: 307 – 26.

PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/21219155>

GBD 2015 Mortality and Causes of Death Collaborators. 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 (Read summary and review article broadly; you do not need to read the full article in details)

[http://thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(16\)31012-1.pdf](http://thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)31012-1.pdf)

The Political Origins of Health Inequity – Prospects for Change

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)62407-1/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62407-1/fulltext)

Derrick D. (2014). Empowering Women and Girls: The Impact of Gender Equality on Public Health.

<http://globalhealth.thelancet.com/2014/08/08/empowering-women-and-girls-impact-gender-equality-public-health>

Watch the Video/Listen to the Podcasts:

Eliminating Poverty and Health Disparities (57:25)

<https://www.youtube.com/watch?v=gzIq87HwBME>

The Burden of Disease from Road Accidents: Why are roads one of the world's biggest killers? (32:03)

<https://www.theguardian.com/global-development/audio/2013/aug/30/road-safety-global-development-podcast>

Group Assignment:

Part 1: Students have now been assigned to small groups. Prepare a Voicethread with your group's findings for the assigned task (provide text as well as graphics). You can upload a Powerpoint to Voicethread with your group's content, which is probably the easiest route. Use any platform you like to collaborate with one another to complete the task (email, chat, Skype, Google Hangouts) and consult the Voicethread link if you need help. Group Voicethread is due by **midnight, Saturday September 9, 2017**.

- **Assigned Group Set 1:** Describe the global burden of suicide.
 - o Prevalence rates by countries, over time, and by socio-demographic characteristics
 - o Years of potential life lost
 - o Sentinel events that may be associated with trends in suicide rates
- **Assigned Group Set 2:** Based on your readings, compare and contrast the socio-demographic root causes of infant mortality in Norway versus India. Be sure to include: mortality measures and root causes with their measure of effect on infant mortality (search for information on your own and be sure to make appropriate citations; please avoid Wikipedia).

Part 2: Groups will review each other's work.

Read each other's presentations and comment as an individual on what you found surprising from the other group, how the suicide rates in your own country may differ, and other root causes of the infant mortality in your own country. Individual comments due by **midnight, Monday September 11, 2017**.

Week 4 | September 11 – 17 | Global Processes and the Health Effects of Globalization
TURN IN TOPIC FOR FINAL PAPER BY MIDNIGHT MONDAY, SEPTEMBER 18TH, 2017

Objectives: After completing this module, students will be able to describe key aspects of globalization and the linkages between globalization and health, articulate a framework for analyzing the health effects of globalization, discuss the challenges and costs presented by pandemics and other global health challenges, and describe how economic inequality harms societies.

Read:

Globalization is Good for You, Mostly

<http://www.bmj.com/content/323/7311/504>

Globalization of International Health

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(97\)05546-3/fulltext?_eventId=login](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(97)05546-3/fulltext?_eventId=login)

Globalization and Health: The Need for a Global Vision (OPTIONAL)

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(97\)05546-3/fulltext?_eventId=login](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(97)05546-3/fulltext?_eventId=login)

Globalization and Health: A Framework for Analysis and Action (OPTIONAL)

[http://www.who.int/bulletin/archives/79\(9\)875.pdf](http://www.who.int/bulletin/archives/79(9)875.pdf)

Globalization and Health: A Conceptual Framework (OPTIONAL)

<http://www.globalizationandhealth.com/content/1/1/14>

Watch the videos:

Choose **two** of the videos below based on your interests:

Global Health and Global Trade: Lives in the Balance (57:08)

<http://www.youtube.com/watch?v=i8LJ7eAxxnE>

Health and Globalization: Pandemics, Rising Costs and Other Challenges (31:33)

<http://www.youtube.com/watch?v=ivncbRkZqxM>

How Economic Inequality Harms Societies (16:54)

https://www.ted.com/talks/richard_wilkinson

Water Quality and Future Generations: Deb Swackhamer at TEDxUMN (13:04)

<https://www.youtube.com/watch?v=ezZi-ECSFgA>

Final Paper Topic: Submit your final paper topic by **midnight, Monday September 18, 2017.**

Assignment:

Fish/seafood has been recommended as part of a healthy diet in the U.S. and in various other countries due to its rich sources of omega-3 fatty acids. However, it can be contaminated with high amounts of methyl mercury and poly-chlorinated biphenyls (PCBs) causing ill health effects. And some varieties of seafood have been overfished in ways that cause lasting damage to our environment and economics in a particular region or country. Thus, fish sustainability is a highly debated public health topic.

