ENV H 597A: Case Studies in Environmental & Occupational Health

Instructor: Debra Cherry, MD, MS
Associate Professor, School of Medicine, Division of GIM
Adjunct Associate Professor, SPH, DEOHS
Office: Pat Steel Building, Harborview, Room 5031

Email: cherryd@uw.edu
Phone Number: (206) 744-9398
Office Hours: By appointment

Course Time and Location:
Autumn, 2021
Thursdays, 2:30-3:20 pm
You may join class remotely or meet in the classroom, SOCC 220
Zoom Meeting Link: https://washington.zoom.us/j/98981812170

Course Website: ENV H 597 A Au 21: Case Studies In Environmental And Occupational Health (uw.edu); or https://canvas.uw.edu/courses/1478691

Course Description:
During this course, we will primarily discuss clinical cases encountered at the Occupational & Environmental (OEM) Clinic at Harborview Medical Center and other OEM clinics in the community. This course focuses on the evaluation and management of occupational and environmental injuries and illnesses; tertiary prevention of chronic disability; assessing fitness for duty; recognition of sentinel events; and the physician’s role in protecting public health, including recognition of adverse events. The format is interactive with students and faculty. Emphasis is placed on evidence-based clinical decision-making through critical clinical reasoning and analysis of the scientific literature, as well as patient-centered care. Students taking this course who do not currently see patients with conditions related to occupational or environmental exposures may present cases from a pool compiled by the instructor.

Course Learning Objectives:
By the end of this course, students should be able to:
1. Synthesize clinical and relevant exposure/hazard information and develop a differential diagnosis that includes both occupational/environmental and non-occupational/environmental conditions.
2. Apply a systematic and evidence-based approach to evaluating potentially occupationally- and environmentally-related injuries and illnesses.
3. Apply an evidence-based approach to managing occupational and environmental injuries and diseases.
4. Assess work-relatedness for potentially work-related injuries and illnesses.
5. Recommend appropriate occupational (and non-occupational) accommodations and restrictions for occupationally-related injuries and diseases.
6. Assess fitness for duty, including special populations such as military personnel, commercial drivers, and workers in safety sensitive positions.
7. Evaluate and manage patients, workers, and affected community members within the relevant occupational and environmental legal and regulatory frameworks.

**Course Format**

**Overview:**
An occupational or environmental injury or disease case will be presented and discussed at each session. This will be the “main case presentation”. The presenting student, participating students, supervising attending physician for the clinical case, and other faculty will help to reinforce pertinent teaching points. Each session will also include discussion of other current clinical, population or public health cases that contribute to achieving the learning objectives.

First day of class: Log onto Google sign-up sheet at [https://docs.google.com/spreadsheets/d/10WndPGHtWfJ9aIYpHoku41mwFmUe9UzpVgL-9pvDOU/edit?usp=sharing](https://docs.google.com/spreadsheets/d/10WndPGHtWfJ9aIYpHoku41mwFmUe9UzpVgL-9pvDOU/edit?usp=sharing) and pick a day to present the main case. **Meet with Dr. Cherry at least one week in advance** (see sign-up sheet for suggested dates and times) to plan your main case presentation.

**In-Class Session Format (50 minutes):**

- Student presents and guides discussion of the main case (~25 min)
- Student reviews main teaching points using PowerPoint presentation teaching points slide (~5 min).
- Submit and review answers to post-session case-related quiz questions (~10 min).
- Discuss other current clinical, population or public health cases (~ 10 min)

<table>
<thead>
<tr>
<th>Date</th>
<th>Presenters tbd*</th>
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<tbody>
<tr>
<td>9/30</td>
<td>Bonnie</td>
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<td>10/7</td>
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<td>10/14</td>
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<td>10/21</td>
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<td>10/28</td>
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<td>11/4</td>
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<tr>
<td>11/11</td>
<td>Veteran’s Day, no class</td>
</tr>
<tr>
<td>11/18</td>
<td>Alannah</td>
</tr>
<tr>
<td>11/25</td>
<td>Thanksgiving</td>
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<td>12/2</td>
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<td>12/9</td>
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</tbody>
</table>

*Students: Arthur, Melissa, Britt, Dorian, Bonnie, Will, Steve, Karla; Alannah (Med Student)
12/10: Last day of instruction
12/11-12/17: Exam week

Course Requirements

Main Case Presentation: At the start of the quarter, each student will sign up for one session at which to orally present a clinical, population health or public health case.

