PUBH 3107
Global Public Health and the Environment
Fall 2018

COURSE & CONTACT INFORMATION
Credits: 2
Meeting Days: Tuesday
Meeting Time: 3:35-5:30
Meeting Place: Moos Health Sci Tower 2-690
Instructor: Bruce H. Alexander
Office Address: 1260 Mayo Building
Office Phone: 612-625-7934
E-mail: balex@umn.edu
Office Hours: Arranged
T.A. Gabriela Bustamante, MPH
E-Mail busta027@umn.edu

COURSE DESCRIPTION
This course in global public health focuses on the environmental determinants of the health and well being of people in different countries. The course is developed as a global impact course for the Public Health Minor. The course will provide a global perspective on the burden of environmentally related disease and injury, the interactions between people, animals, and ecosystems, agents and vectors of disease and injury, and the role of governmental and nongovernmental organizations. The course will present an opportunity to developing the critical thinking skills to understand the complexity of these public health challenges and explore equity issues related to environment determinants of health.

COURSE PREREQUISITES
This course is intended for students completing the Public Health Minor. All public health minor requirements need to be completed prior to entrance into this course. Students must have completed PubH 3202 OR PubH 3001 OR PubH 3004 AND PubH 3350 OR PubH 3106.

COURSE GOALS & OBJECTIVES
At the completion of the course students will be able to:
• Describe the key concepts of global public health including population demographics, epidemiological transitions, and health status and disease burden indicators, with an emphasis on human and environment interactions.
• Discuss the role of population change through, migration, conflict, and globalization on the environment and public health.
• Describe how environments and environmental determinants contribute to the global burden of disease and the practices and policies required to reduce this burden.
• Understand the primary environmental determinants of global environmental health, including air, water, food security, vectors, animals, chemical and physical exposures,
• Be able to describe how climate change can modify the impact of specific environmental exposures and the public health response needed for climate change adaptation and resilience
• Apply a “systems thinking” approach to complex environmental health problems and understand the various disciplines needed to address these problems.
• Critically evaluate and summarize and communicate information about global environmental public health issues
METHODS OF INSTRUCTION AND WORK EXPECTATIONS

The instruction methods for this course are: lecture, group discussions, and student led presentations. Guest speakers may be incorporated into the course.

The class will meet for two hours once a week. The class will be built around selected topics that present global environmental health challenges. In general, each topic will be introduced one week, with follow-up discussion the next week. Reading material, other resources, and homework assignments will be posted on the Moodle site. These materials will form the basis for the class discussion the following week. The group discussions will focus on assigned readings, usually one less technical and one technical article. The two types of articles will allow students to become interested in the problem and then to develop the to critically review complex information and summarize. Students are expected to have all assignments completed at the beginning of class so they can participate in the discussion.

Class discussions will be organized as small (3-5 students per group) group work. Discussions will include students being called upon to lead parts of the discussion based on the assignments. Assessment of the activities will include a posting of a summary of the discussion and/or a brief quiz related to the material. Please bring laptop or other device to class to be able to connect to internet and participate in quizzes.

A major part of the grade will be based on three activities focused on a term topic chosen by each student. The topic will be problems or controversies in global environmental public health.

Course Workload Expectations

Global Public Health and the Environment is a 2 credit course. The University expects that for each credit, you will spend a minimum of three hours per week attending class or comparable online activity, reading, studying, completing assignments, etc. over the course of a 15-week term. Thus, this course requires approximately 90 hours of effort spread over the course of the term in order to earn an average grade.

Learning Community

School of Public Health courses ask students to discuss frameworks, theory, policy, and more, often in the context of past and current events and policy debates. Many of our courses also ask students to work in teams or discussion groups. We do not come to our courses with identical backgrounds and experiences and building on what we already know about collaborating, listening, and engaging is critical to successful professional, academic, and scientific engagement with topics.

In this course, students are expected to engage with each other in respectful and thoughtful ways.

In group work, this can mean:

- Setting expectations with your groups about communication and response time during the first week of the semester (or as soon as groups are assigned) and contacting the TA or instructor if scheduling problems cannot be overcome.
- Setting clear deadlines and holding yourself and each other accountable.
- Determining the roles group members need to fulfill to successfully complete the project on time.
- Developing a rapport prior to beginning the project (what prior experience are you bringing to the project, what are your strengths as they apply to the project, what do you like to work on?)

In group discussion, this can mean:

- Respecting the identities and experiences of your classmates.
- Avoid broad statements and generalizations. Group discussions are another form of academic communication and responses to instructor questions in a group discussion are evaluated. Apply the same rigor to crafting discussion posts as you would for a paper.
- Consider your tone and language, especially when communicating in text format, as the lack of other cues can lead to misinterpretation.

Like other work in the course, all student to student communication is covered by the Student Conduct Code (https://z.umn.edu/studentconduct).