You will be assigned to one of the following roles within a group. Roles: fish industry executive, local fishermen, individual trying to follow a healthy dietary pattern, politician (national), local mayor, public health policy maker that is responsible for creating national dietary guidelines.

1. Your group should choose a geographic location where fish scarcity is an issue. From the role that you have been assigned, describe the factors that influence your perspective, how globalization may have contributed to the scarcity of fish in your selected geographic area, and discuss the implications of this from your stakeholder perspective.
 - Prepare 3 slides that contain this information.
 - Share the slides with each member of your group by posting it in the Student Pages link provided for your group below.
 2. Using a collaborative tool, as a group, (each group will have the various stakeholders represented) describe the complexity of the issue given all the different stakeholders at play and identify a strategy to counter the global factors that have contributed to this scarcity. After your discussion, have one person summarize your final strategy in a Voicethread with no more than 3 slides.
- Due by midnight Monday September 18, 2017.**

Week 5 | September 18 – 24 | Public Health Law and Ethics

Objectives: After completing this module, students will be able to describe key ethical issues in global health, identify ethical approaches to allocating funds for health, and discuss selected current ethical and human rights concerns in global health.

Read:

12 Principles of Ethical Public Health Practice (Please read these carefully)

https://www.apha.org/~media/files/pdf/membergroups/ethics_brochure.ashx

Ethical Issues in Resource Allocation, Research, and New Product Development

<http://www.ncbi.nlm.nih.gov/books/NBK11739/>

Ethics and Governance in Global Health Inequities

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2465483/>

Optional Reading:

Polio in Pakistan

Mandatory Polio Vaccination for Travelers: Protecting Global Public Health or Political Health

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)60756-X/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60756-X/fulltext)

Additional References:

The UNC Institute for Public Health has prepared training modules in public health ethics:

https://nciph.sph.unc.edu/tws/training_list/?mode=view_series&subcat_id=521&subcat_title=Public+Health+Ethics

Good Decision Making in Real Time:

<https://www.cdc.gov/od/science/integrity/phethics/trainingmaterials.htm>

Assignment

Compose a personal reflection paper (750 – 1000 words, double-spaced) reflecting on an ethical issue that you have encountered or are currently encountering as part of your work or practice. How do the 12 principles of ethical public health practice may help you navigate the issue? How does your issue relate to global health topics? You will be asked to share your ethical issue during the synchronous meeting.

Due by midnight, Monday September 25, 2017

Synchronous Session (1 Hour) | To be Announced

Weeks 6 and 7 | September 25 – October 8 | Public Health Systems in Upper Income Countries

Objectives: After completing this module, students will be able to define the role that governments play in delivering health, list the key components of public health infrastructure, 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, compare the public health infrastructure of selected countries, and make recommendations for improving the infrastructure of selected countries based on lessons in other countries.

Read:

The Role of Public Health Institutions in Global Health System Strengthening Efforts: The US CDC's Perspective

<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001199>

Working for Health: An Introduction to the World Health Organization

http://www.who.int/about/brochure_en.pdf?ua=1

The Health Worker Crisis: An Analysis of the Issues and Main International Responsibilities

<http://www.healthpovertyaction.org/wp-content/uploads/downloads/2013/11/Health-worker-crisis-web.pdf>

Watch the videos:

Program "More Doctors for Brazil" – Health for the Most Vulnerable Communities (15:45)

<https://www.youtube.com/watch?v=YNhsza8ixDE&feature=em-uploademail>

Behind Health Care Reform: An Insider's View: Stan Hupfeld at TEDxOU (16:38)

<https://www.youtube.com/watch?v=0gcARSUEF0s>

Assignment:

Develop a Strength, Weakness, Opportunity and Threat (SWOT) analysis focusing on the national health system from an upper income country other than the U.S. Develop 5 – 6 recommendations for improving the health system that you analyzed based on your SWOT analysis. Submit your SWOT and recommendations in the assignment tool.

