Catalog Description:

An introduction to the key concepts and considerations in public health research and practice. Selected public health topics will be presented from biomedical, epidemiologic, socio-cultural, and policy perspectives in the context of low, middle, and high-income countries.

Required Textbook: Essentials of Public Health by Bernard Turnock

Additional required readings will be provided as links in the Syllabus or on Blackboard as pdf files. Majority of the classes will be audiotaped and available in Blackboard to students registered in the class.

Course objectives: Upon completing this course, students should be able to:

- Explain what public health is
- Carry out disease outbreak investigation
- Understand the principles of epidemiologic research used in public health
- Work as part of a team to improve health outcomes for a community, state or country
- Know public health interventions that have worked in the past
- Understand the inputs into making public health interventions for populations
- Strategize on interventions for stopping or reducing a public health issue

Important Dates: Add/Drop deadline: Sept 7th
Withdraw deadline: Oct 26th
Exam date: Dec 18th 9am
Mid-Term 1: Oct 11th
Mid-Term 2: Nov 20th
<table>
<thead>
<tr>
<th>Class number, Date</th>
<th>Topic</th>
<th>Readings</th>
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</table>
| 1 Thurs Aug 30    | Course introduction What is Public Health? Definitions | 1. Essentials of Public Health by Bernard Turnock Chapter 1  
2. Basic Epidemiology by Bonita et al, Chapter 2 Published by WHO (http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf) |
2. Chapter 2 Essentials of Public Health by Bernard Turnock |
<p>| 3 Thurs Sept 6     | Using Data to Make Public Health Decisions/Consequences of Health Disparities | Guest Speaker: Dr. Rashida Dorsey |
| 4 Tues Sept 11     | Adverse Childhood Events | Guest Speaker: Dr. Cynthia Devore Reading: Chapter 4 in The Health Gap by Michael Marmot. (In blackboard) |</p>
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<tr>
<th>Date</th>
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<th>References</th>
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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3150124/  
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2563367/  
https://muse.jhu.edu/book/18300  
(In blackboard)  
3.Effects of poverty on health in the US.  
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<tr>
<th>Date</th>
<th>Reading Notes</th>
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<tr>
<td>8 Tues</td>
<td>Health Systems</td>
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3. Sri Lanka maternal health (in blackboard) |
| 9 Thurs   | Globalization and Disease, Climate Change and Health                           |
| Sept 27   | 1. Chapter 3 in Diseases of Poverty by Lisa Adams and John Butterly (In blackboard)  
| 10 Tues   | Occupational Health, Environmental Health, Built Environment                  |
2. Chapter 6 in The Health Gap by Michael Marmot(In blackboard) |
<p>| 11 Thurs  | Causation (Sufficient and Necessary Causes, Causal webs)                      |</p>
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<tr>
<th>Date</th>
<th>Topic</th>
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<tr>
<td>13 Thursday 11 Oct</td>
<td>Mid-term 1</td>
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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3474301/  
2. Basic Epidemiology by Bonita et al, Chapter 3. Published by WHO (http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf) |
http://www.jstor.org/stable/20393934?seq=1#page_scan_tab_contents  
2. Chapter 7 in Modern Epidemiology by Kenneth Rothman 3rd edition  
3. Chapter 3 in Designing Clinical Research by Stephen Hulley and Steven Cummings |
| 16 Thurs 25 Oct | US Health Group Meets                          | Breaks into 2 groups  
a) Health Disparities  
b) Health Policy |
| 17 Tues 30 Oct | Global Health Group meets                      | Breaks into 2 groups  
a) Comparison of US to High Income country  
b) Low/Middle Income countries |

3. Hep A outbreak in VA (in blackboard)

18 Thurs Nov 1

Disease Outbreak Investigation

19 Tues Nov 6

Infectious Diseases (Malaria and Cholera)


https://www.nytimes.com/2016/08/18/world/americas/united-nations-haiti-cholera.html?mcubz=1