COURSE TEXT & READINGS

Course readings will be selected from a variety of textbooks, journal articles, and published reports, available online through the University of Minnesota Library and other sources. A course website will provide links to these resources. The readings will be posted as we proceed through the semester.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 9/4  | Introduction  
      | Public health indicators  
      | Global burden of disease |
| 9/11 | Migration and Urbanization |
| 9/18 | One Health: Humans, animals, ecosystems: Interdisciplinary solutions |
| 9/25 | Risk Assessment |
| 10/2 | Zoonotic disease |
| 10/9 | Occupational environments |
| 10/16 | Water and sanitation  
       | Students present “Quick Takes” of projects |
| 10/23 | Air pollution |
| 10/30 | Injuries and violence |
| 11/6  | Vector-borne Diseases |
| 11/13 | Neighborhood influence on health |
| 11/20 | Food safety and food security  
      | Climate Change World Café |
| 11/27 | Projects Due:  
      | Student Presentations |
| 12/4  | Student Presentations |
| 12/11 | Student Presentations |
SPH AND UNIVERSITY POLICIES & RESOURCES

The School of Public Health maintains up-to-date information about resources available to students, as well as formal course policies, on our website at www.sph.umn.edu/student-policies/. Students are expected to read and understand all policy information available at this link and are encouraged to make use of the resources available.

The University of Minnesota has official policies, including but not limited to the following:

- Grade definitions
- Scholastic dishonesty
- Makeup work for legitimate absences
- Student conduct code
- Sexual harassment, sexual assault, stalking and relationship violence
- Equity, diversity, equal employment opportunity, and affirmative action
- Disability services
- Academic freedom and responsibility

Resources available for students include:

- Confidential mental health services
- Disability accommodations
- Housing and financial instability resources
- Technology help
- Academic support

EVALUATION & GRADING

Grading will be based on, participation, completion of assignments, and a term topic that will include written and oral communication components.

Assignments will be based on assigned readings in preparation for class and/or based on concepts presented in class. Students should be well enough prepared to participate in class discussions. Assignments will either be turned in during class or posted on the course website. There will be eight to ten assignments that will count toward the grade.

Term topic: Students will work in groups to explore a topic relevant to global environmental health and develop a presentation and craft a well-reasoned and specific letter to a decision maker on the topic requesting action. The group presentations will be done twice. Once as a quick take presentation that outlines the topic and argument and a final presentation to the class will be presented to the class in the last three sessions. The topic will be relevant to global environmental public health that represents a challenge for public health where there is some debate on the solution. Attendance in class to listen to the presentations of fellow students is expected and class feedback is required. Groups will have an opportunity to evaluate the group members. Group members will also have the opportunity to evaluate their contribution to the group and that of their partners.

Grading Scale

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percent of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>20</td>
</tr>
<tr>
<td>Participation</td>
<td>20</td>
</tr>
<tr>
<td>Term topic: Quick Take</td>
<td>10</td>
</tr>
<tr>
<td>Term topic: Presentation</td>
<td>20</td>
</tr>
<tr>
<td>Term topic: Letter</td>
<td>20</td>
</tr>
<tr>
<td>Term Topic: Peer review</td>
<td>10</td>
</tr>
</tbody>
</table>

The University uses plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following, and you can expect the grade lines to be drawn as follows:

<table>
<thead>
<tr>
<th>% In Class</th>
<th>Grade</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 - 100%</td>
<td>A</td>
<td>4.000</td>
</tr>
<tr>
<td>90 - 92%</td>
<td>A-</td>
<td>3.667</td>
</tr>
<tr>
<td>87 - 89%</td>
<td>B+</td>
<td>3.333</td>
</tr>
<tr>
<td>83 - 86%</td>
<td>B</td>
<td>3.000</td>
</tr>
</tbody>
</table>
80 - 82%  B-  2.667  
77 - 79%  C+  2.333  
73 - 76%  C   2.000  
70 - 72%  C-  1.667  
67 - 69%  D+  1.333  
63 - 66%  D   1.000  
< 62%     F

- A = achievement that is outstanding relative to the level necessary to meet course requirements.
- B = achievement that is significantly above the level necessary to meet course requirements.
- C = achievement that meets the course requirements in every respect.
- D = achievement that is worthy of credit even though it fails to meet fully the course requirements.
- F = failure because work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (Incomplete).
- S = achievement that is satisfactory, which is equivalent to a C- or better
- N = achievement that is not satisfactory and signifies that the work was either 1) completed but at a level that is not worthy of credit, or 2) not completed and there was no agreement between the instructor and student that the student would receive an I (Incomplete).

### Evaluation/Grading Policy

<table>
<thead>
<tr>
<th>Evaluation/Grading Policy</th>
<th>Evaluation/Grading Policy Description</th>
</tr>
</thead>
</table>
| Scholastic Dishonesty, Plagiarism, Cheating, etc. | You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis (As defined in the Student Conduct Code). For additional information, please see [https://z.umn.edu/dishonesty](https://z.umn.edu/dishonesty).

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: [https://z.umn.edu/integrity](https://z.umn.edu/integrity).

If you have additional questions, please clarify with your instructor. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Indiana University offers a clear description of plagiarism and an online quiz to check your understanding ([http://z.umn.edu/iuplagiarism](http://z.umn.edu/iuplagiarism)). |
| Late Assignments | Late assignments will be accepted, but only eligible for 80 percent of the credit unless there is a legitimate reason for an absence or delay in turning in the assignment. |
| Attendance Requirements | A critical aspect of this class is participating in the discussions, therefore attendance is required to receive full credit. |
| Extra Credit | No extra credit options are available |