Resources for the assignment:

For more information on how to conduct a SWOT analysis

<http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/swot-analysis/main>

International Profiles of Health Care Systems, 2015

http://www.commonwealthfund.org/~media/files/publications/fund-report/2016/jan/1857_mossialos_intl_profiles_2015_v7.pdf

You are also encouraged to seek additional resources as necessary.

Due by midnight, Monday October 9, 2017

Week 8 | October 9 – 15 | Strengthening the Public Health Systems in Low and Middle Income Countries

Objectives: After completing this module, students will be able to identify the essential elements that define a public health system, describe the Sustainable Development Goals (SDGs) and why they are important in strengthening public health systems in low- and middle- income countries (LMICs), define the role and methods non-governmental organizations (NGOs) play in delivering public health services, discuss the importance of human resources and information systems in public health delivery, compare and make recommendations for improving the public health systems of selected LMICs countries based on lessons learned in other countries.

Read:

Thinking for Health Systems Strengthening:

http://www.who.int/alliance-hpsr/alliancehpsr_overview_fr_eng.pdf?ua=1

Strengthening Health Systems to Improve Health Outcomes. WHO's Framework for Action

http://www.who.int/healthsystems/strategy/everybodys_business.pdf

What is a Resilient Health System? Lessons from Ebola

<https://assets.rockefellerfoundation.org/app/uploads/20150507145005/PIIS0140673615607553.pdf>

Getting Started with the Sustainable Development Goals

<http://unsdsn.org/wp-content/uploads/2015/12/151211-getting-started-guide-FINAL-PDF-.pdf>

Additional Resources:

There are additional sources on health systems strengthening, including [WHO HSS publications](#) and the [USAID Health Systems 20/20](#) effort, and the [Lancet series on child survival](#) (see links in Sakai).

Individual Assignment:

Watch these clips that illustrate the challenges in delivering health care AND public health in resource poor settings:

1. River Blindness in Togo (1:19)

<https://www.youtube.com/watch?v=Pze0EpGwDIE>

2. Carter Center Trachoma Program in Ethiopia (3:59)

<https://www.youtube.com/watch?v=HgSaUCGzqT8>

3. Malaria and Lymphatic Filariasis Elimination in Nigeria (3:21)

<https://www.youtube.com/watch?v=uviglebTV1M>

4. USAID Smiling Sun Project in Bangladesh (5:01)

https://www.youtube.com/watch?v=Vfy81ZwR_tU

5. Health Systems and Policies: Case Study of Urban Poor in Bangladesh (11:00)

<https://www.youtube.com/watch?v=LeVXIep0Hto>

Choose one of the countries covered in the case studies. Write a reflection paper (750 –1000 words, double-spaced) that discusses the challenges in strengthening the public health systems of the countries covered in the case studies (e.g. Togo, Ethiopia, Nigeria, and Bangladesh). How can the public health system be strengthened in these countries? What are some of the advantages and disadvantages of the approaches you have chosen?

Due by midnight, Monday October 16, 2017.

Week 9 | October 16 – 22 | Ebola: Contemporary Outbreak

Objectives: After completing this module, students will have a better understanding of the events in the Ebola outbreak and consequences for the future of public health and describe key lessons from the Ebola outbreak as they apply to public health.

