ENV H 586 A Au 20: Current Issues In Occupational Health At The Human Animal Interface

ENV H 586A: Seminar in Current Issues of Occupational Health at the Human Animal Interface/One Health

Autumn Quarter 2020, 2 credits (graded)
Day/time: Thursday 2:30-4:20
Room: by Zoom https://uw-phi.zoom.us/j/99885252673

INSTRUCTOR:
Peter Rabinowitz MD MPH
Office: Rosling Building 262
Phone: (206) 616-0598
Email: peterr7@uw.edu

OFFICE HOURS: By appointment (contact Vickie Ramirez ramirezv@uw.edu)

Course Description:
This course is a weekly seminar for in-depth exploration of a wide range of topics related to the One Health approach to the interconnected health of humans, animals, and their shared environment. It provides some general background regarding the occupational health of workers in close contact with animals in a number of different settings including agriculture, laboratory research, and veterinary medical care, with particular focus on zoonotic infectious diseases transmitted between humans and animals. It emphasizes critical readings of the scientific evidence regarding these issues and the COHERE guidelines for One Health studies.

The course is designed to meet the needs of students in the One Health certificate program as well as those in the Occupational Health at the Human Animal Interface (OHHAI) research training program. It is open to other students with permission of the instructor.

The Autumn quarter 2020 seminar will focus on key zoonotic diseases as well as One Health research studies.

The seminar will use a “One Health” paradigm that integrates human, animal, and environmental health to explore occupational health issues in a number of animal contact settings. Specific topics will include the assessment and management of biological, physical, chemical, and psychosocial exposure hazards in these different settings.
An emphasis will be placed on an integrated approach to human health, animal health, and environmental aspects of zoonotic diseases and other One Health problems.

The seminar will stress the skills of critical reading and systematic review of the scientific literature, oral and written communication of health risks, and formulation of research hypotheses and study designs. Students will lead or play a major part in most of the sessions in a given quarter. This will provide students with an opportunity to develop and demonstrate skills in literature review, presentation of materials, interdisciplinary teamwork, problem solving, practice planning, evidence based policy development, and research planning.

In Autumn 2020, students will review pertinent research studies and other scientific literature resources to create two types of summary documents that will be uploaded to the Center for One Health Research website:

1) **Zoonotic Disease Summaries** that include a short summary about a particular zoonotic disease, and includes a table on the clinical presentation of the disease in multiple species, as well as the treatment across species. It will also include roles for different members of a One Health team, and environmental and occupational aspects. Each student in Autumn 2020 seminar will create one disease summary with tables in a form that can be uploaded to the COHR website.

2) **COHERE Reviews**: a review of a recent scientific publication that cites the COHERE guidelines, with a written summary of the study and a point by point review of how the study followed the COHERE guidelines.

Canvas and email are the standard medium used for communication regarding this course. Students are responsible for ensuring that their correct email address is on file, and for informing the instructor if unable to use either electronic medium.

**Course Learning Objectives (for the ENV H 586 Series)**

Each quarter of the seminar will cover a number of the overall learning objectives. At the end of the series, the student will be able to:

1. Apply the COHERE (Checklist for One Health Epidemiological Reporting of Evidence) guidelines to determine whether research meets the definition of a One Health study and, if so, to evaluate the quality of the One Health methodology used.

2. Research an assigned zoonotic disease topic, and demonstrate his or her expertise on that topic by professionally leading a portion of a class session on that topic.

3. Use electronic resources to systematically research scientific literature and present the results of such review in a systematic fashion.

4. Identify the major aspects of selected zoonotic diseases, including clinical presentation across species, treatment modalities, and prevention/management roles for different members of One Health teams.
5. Discuss strategies for preventing, controlling or managing occupational health hazards at the human animal interface using an interdisciplinary One Health team model including exposure control and surveillance.
6. Effectively communicate information about scientific aspects of zoonotic diseases, both orally and in written form.
7. Understand how socioeconomic and other social factors, including poverty, immigration, literacy, urbanization and racism, can be addressed using a One Health approach.

Texts and References:

In Autumn Quarter 2020, the principal reference text is:


This text book will be available at the Center for One Health (COHR) suite, as well as for purchase online from the publisher. We will mostly be using Chapter 9 (zoonoses) Chapter 9 Zoonoses.pdf

Another resource will be the online clinical guide called Up to Date that is available online through the Health Sciences library.

All students are expected to be able to access class materials via email and the course Canvas website. If this presents a problem for you let the instructor know immediately.