One week prior to the assigned session, the student will meet with the instructor on Zoom (same link as class) to select one case to present.

Three days (i.e. Monday) prior to the assigned class session, the student will email the instructor the following case materials for review:

- A **one sentence description of the case**.
- A draft **PowerPoint presentation** to guide the case discussion and highlight information pertinent to the case e.g. images, results etc. This PowerPoint presentation should include:
  - A recommended total of 6 - 12 slides.
  - A **Teaching Point** slide with 4 - 5 main teaching points.
    - **NEW IN Aut 2021**: Include a statement linking your case to occupational or preventive medicine specifically (see supplement with ACGME, ABPM, and ACOEM competencies in OEM)
  - A **References** slide with at least three scientific references supporting content in the case presentation and questions. References should include at least one primary source.
- **Two case-related questions with answers** (e.g. covering epidemiology, exposure-disease relationship, diagnosis, or management aspects of the case) to re-enforce teaching points. One of the questions should be in the style of the American Board of Preventive Medicine (ABPM) board examination (see Board Review Question resources below). The questions can be submitted as a Word document, Google document, or PDF.
  - **Sample question**: Which of the following is the most common cause of occupational allergic contact dermatitis?
    - A) Rubber accelerators
    - B) Hydrochloric acid
    - C) Mercury
    - D) Degreasers

By the 1:30pm on assigned session day, the student will email the instructor the final Powerpoint presentation, and a Word document with the two questions with answers.

Clinical Case presentations should include sections on the history of the present illness (including injury mechanism (if relevant) and exposures/controls); pertinent past medical history, family history, social history, and medications; occupational history; physical examination, clinical diagnostic data & (if relevant) exposure/hazard data, differential diagnosis, management, work-relatedness and work restrictions (if relevant), and primary prevention considerations.
Example Clinical Case Presentations and Case-Related Questions

- PowerPoint Presentation
  - Clinical Case Example 1 - Return to Work after COVID-19 Positive Diagnosis (Srivani Kanumuri).pptx
  - Clinical Case Example 2 - Occupational Asthma (Tony Norman).pptx
  - Clinical Case Example 3 - UW Employee COVID-19 case (Michael Cashman).pptx
- Case-related Questions
  - Clinical Case Q&A Example.docx

Population Health/Public Health Case presentations should include the following: a concise statement or summary of the problem or issue (situation); pertinent information about the situation that helps to further educate your peers about the cause of the problem or issue (background and risk identification); overview and analysis of potential solutions to the problem or issue (intervention evaluation); recommendations about how the problem or issue can be addressed (recommendations for implementation); and pertinent outcome measures to highlight the impact of recommendations that may have been implemented.

Example Population/Public Health Case Presentations and Case-Related Questions

- PowerPoint Presentation
  - Public Health Case Example 1 - Gone Camping Lyme Disease Presentation (Jared Egbert).pptx
- Case-related Questions
  - Public Health Case Q&A Example.docx

Evaluation

Please see the table below for details about how students will be evaluated in this course:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Contribution to Final Grade</th>
<th>Grading Rubric (if Applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Case Presentation</td>
<td>80%</td>
<td>• Grading Rubric Clinical Case Spring 2021.docx</td>
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<tr>
<td></td>
<td></td>
<td>• Grading Rubric Public Health Case Spring 2021.docx</td>
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<tr>
<td>Weekly Post-Session Quiz</td>
<td>20%</td>
<td>Not applicable</td>
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</table>
Specific elements of the main case presentation grading rubrics are outlined below with additional details available in the links provided above under 'Grading Rubric':

- Advance review of case with instructor.
- Clarity, organization, synthesis of information, and reasoning in oral presentation.
- For clinical cases: review of injury mechanism/exposures/controls, occupational history, physical examination, clinical diagnostic data & (if relevant) exposure/hazard data, differential diagnosis, management, work-relatedness and work restrictions (if relevant), primary prevention considerations.
- For public health cases: review of situation, background and risk identification, intervention evaluations, recommendations for implementation, and outcomes.
- Discussion of teaching points summary, useful references and case-related quiz questions.