Read:

Frieden, T.R. (2015) The Future of Public Health. Shattuck Lecture. Special Article. *The New England Journal of Medicine*, 373, 1748 – 54.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/26510022>

Frieden, T. R., Damon, I., Bell, B. P., Kenyon, T., & Nichol, S. (2014). Ebola 2014 – New Challenges, New Global Response and Responsibility. *The New England Journal of Medicine*, 371(13), 1177 – 80.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/25140858>

Heymann D.L., Chen, L., Takemi, K. *et al.* (2015) Global Health Security: The Wider Lessons from the West African Ebola Virus Disease Epidemic. *The Lancet*, 38, 1884 – 901.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/27429901>

Kelly T.R., Karesh W.B., Johnson C.K., Gilardi K.V.K., Anthony S.J., Goldstein T., Olson S.H., Machalaba C., PREDICT Consortium, Mazet J.A.S. (2017) One Health Proof of Concept: Bringing a Transdisciplinary Approach to Surveillance for Zoonotic Viruses at the Human-Wild Animal Interface. *Preventive Veterinary Medicine* 137; 112 – 8.

PubMed: <https://www.ncbi.nlm.nih.gov/pubmed/28034593>

Watch:

Living in Emergency (1:33:46)

<https://vimeo.com/29121376>

Optional:

Pandey A., Atkins, K.E., Medlock, J., *et al.* Strategies for containing Ebola in West Africa. *Science* 346, 991(2014); DOI: 10.1126/science.1260612

NIH Public Access: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4316831/pdf/nihms656283.pdf>

Gostin, L.O., DeBartolo, M.C, Friedman, E.A. (2015) The International Health Regulations 10 Year On: The Governing Framework for Global Health Security. *The Lancet*, 386, 2222 – 6.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/26615327>

Briand, S., Bertherat, E., Cox, *et al.* (2014). The International Ebola Emergency. *New England Journal of Medicine*, 371(13), 1180 – 3.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/25140855>

Other Resources:

Ethics and Ebola: Public Health Planning and Response. Presidential Commission for the Study of Bioethical Issues. February 2015. Available at:

http://bioethics.gov/sites/default/files/Ethics-and-Ebola_PCSBI_508.pdf

UNC Ebola Information Portal

<http://sph.unc.edu/global-health/ebola/>

Group Assignment:

You are charged with presenting “lessons learned” to the WHO as a team. As a group develop three slides to upload to VoiceThread that address an issue of your choosing (e.g. international response, Ebola control, prevention, global health security, ethics of PH planning, etc.)

Due by midnight, Monday October 23, 2017.

Final Paper: Turn in outline of final paper **by midnight, Monday October 23, 2017.**

Week 10| October 23 – 29 | Zika and Other Vector-Borne Infections – the New, the Old and the Re-Emerging

Objectives: After completing this module, students will have a better understanding of vector-borne infections and will be able to identify links between old (malaria), new (Zika) and re-emerging (yellow fever, dengue) vector-borne infections. Students will also be able to apply public health principles learned in the course to combat transmission of these infections.

Watch:

The Devastating Zika Virus Explained (3:29)

<https://www.youtube.com/watch?v=ZxhmmkmoGF8>

What is the Zika Virus? (1:55)

<http://www.cnn.com/videos/world/2015/12/22/what-is-the-zika-virus-darlington-orig-sdg.cnn>

Zika Resources Video Resources (feel free to watch the 1 – 2 video(s) that interest you most)

<https://www.cdc.gov/zika/comm-resources/video.html>

Please note that Zika transmission can also occur via bodily fluids such as semen and blood products. Non-vector-borne ZIKV transmission plays a role in the spread of ZIKV and has great societal impact.

