Course Syllabus

Environmental Health 596/586 / Nursing 580

Current Issues In Occupational Health At The Human Animal Interface / Occ. & Env. Medicine

Spring Quarter, 2019

Thursday 3:30-5:20 p.m.  South Campus Center 350

Instructor:

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Course Description:

This course provides a weekly seminar setting for presentations and discussions regarding a number of occupational and environmental health topics, with a focus on biological and physical hazards and their control. It emphasizes current issues and real world situations faced in the practice of environmental and occupational health. This seminar will stress the application of a "One Health" approach considering human, animal, and environmental aspects of an occupational health challenge. The course will include critical reading of the literature and the design of model occupational health programs tailored to particular workforces and hazards.

The course is designed to meet the needs of students from either a public health or occupational medicine background. It will enable students to model interprofessional practice and collaboration by having them work as members of an occupational health "team" addressing a particular type of workplace. The introductory sessions will review occupational health teams and the components of occupational health programs, as well as some basic information about biological and physical hazards. Some of the seminar time will be devoted to group work on projects. The last five sessions will involve presentation of group projects. A writeup of the project is also due at the end of the course. An emphasis will be placed on issues which foster multi-disciplinary interaction between occupational/environmental health professionals (if students from multiple disciplines are enrolled). Student presentations will be made in inter-disciplinary teams.

During this segment of the ENVH 596 / NURS 580 series, the Spring 2018 quarter, we will focus on topics related to the assessment and control of occupational & environmental biological and physical hazards.

The course emphasizes the ability to critically read the current literature. Most of the sessions will be student-led. The course will provide an opportunity for students to develop and practice presentation skills, and
demonstrate expertise in using the literature and locating and using relevant, current, and evidence-based information sources.

Students may register for the course on a graded or credit/no credit basis, though graded status is typically required if you are taking this to fulfill a degree requirement. OEMP trainees as well as OHHAI Scholars are expected to attend and participate in the seminar.

Canvas and email are the standard medium used for communication regarding this course, and readings will be distributed generally via Canvas or e-reserves. 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.

Learning Objectives:

At the end of this course, the student should be able to:

1. Critically review a scientific paper on a topic of interest, using a structured approach, to determine the validity of the work and to describe how it might affect the practice of occupational and environmental health.
2. Research an assigned topic, working in an interdisciplinary group, 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 research occupational and environmental health issues, and understand the difference between peer-reviewed and non-peer reviewed source materials.
4. Identify the major types and sources of biological and physical hazards in environmental and occupational settings, including infectious agents, noise, and high and low pressure environments, including diving and aviation and space environments.
5. Describe the major pathways of human exposure to representative biological and physical hazards in environmental and occupational settings
6. Describe the major effects of noise, heat, cold, high pressure environments, and low pressure environments on the human body.
7. Describe basic strategies for assessing, preventing, and controlling or managing biological and physical hazards in environmental and occupational settings
8. Identify major regulations, agencies, programs, and stakeholders related to biological and physical health hazards
9. Formulate strategies for preventing, controlling or managing biological and physical hazards related to a specific complex situation or issue
10. Effectively communicate information about biological and physical health risks and response strategies, both orally and in written form.

Course Format:

The course consists of 10 sessions this quarter. Sessions will be in one of two formats:

1. Lecture/discussion/paper critique (first five sessions): These will consist of a focused presentation on an assigned subject of interest in occupational and environmental health, followed by a critical discussion of an assigned paper on the topic. These sessions will include a brief didactic by the instructor, followed by a discussion of the paper. There will then be time set aside for group work on final projects.
2. **Student team presentations (second five sessions):** Students will present their occupational health program proposal for a particular worksite setting. These sessions should be interactive to allow critique from other students. Other students will act as management and worker stakeholders and comment on the presentation from these two points of view. There will be a guest expert invited to all of these sessions as well.

**Course Requirements:**

1. **Class Presentations:** Each student will play a principal role in class team presentations during the last five sessions of the course.