Course Requirements:

1. Seminar: Each student will play a principal role in preparing and writing up one Zoonotic Disease summary and one COHERE review.
2. Class Participation: Although students will not be graded on attendance, active engagement in classroom discussions is required to meet many of the learning objectives for the course. Students should come to the seminar having done the expected preparation (see below), and participate actively in the seminar discussion including critique of the presented zoonotic disease summaries and COHERE reviews.

Seminar Schedule: ENVH 586- Fall 2020

<table>
<thead>
<tr>
<th>Week #</th>
<th>Date</th>
<th>Seminar Leader</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>10/1/20</td>
<td>Rabinowitz</td>
<td>Intro to Seminar, Course Structure, One Health, Zoonotic Disease Guide, COHERE guidelines</td>
</tr>
<tr>
<td>2</td>
<td>10/8/20</td>
<td>Benoit, Bui, Thiel Mansi, Trinh,</td>
<td>Zoonosis 1, 2, COHERE 1</td>
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and here is the list of Zoonotic Disease topics: (as of 10/1/2020)

1. Bartonella
2. Echinococcosis
3. Campylobacter
4. Leptospirosis
5. Lyme Disease
6. Brucellosis
7. RMSF
8. Leishmaniasis
9. Rift Valley Fever
10. Tuberculosis
11. COVID
12. West Nile Virus

Seminar Structure (ENV H 586 Autumn 2020)

1. Before the Session:

If you are one of the assigned seminar leaders:

- Prepare your written zoonotic disease summary or COHERE review.
• Prepare a 20 minute presentation about the paper

For all other seminar sessions:
• Read the COHERE paper(s) assigned for the session.
• Read in Chapter 9 Human Animal Medicine Chapter 9 Zoonoses.pdf about the zoonoses to be covered for the session
• Come to class prepared to discuss the zoonoses and the COHERE paper

1. **During the Session:**

First third (2:30-3:00):
• The seminar group will discuss either the zoonotic disease or a COHERE review, with active participation from the group.

Second third (3:00-3:30)
• The seminar group will discuss either a zoonotic disease or a COHERE review, with active participation from the group.

3:30-3:40 There will be a 10-minute break

Final third (3:40-4:10):
• The seminar group will discuss either a zoonotic disease or a COHERE review, with active participation from the group.

4:10-4:20 Wrap up

**Basis for Grading:**

This course is offered on a graded (A section) basis.

**Seminar leadership 25% COHERE, 25% Zoonotic disease**

Judged on quality of: student preparation; presentation materials; presentation style; and evidence of professionalism and interdisciplinary cooperation, if relevant.

**Rubric for Seminar Leadership**

<table>
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<tr>
<th></th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>Exceptional</th>
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<tbody>
<tr>
<td>Provides good overview of topic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Provides overview of research needs for population</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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Provides good overview of study, including study setting and population, methodology used, results and generalizability

Identifies strengths and weaknesses of study

Leads discussion based on student questions

Description of ratings:

1. Exceptional; Addresses salient points in this section. Insightful presentation/analysis.
2. Excellent; Addresses most of the important points with occasional oversights. Thorough presentation/analysis.
3. Good; Moderate degree of omission of key information. Good presentation/analysis
4. Fair; Frequent omission of key information. Multiple inaccuracies noted. Unprepared presentation/limited analysis.
5. Poor; Does not convey relevant information; did not provide interpretation of data; unprepared presentation

Writeup of presentation: 25% COHERE, 25% Zoonotic disease

Consistency and quality of writeups, as above.

Assignment of numeric grades will use the UW Department of Health Services grading guidelines for graduate students. More details are available at the course website.
http://depts.washington.edu/hserv/grading

3.9-4.0 Excellent and exceptional work.............for a graduate [or professional] student
3.7-3.8 Strong work
3.4-3.6 Competent and sound work (default category)
3.2-3.3 Adequate work, although some weaknesses are evident
2.9-3.1 Borderline work
2.7-2.8 Deficient but acceptable work
<2.7 Unacceptable work

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 (mailto:uwdrs@uw.edu), or disability.uw.edu (http://depts.washington.edu/uwdrs/). 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.

**Religious Accommodations**

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW’s policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy (https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (https://registrar.washington.edu/students/religious-accommodations-request/).

**Academic Integrity**

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 (http://sph.washington.edu/students/academicintegrity/). 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.

**Classroom Climate**

The UW School of Public Health seeks to ensure all students are fully included in each course. We strive to create an environment that reflects community and mutual caring. We encourage students with concerns about classroom climate to talk to your instructor, your advisor, a member of the departmental or SPH Diversity Committee and/or the program director. Victoria Gardner, Assistant Dean for Equity,
Diversity and Inclusion ([vg@uw.edu](mailto:vg@uw.edu)) is also a resource for students with classroom climate concerns.

## Course Summary:

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