Read:

Focosi, D., Maggi, F., Pistello, M. Zika Virus: Implications for Public Health. *Clinical Infectious Diseases* 2016, 63: 227 – 33.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/27048745>

Viral Complacency. *Nature* 2016, 532(7597):5.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/27078526>

Chan M. Yellow Fever: The Resurgence of a Forgotten Disease. *Lancet* 2016; 0140-6736(16)30620-1.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/27229187>

Dengue and Severe Dengue

<http://www.who.int/mediacentre/factsheets/fs117/en/>

Elimination of Malaria in the United States (1947 – 1951)

https://www.cdc.gov/malaria/about/history/elimination_us.html

Optional:

Lessler, J., Chaisson L.H., Kucirka L.M., *et al.* Assessing the Global Threat from Zika Virus. *Science* 2016; 1 – 17. PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/27417495>

Unveiling the Burden of Dengue Fever in Africa

<http://blogs.cdc.gov/publichealthmatters/2015/07/unveiling-the-burden-of-dengue-in-africa/>

World Malaria Report 2014

http://www.who.int/malaria/publications/world_malaria_report_2014/wmr-2014-no-profiles.pdf

ChikDenMaZika Syndrome: The Challenge of Diagnosing Arboviral Infections in the Midst of Concurrent Epidemics. *Annals of Clinical Microbiology and Antimicrobials* 2016; 15:42.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/27449770>

Other Resources:

CDC – Zika Virus Update

<http://www.cdc.gov/zika/>

Synchronous Session:

Synchronous Session (2 Hours) | To be Announced

Drs. William Fischer II and David A. Wohl from the UNC School of Medicine will discuss the response to the Ebola outbreak. Dr. Matthew Collins from the UNC School of Medicine will discuss the emerging Zika epidemic.

Assignment:

Prepare 3 questions for an expert panel in infectious disease related to the current state of our knowledge on the topic. Please cite the reference(s) that inspired your question.

Due by midnight, TBD

Week 11 | October 30 – November 5 | Public Health as a Team Science

Objectives: After completing this module, students will understand the roles, influences, and responsibilities of scientists from different disciplines that are needed to solve complex public health problems and that integration of diverse disciplines leads to innovative solutions.

Watch

Systems Thinking for Health Systems Strengthening (6:30)

<https://www.youtube.com/watch?v=iIs6zQXUpAU&feature=youtu.be>

Read

Systems Thinking to Improve the Public's Health

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3940421/pdf/nihms59439.pdf>

The Application of Systems Thinking in Health: Why Use Systems Thinking?

<https://www.ncbi.nlm.nih.gov/pubmed/25160707>

Competitive Science: Is Competition Ruining Science?

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4363426/pdf/zii1229.pdf>

Building Successful Collaborations

<https://www.gov.mb.ca/health/primarycare/providers/pcn/docs/collaborationtool.pdf>

Collaborating with the Community (OPTIONAL)

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4307798/pdf/nihms649932.pdf>

Assignment:

Topic: your choice: Cell phones and public health **or** Soda and public health **or** other topic approved by instructor (4 pages total).

Read information on concept mapping here <http://sils.unc.edu/it-services/instructional-technology/concept-mapping>). You can use electronic software from whatever program you wish, or you can scan and upload if you decided to create a concept map by hand.

- 1) Develop a concept map of the interconnection between cell phones or soda and public health or other topic approved by instructor (use resources available on Sakai) (one page)
 - a. Think about the benefits and risk associated with cell phone use or soda or other topic of your choice broadly
 - b. How is this a public health issue?
 - c. What policies exist in this arena?

- 2) Pick one public health issue related to cell phone use or soda or other topic of your choice (3 pages double-spaced maximum)
 - a. Identify all the team players that need to be involved
 - b. Describe briefly their knowledge and skill set that they bring to the team
 - c. Discuss how your team is better prepared to address the issue compared to one discipline's perspective.

Due by midnight, Monday November 6, 2017.

Week 12 | November 6 – 12 | Global Health and the Three Ds – Development/Diplomacy/Defense

Objectives: After completing this module, students will be able to describe how global health relates to development, diplomacy and defense (foreign policy) and opportunities for collaboration and leadership between the three domains. Students will also have a better understanding of the Global Health Security Agenda and will be able to articulate global health priority areas of the U.S. federal government.