2. **Participation in Class Discussions:** Students are encouraged to participate actively in class discussion. This presupposes coming to class, being prepared (having read assigned material), and being willing to exchange views with fellow students. Some kinds of “interventions” are especially helpful in class discussion, and these are highly valued. They include:
   - Expressing your view and supporting it with evidence from the assigned reading or from another authoritative source.
   - Asking a thoughtful question about something in the reading that was unclear to you.
   - Responding to another student’s comment by asking a clarifying question, indicating that you listened attentively and want to dig deeper.
   - Building on another student’s comment in an iterative way.
   - Effectively reflecting back and/or summarizing what is being said in the conversation, and identifying points of consensus or disagreement.
   - Taking things “one step further,” that is, commenting on the broader significance of a point in the reading or the discussion, or drawing a link between such a point and an apparently unconnected issue, indicating that you’re a systems thinker making connections.

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

**Basis for Grading:**

**Group Presentations (40%):** Judged on quality of: student preparation; presentation materials; presentation style; quality of resource list or other handouts; and evidence of professionalism and interdisciplinary cooperation, if relevant. This is a group grade for your team.

**Individual Presentation Write-ups (45%):** You will be graded separately on the piece of the final project presentation that you writeup.

**Participation in Class Discussions (15%):** Judged on class preparation and participation in class discussions.

ENV H 596 / NURS 580 is offered on both a graded (A section) and credit/no credit (B section) basis. The expected student contribution to the course is identical whichever grading status is chosen.

**Preparing and writing up a group presentation:**

**Read the literature on the subject.** Students will research the topic and be able to summarize the relevant literature.
Meet with the instructor. The student group must meet with the instructor at least two, and preferable three or more weeks, prior to the presentation. At this meeting, the topic will be clarified, resource material and faculty identified, and a presentation format chosen. The student and instructor will agree on the scope of the presentation and best approach to preparation and presentation.

Distribute materials in advance (if necessary). Materials for other students should be distributed two weeks in advance. This is especially important for journal club formats. Reading material will be distributed electronically via the web when possible.

Present your topic: decide who in your group will present what aspects of the presentation. Your slides will be due to be handed in at the end of the presentation. Help conduct the session in an interactive way and elicit feedback from students and faculty.

Writeup your project: decide who will write what section of your report. You will be individually graded on the section that you hand in.

Criteria for team presentations and writeup:

Your team should create a clear and organized proposal for an occupational health program for the worksite assigned. Your presentation and writeup should include the following components:

1. Hazard identification process: what are the hazards?
2. Risk assessment process: how will you assess the hazards?
3. Risk management- control efforts- using hierarchy of controls
4. Medical screening and surveillance
5. Special programs for worker education, return to work, etc.
6. Cost analysis for the program

Again, students can decide within their group who will be presenting which of the above components, as well as how to divide up the writeup of the project.

Classroom Climate

Diverse backgrounds and experiences are essential to the critical thinking endeavor at the heart of university education. Therefore, I expect you to follow the UW Student Conduct Code in your interactions with your colleagues and me in this course by respecting the many social and cultural differences among us, which may include, but are not limited to: age, cultural background, disability, ethnicity, family status, gender identity and presentation, citizenship and immigration status, national origin, race, religious and political beliefs, sex, sexual orientation, socioeconomic status, and veteran status. I will acknowledge from the beginning that all of us, including your instructor, have a lot to learn about combatting racism, sexism, classism, and other forms of discrimination and bias, and that this learning process will continue throughout our careers. Please talk with me right away if you experience disrespect in this class, and I will work to address it in an educational manner.

UW students can also report incidents of bias or violations of UW policies for non-discrimination using the Bias Reporting Tool available at: [http://www.washington.edu/bias/](http://www.washington.edu/bias/).

Disability Resources for Students (DRS) offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. If you have not yet established services through DRS, but have a
temporary or permanent disability that requires accommodations (this can 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

**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. Any suspected cases of academic misconduct will be handled according to University of Washington regulations. For more information, see the UW Community Standards and Student Conduct website.

### Course Summary:

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<tr>
<th>Date</th>
<th>Details</th>
<th>Due Time</th>
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<tr>
<td>Thu Apr 11, 2019</td>
<td><a href="https://canvas.uw.edu/courses/1289484/assignments/4785499">Reading for Week 2: Allergy</a></td>
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<td>Thu Apr 18, 2019</td>
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<td><a href="https://canvas.uw.edu/courses/1289484/assignments/4702390">Written Report (Occupational health and safety manual)</a></td>
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<td><a href="https://canvas.uw.edu/courses/1289484/assignments/4798392">Reading for Week 4- noise</a></td>
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