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Current Issues In Occupational And Environmental Medicine

Welcome to ENVH 596 B SUMMER 2024!

BIOLOGICAL AND PHYSICAL HAZARDS

Credits & Grading: 2 credits, graded

Time: Thursdays, 2:00-3:30 pm

Location: Online, Zoom

Instructor: Deborah Havens, havensde@uw.edu

Zoom Link: <https://washington.zoom.us/j/97064508987> 

[https://urldefense.com/v3/__https://washington.zoom.us/j/97064508987_!!K-Hz7m0Vt54!ismZ-cTyhIO8372w-YxF2amg8cCBpGjATjAiKol52krk0twu0IG71p5gFPQDvDnpHPwEeJcIPN6g_24\\$](https://urldefense.com/v3/__https://washington.zoom.us/j/97064508987_!!K-Hz7m0Vt54!ismZ-cTyhIO8372w-YxF2amg8cCBpGjATjAiKol52krk0twu0IG71p5gFPQDvDnpHPwEeJcIPN6g_24$) .

The focus of the course will be on Biological and Physical Hazards. It is taught in conjunction with ENVH 596 A. This course runs on a two-year cycle to cover biological/physical concerns that might be encountered in the occupational health arena. The majority of our sessions will have guest speakers (50-60 minutes) followed by a student presentation (15 minutes) and Q&A sessions.

July 11	Basics of Medicine in the Outdoors	Dr. Ali Khan	NA
July 18	PPE	Gary Bangs, CIH	
July 25	Ergonomics	Dr. Elizabeth Bonson, OSHA	
August 1	Toxic Exposures	Dr. Peter Rabinowitz	
August 8	Infectious Diseases	Dr. Peter Rabinowitz	
August 15	Radiation	Phil Campbell, CHP, MHP	
August 22	Heat-Related Illness	Dr. June Spector	Dr. Tsuzumi Kanaoka

Student Responsibilities:

Main Presentation

Students are asked to sign up for one of the weeks/topics. You should prepare a journal article (ideally an RCT) to present and 4-5 board-style questions useful for discussion and review that can be efficiently discussed in 10-15 minutes. The students who are presenting should email/contact the instructor ([havensde@uw.edu \(mailto:havensde@uw.edu\)](mailto:havensde@uw.edu)) by Sunday of the presenting week to provide the readings, questions, and briefly discuss the presentation in preparation for class. This is an abbreviated quarter; if there are more students than available weeks, students can work together.

Supplemental Readings

Readings prior to class. If there is an appropriate chapter in LaDou, 6th Edition, it will be uploaded and made available on the module for that week. There may also be pertinent articles assigned or suggested by the speakers. These will also be available in the modules. Please review required articles prior to class sessions and be prepared to thoughtfully engage with the speakers and the topic.

Course Learning Objectives:

Occupational and Environmental Medicine (OEM) physicians and occupational health practitioners should have the knowledge and skills necessary to recognize potential chemical, physical, and biological occupational and environmental causes of health concerns to individuals as well as to communities. OEM physicians and occupational health practitioners should be competent in taking an exposure history that includes environmental as well as occupational sources and must understand how to identify hazards. They should also be able to characterize risk, based on assessment of an exposure that includes knowledge of populations at risk, potential pathways of exposure, health impacts and mitigating factors, and relevant timeframe of exposure. They should understand dose-response relationships and how to compare environmental and biomonitoring data to published standards. OEM physicians and occupational health practitioners should be aware of common clinically significant environmental agents and diseases relevant to the geographic area where they practice, such as lead, asbestos, arsenic, and radon.

OEM physicians and occupational health practitioners should be able to assess, prepare and respond to individual and population risks for common occupational and environmental disorders as well as emerging and catastrophic events such as pandemics, bioterrorism, climate/weather occurrences (1).

While it is not possible to cover all biological and physical hazards in this course, this quarter is a starting point for knowledge and exposure to these concepts. Aspects of the following areas of knowledge/competency will be addressed in this quarter.

K1.11 Use of personal protective equipment (PPE), including respiratory selection, FIT testing

K2.4 Human factors and ergonomics

K3.3 Biomechanical limitations and restrictions

K3.4 Musculoskeletal injuries

K4.2 Physical hazards, ergonomics, robotics-human-work interface, cumulative trauma, repetitive microtrauma, and other factors contributing to falls, slips, injuries, or loss of life or limb

K4.3 Risk factors: treatment and management of chemical exposures (e.g., metal, gas, fumes, dust)

K4.5 Infectious diseases (e.g., COVID, Avian Flu, SARS, rabies, TB) and bloodborne pathogens

K4.6 Radiation exposure (e.g., UV exposure, nuclear, ionizing and non-ionizing)

K4.8 Extremes of temperature leading to heat or cold-related illnesses (e.g., frostbite)

K4.16 Hazards related to working confined spaces

K4.18 Hazards related to construction (2)

1) OEM Competencies. 2021. Available at: <https://acoem.org/learning/oemcompetencies> ↗ (<https://acoem.org/learning/oemcompetencies>)

2) OEM Content. Available at: <https://www.theabpm.org/become-certified/exam-content/occupational-medicine-content-outline/>

Grading:

Attendance is mandatory. This is a very short quarter. The sessions are provided via Zoom to facilitate attendance. If you have a conflict, please discuss with the instructor in advance so that alternative or remediation options can be created. Missed classes or inadequate preparation will result in a grade decrease. The quality of the student presentation will also be included in the grade.

Other UW info:

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 and concerns related to equity, diversity, and inclusion.

Equity, Diversity and Inclusion

Diverse backgrounds, embodiments and experiences are essential to the critical thinking endeavor at the heart of University education. In SPH, students are expected:

- To respect individual differences, which may include, but are not limited to, age, cultural background, disability, ethnicity, family status, gender, immigration status, national origin, race, religion, sex, sexual orientation, socioeconomic status and veteran status.

- To encourage students with concerns about classroom climate to talk to their instructor, adviser, a member of the departmental or SPH EDI Committee, the Assistant Dean for EDI, or the program's director.

Bias Concerns

The Office of the Dean has a student concern policy, a faculty concern policy and standard HR procedures for staff concerns. Our 2018 climate survey states that most people in SPH do not report bias incidents because they do not know where to go. Students are encouraged to report any incidents of bias to someone they feel comfortable with, including instructors, advisers or department staff. They can email dcinfo@uw.edu for immediate follow up. Bias concerns can be anonymously and confidentially reported at this link <https://sph.washington.edu/about/diversity/bias-concerns>. Data is collected by the Assistant Dean for EDI and the Director of Program Operations for Student and Academic Services and tracked for resolution and areas are identified for further training.

Access and Accommodations

Your experience in this class is important to me. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you have already established accommodations with Disability Resources for Students (DRS), please activate your accommodations via myDRS so we can discuss how they will be implemented 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), contact DRS directly to set up an Access Plan. DRS facilitates the interactive process that establishes reasonable accommodations. Contact DRS at 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


SPH Land Acknowledgment

The University of Washington acknowledges the Coast Salish people of this land, the land which touches the shared waters of all tribes and bands within the Duwamish, Suquamish, Tulalip and Muckleshoot nations.

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/)  (<https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/>). Accommodations must be requested within the first two weeks of this course using [Religious Accommodations Request form](https://registrar.washington.edu/students/religious-accommodations-request/)  (<https://registrar.washington.edu/students/religious-accommodations-request/>).

Course Summary:

Date	Details	Due
Fri Jul 12, 2024	 Week 1 (https://canvas.uw.edu/courses/1729449/assignments/9455196)	due by 11:59pm