Browse:

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

Read:

Feldbaum H., Michaud J. Health Diplomacy and the Enduring Relevance of Foreign Policy Interests. *PLoS Medicine* 2010; 7(4): e1000266.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/20422036>

Michaud J., Kates J. Global Health Diplomacy: Advancing Foreign Policy and Global Health Interests. *Global Health: Science and Practice* 2013; 1(1): 24 – 8.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/25276514>

Dora C., Haines A., Balbus J., *et al.* Indicators Linking Health and Sustainability in the Post-2015 Development Agenda. *Lancet* 2015; 380 – 91.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/24923529>

Snair J, Mills C. (2014). Call for a Dedicated Environmental Health and Security Strategy.
<https://www.domesticpreparedness.com/commentary/call-for-a-dedicated-environmental-health-security-strategy/>

Optional:

Lim M., Blazes D. "Collateral Duty Diplomacy": The U.S. Department of Defense and Global Health Diplomacy. *Science and Diplomacy* 2015.

Available at: <http://www.sciencediplomacy.org/article/2015/collateral-duty-diplomacy>

Chan L.H., Chen L., Xu J. China's Engagement with Global Health Diplomacy: Was SARS a Watershed? *PLoS Medicine* 2010; 7(4): e1000266.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/20436959>

Lee K., Chagas L.C., Novotny T.E. Brazil and the Framework Convention on Tobacco Control: Global Health Diplomacy as Soft Power. *PLoS Medicine* 2010; 7(4): e1000232.

PubMed: <http://www.ncbi.nlm.nih.gov/pubmed/20421917>

Synchronous Session:

Synchronous Session (1 Hour) | November 7, 2017 at TBD

Assignment:

Prepare 3 questions for our guest expert based on your readings. Please cite the articles and passages that prompted your questions.

Due by midnight, Sunday November 5, 2017.

Week 13 | November 13 – 19 | Public Health Interventions, U.S. and Global

Objectives: After completing this module, students will be able to identify the most successful and cost effective global health interventions, and the characteristics of a successful intervention, describe a framework for scaling up successful global health projects and articulate a vision for sustaining global health progress after completion of the Sustainable Development Goals.

Read:

Success in Addressing Priorities

<http://www.ncbi.nlm.nih.gov/books/NBK10252/>

Improving the Health of Populations: Lessons from Experience

<http://www.ncbi.nlm.nih.gov/books/NBK11736/>

Scaling Up Global Health Interventions: A Proposed Framework for Success

<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001049>

Poor Sanitation in India May Afflict Well-Fed Children with Malnutrition

<http://www.nytimes.com/2014/07/15/world/asia/poor-sanitation-in-india-may-afflict-well-fed-children-with-malnutrition.html?hpw&action=click&pgtype=Homepage&version=HpHedThumbWell&module=well-region®ion=bottom-well&WT.nav=bottom-well>

As a resource to this topic you can watch the video:

Fifty Years of Global Health (1:15:54) (OPTIONAL):

<https://www.csis.org/events/fifty-years-global-health>

Assignment:

Based on your reading of “Poor Sanitation in India”, complete the following assignment:

1. Use existing data (e.g., State of the World’s Children or Demographic Health Survey (DHS)), identify countries where both sanitation and childhood malnutrition are major problems.
2. Identify literature with examples of successful WaSH interventions that impacted child malnutrition.
3. Pick a country from those identified in step 1 and describe a WaSH intervention that you think could reduce child malnutrition. Identify the type of malnutrition you are targeting and justify the choice of intervention based on what you learned from the literature (in step 2) about what works and doesn’t work. Upload your research to VoiceThread in a 3-5 slide presentation with a narrative. **Due by midnight, Saturday November 18, 2017**
4. Connecting your own findings and course materials, comment on two of your classmates’ posts. **Due by midnight, Monday November 20, 2017**

Weeks 14 and 15 | November 20 – December 3 | The Health Effects of Climate Change and the Future of Global Health

Objectives: After completing this module, students will be able to explain the health effects of global climate change, and identify measures to mitigate these effects. Students will be able to describe a vision for the future of global health, focusing on the opportunities to reduce the mortality and morbidity gap between high-income and low-income countries.