| 20 Thurs Nov 8 | 1. Measles outbreak in CA. Disney Measles outbreak (In blackboard)  
Infectious Diseases (Measles, Polio)  
3. Polio eradication video [https://www.youtube.com/watch?v=ULKjX16t3M](https://www.youtube.com/watch?v=ULKjX16t3M)  
Infectious Diseases (Ebola) Public Health in Disasters and refugee camps  
2. Case study material on management of Ebola spread into Nigeria during 2014 outbreak. (In blackboard)  
5. Public Health in Disasters: Reading: Chapter 6 In Essentials of Public Health by Turnock |
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<th>Date</th>
<th>Time</th>
<th>Topic</th>
<th>References</th>
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<tbody>
<tr>
<td>24 Tues</td>
<td>Nov 27</td>
<td>Non Infectious Diseases (Nutrition, Reproductive health)</td>
<td>4. Diseases of Poverty (Epidemiology, infectious Diseases and modern plagues) Adams LV, Butterly JR. Chapter 12</td>
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<td></td>
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<td>1. <a href="https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html">https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html</a></td>
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<tr>
<td>Date</td>
<td>Topic</td>
<td>References</td>
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| 25 Thurs   | Non Infectious Diseases (Diabetes, CHD, Obesity) | 1. Barnes AS. The Epidemic of Obesity and Diabetes, Texas Heart Institute Journal.2011 38:2; 142-144 In Blackboard.  
| Nov 29     |                                            |                                                                                               |
| 26 Tues    | Life Expectancy/Opioid Addiction           | 1. NY Times Dec 8, 2016, Life Expectancy in US Declines Slightly and Researchers are Puzzled. By Katie Rogers  
3. Rehm et al Policy Implications of Marked reversals of population life expectancy caused by substance abuse BMC Medicine 2016 14:42 In Blackboard  
| Dec 1      |                                            |                                                                                               |
| 27 Thurs   | Group Presentations                        |                                                                                               |
| Dec 6      |                                            |                                                                                               |

**Instructional Methods:**

The course meets twice a week for eighty minutes. The way we use this time will vary, and will include lectures, discussions, films, and in-class exercises.

**Grading:** There will be two midterm examinations and a final examination. There will be one paper assignment due last week of classes (Week of Dec 3rd)
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<thead>
<tr>
<th>Item</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Exam 1</td>
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<td>Exam 2</td>
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<tr>
<td>Paper</td>
<td>25</td>
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<td>Small Group Participation</td>
<td>10</td>
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<tr>
<td>Final exam</td>
<td>25</td>
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<td>Topic deadline/other deadlines</td>
<td>10</td>
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100%

Final Paper will be a maximum of 2500 words. You will choose the topic for your final paper by Nov 6th. You can choose either a US Health Issue or an International Health Issue. For the US health issue you can focus either on Health Disparities or Health Policy and for the International Health group, you can focus on either Comparison of a High Income Country (OECD Country) to the US or a problem occurring in a Low or Middle Income country. Please use tables and graphs as much as possible and doing statistical analyses will get you extra points. For Bonus Point(s) you can volunteer for the small group presentation. Bonus points will be either 1 or 2 points added to the final percentage based on contribution to the group presentation.

**Grading scale**:  
- 94-100 A  
- 90-93 A-  
- 87-89 B+  
- 83-86 B  
- 80-82 B-  
- 77-79 C+  
- 73-76 C  
- 70-72 C-  
- 67-69 D+  
- 63-66 D  
- 60-62 D-  
- Below 60 F

**Notes:**

Students will be expected to understand and abide by campus policies related to **academic integrity** and **appropriate citation of sources** in all written work completed. Plagiarism is a serious offense, deliberate or not, and will referred for further disciplinary action. If you need further guidance regarding citation, please see me.

There are times when **extraordinary circumstances occur** (e.g., serious illness, death in the family, etc.). In such circumstances, and/or if you need additional time to satisfactorily complete any course requirement, please consult with me within a reasonable amount of time. **Nota bene:** Extensions are not guaranteed and will be granted at the discretion of the instructor. No extra credit projects will be assigned.
Papers and all other assignments must be submitted when due except when an extraordinary circumstance as described above occurs. Late submission will lead to daily point subtractions.

Every effort will be made to respond to student emails in a timely fashion (within 24-48 hours).

**Electronics Policy:**
1) Using laptops or tablets to take notes is permitted. (However, research suggests you learn better when you take notes with pen and paper.) If you are also going to use your laptop or tablet to check email, do Facebook, shop, do work from other classes, read the news, or otherwise dissociate, sit in back. (Because really, that's just distracting and obnoxious, let's be honest.)

2) Please do not have your phones out. If you cannot survive the class period without checking your phone, sit in back. (Then read the research showing that compulsive phone-checking simulates the feeling of being in love, and do some soul-searching.)

3) Consider making the decision to be mindfully present during our time together.

**Final Paper Rubric**

The final paper is a research paper and should follow the guidelines of research papers in your field. You can use any style such as APA, MLA or Chicago style or use the style of a particular journal in your field. A research paper is not an essay and should have subtitles and the standard subtitles are Introduction, Methods, Results and Discussions but this can vary based on your adopted publication journal.

Papers will be graded on

1. Relevance of title and topic: Is this topic important for today’s real world problems?
2. Stated hypothesis and if analyses done fits resolving the hypothesis.
3. Coherence of association discussed in the paper, is the association logical.
4. Organization: Does the paper flow and ease of reading.
5. Concise and Brevity: Ideas should not be repeated over and over.
6. Use of graphical presentation of data or results
7. Use of Statistical Analyses will lead to bonus points but points will not be taken for not using statistical analyses.