ENV H 447/547
Environmental Change and Infectious Disease
Spring 2016 Syllabus

Instructor:
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Office hours: TBA

Meeting time and place: Tues Thurs 10:30 to 11:50 AM, room TBA

Credits: 3

Enrollment: Limited to 30 students total

Subject matter: A multidisciplinary approach is used to address the impacts of environmental change (including climate change) on infectious disease. Concepts include categories of environmental change; infectious disease emergence/re-emergence; environmental aspects of infectious disease exposure, acquisition, and progression; pathogen growth/survival in the environment; historical and societal perspectives; surveillance; and strategies for control.

Learning objectives: At the end of the course, the student will be able to:

- Define and describe infectious disease emergence and re-emergence.
- Describe how environmental change can change the incidence, prevalence, geographical distribution, and/or severity of infectious diseases.
- Compare the different ways that climate change can impact infectious diseases, and identify the factors that are likely to have the greatest impacts.
- Identify and interpret reliable sources of information on environmental change, climate change, and infectious disease.
- Recognize the interface between human and animal health in the contexts of environmental change and infectious disease.
- Recognize the impact of climate change on agriculture and nutrition, and describe the importance of these factors to infectious diseases in humans.
- Evaluate and discuss strategies for detecting and combating emerging and re-emerging infectious diseases, including surveillance, prevention, case detection, and treatment.
- Recognize and discuss controversial issues related to the interplay between environmental change and infectious disease.

Format: Lectures by the instructor and 3 guest lecturers, plus student-led discussions.

Website: Lecture notes, reading lists, assignments, and announcements, including due dates, will be posted and updated on the course website. Students are responsible for checking for changes to schedule or assignments.

Readings: No textbooks. Required reading and recommended resources, mostly from the scientific literature, posted on web site. Students expected to read required materials prior to class.

Curriculum vitae: Each student is required to provide a 1-2 page CV describing the student's interests and background, due by third class period.

Mid-term assignments: In-class presentations, research papers, and a panel discussion (see below).

Panel discussions

- Teams (2-3) of students will select relevant topics to be discussed in a debate format.
- Issues related to science, public health, policy, and/or society can be addressed as appropriate for the topic, and must be defended.
- Presentations near end of quarter.
- A list of suggested topics will be provided from which students can choose. Students may address alternative topics if approved by the instructor. Topics must be submitted to the instructor in advance. Students are also recommended to discuss their planned debate strategy with the instructor least two weeks prior to their presentation.
- Presentations are graded individually (your grade will not be impacted by your debate counterpart). Grades are based on scientific rigor, depth of background research, coherence, and organization.

Final paper: Topic related to the class must be approved by the instructor.

- 547 students: Paper must be 6-8 pages (not including references), double-spaced, and must include ≥10 primary references.
- 447 students: Paper must be 4-6 pages long, double-spaced, and must include ≥7 references.

How do Env H 447 and Env H 547 differ? The graduate course (547) differs from the undergraduate course (447) in the following ways:

- All students will make 2 in-class presentations that require independent research. The undergraduate presentations will take place after the first set of graduate presentations, so that undergraduates have the opportunity to learn from their graduate counterparts.
- 547 students are assigned a final research paper that is broader in scope and comprises a greater portion of the grading rubric, relative to 447 students.
- 547 students are expected to play greater leadership roles in classroom discussions, and to coach 447 students in preparing for the panel discussion

Grading: Course grades will be based on the following areas.

- Curriculum vitae 5%
- In-class presentation 1 20%
- In-class presentation 2 20%
- panel discussion 20%
- Final research paper 25%
- class participation 10%

Disclaimer: Insofar as possible, the course will adhere to the plan above and the speakers and topics listed in the class schedule. If there are any changes, the TA or instructors will communicate them to the students as soon as possible.

Access and Accommodations

Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu. (Links to an external site.)DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

Academic Integrity Statement

Students at the University of Washington (UW) are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity.

The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university's policies on cheating and plagiarism, and the SPH Academic Integrity Policy (Links to an external site.). Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the University of Washington Community Standards and Student Conduct website.