Read:

Global Climate Change: Implications for International Public Health Policy

<http://www.who.int/bulletin/volumes/85/3/06-039503/en/>

Managing the Health Effects of Climate Change

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)60935-1/fulltext?_eventId=login](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60935-1/fulltext?_eventId=login)

Global Health 2035: A World Converging within a Generation

<http://globalhealth2035.org/sites/default/files/report/global-health-2035.pdf>

Watch:

Human Support Systems: Risks to Human Health (6:34)

http://www.youtube.com/watch?v=LoLP-zUBH_k

World Bank: Warmer World Will Trap Millions in Poverty (4:28)

https://www.youtube.com/watch?feature=player_embedded&v=REFEgy6jUVU

Additional Resources (review at your leisure):

A Grand Convergence in Global Health

<http://www.globalhealth2035.org/>

The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment

<https://health2016.globalchange.gov/>

Assignments:

Identify an example of a public health issue in your community (link to an image, article, YouTube etc.) that is currently impacted by climate change. Write a blog describing why this is a public health issue, how climate change is making an impact, and what are the consequences if left unresolved (2 pages double-spaced maximum). **Due by midnight, Friday December 1, 2017**

In addition to your climate change blog, please prepare **2 – 3 PowerPoint slides** that summarizes your call to action paper, and key lessons that you learned about this topic throughout the semester. Please be ready to share with your classmates during the synchronous session.

Due by TBD.

Synchronous Session:

Synchronous Session (2 Hours) | To be Announced

First Hour: Global Climate Change – Guest Speakers Kimberly Thigpen, JD, MPH and Trisha Castranio, National Institute of Environmental Health Sciences (NIEHS)

Second Hour: Call to Action Paper Discussion

Finish up your semester paper and submit it by midnight, Sunday December 3, 2017.

SCHEDULE AT A GLANCE		
Week	Topic	Assignment Due (Points)
Week 1 August 22 – 27	Welcome and Course Orientation	Blog assignment; Comment on classmates' blog (50) SYNCHRONOUS WELCOME SESSION
Week 2 August 28 – September 3	What is Public Health and What is Global Health?	Blog assignment (50) Posting and comment on classmate's blog
Week 3 September 4 – 10	Global Health from an Ecological Perspective Global Burden of Disease	Group assignment (50) Comment on other group's post as an individual
Week 4 September 11 – 17	Global Processes and the Health Effects of Globalization	Group role assignment (50) ***TURN IN TOPIC FOR SEMESTER PAPER
Week 5 September 18 – 24	Public Health Law and Ethics	Reflection paper (50) SYNCHRONOUS SESSION
Weeks 6 and 7 September 25 – October 8	The Public Health Systems in Upper Income Countries	SWOT analysis (50)
Week 8 October 9 – 15	Strengthening the Public Health Systems in Low and Middle Income Countries	Reflection paper (50)
Week 9 October 16 – 22	Ebola: Contemporary Outbreak	Group Assignment (50)
Week 10 October 23 – 29	Zika and Vector-Borne Infections	Questions for Expert Panel (50) SYNCHRONOUS SESSION *** OUTLINE FOR FINAL PAPER DUE
Week 11 October 30 – November 5	Public Health as a Team Science	Concept Mapping assignment (50)

Week 12 November 6 – 12	Global Health and the Three Ds: Development, Diplomacy and Defense	Questions for Guest Expert (Due Early) (50) SYNCHRONOUS SESSION
Week 13 November 13 – 19	Public Health Interventions U.S. and Global	Intervention assignment (50)
Weeks 14 and 15 November 20 – December 3	The Health Effects of Climate Change and the Future of Global Health	Climate Change Blog (50) PowerPoint Slides (50) FINAL SYNCHRONOUS SESSION ***FINAL PAPER DUE (300)