Assignment of numeric grades will use UW Department of Health Services grading guidelines for graduate students. Brief descriptions of each grade level are provided below:

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Description</th>
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<tr>
<td>3.9-4.0</td>
<td>Excellent and exceptional work ...for a graduate student</td>
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<tr>
<td>3.7-3.8</td>
<td>Strong work</td>
</tr>
<tr>
<td>3.4-3.6</td>
<td>Competent and sound work</td>
</tr>
<tr>
<td>3.2-3.3</td>
<td>Adequate work, although some weaknesses are evident</td>
</tr>
<tr>
<td>2.9-3.1</td>
<td>Borderline work</td>
</tr>
<tr>
<td>2.7-2.8</td>
<td>Deficient but acceptable work</td>
</tr>
<tr>
<td>&lt;2.7</td>
<td>Unacceptable work</td>
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COVID-RELATED EXPECTATIONS

Per UW policy, this class will be conducted in person. Therefore, unless you meet the criteria for an accommodation from Disability Resources for Students (DRS) or a special arrangement approved by the SPH Office of the Dean that allows you to take the course remotely [see student communications here] you should only register for this class if you can attend in-person.

- Please contact UW Disability Resources for Students (DRS) directly if you feel you may be eligible for an accommodation based on your status as an immunocompromised individual or based on other diagnosed physical or mental health conditions that might prevent you from being able to take classes in-person.

- If you are a student enrolled in a program in SPH, and you are either living with an individual who is immunocompromised, OR you are unable to obtain a visa to travel to the US, you may be eligible for a “special arrangement” that will allow you to take this course remotely. Requests for
special arrangements to take the class remotely should have been submitted to and approved by the Students and Academic Services team in the Office of the Dean before the beginning of the quarter. If you have questions about this type of arrangement, please reach out to Student and Academic Services by email at sphsas@uw.edu.

All UW students are expected to complete their vaccine attestation before arriving on campus and to follow the campus-wide face-covering policy at all times. You are expected to follow state, local, and UW COVID-19 policies and recommendations. If you feel ill or exhibit possible COVID symptoms, you should not come to class. If you need to temporarily quarantine or isolate per CDC guidance and/or campus policy, you are responsible for notifying your instructors as soon as possible by email. If you receive a positive COVID-19 test result, you must report to campus Environmental Health & Safety (EH&S) by emailing covidehc@uw.edu or calling 206-626-3344.

No food or drinks are allowed in the classroom.

Please check your email daily BEFORE coming to class. If we need to conduct class remotely because the instructor or a guest speaker is complying with UW policies and unable to attend in person, we will send all registered students an email with a Zoom link for remote instruction. Thank you for your patience and support as we all transition together back to in-person learning!

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.

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 (Links to an external site.). Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (Links to an external site.).
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 (Links to an external site.) (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.

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 instructors, your advisor, a member of the departmental or SPH Diversity Committee and/or the program director. vg@uw.edu is a resource for students with classroom climate concerns.

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:

1. 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.
2. To engage respectfully in the discussion of diverse worldviews and ideologies embedded in course readings, presentations and artifacts, including those course materials that are at odds with personal beliefs and values.
3. 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 (Links to an external site.). 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.
Writing Skills Resources:
Writing is an important transferable skill for all career pathways. Establishing a strong foundation in writing skills will help you be successful throughout your future course work and career. Although this course does not include written assignments, if you feel that you could benefit from additional opportunities to improve your writing skills, a list of resources at the UW and others accessible online can be found on the SPH website at [https://sph.washington.edu/sites/default/files/inline-files/Writing-Resources-4.3.19.pdf](https://sph.washington.edu/sites/default/files/inline-files/Writing-Resources-4.3.19.pdf).

Learning Agreements (Discussion Norms):
The goal of establishing these agreements is to create a learning environment which is open, supportive, reflective, fosters acceptance and shared accountability, and in which all students can learn productively and thrive. (Sources: Guidelines for Classroom Interactions (University of Michigan), Community Agreements for Inclusive Classrooms (The New School), Community Agreements (University of Toronto):

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<tbody>
<tr>
<td>1.</td>
<td>Understand that your words have effects on others.</td>
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<tr>
<td>2.</td>
<td>Listen respectfully.</td>
</tr>
<tr>
<td>3.</td>
<td>Understand that we will make mistakes in this space.</td>
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<td>4.</td>
<td>Share responsibility for including all voices in the conversation.</td>
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<td>5.</td>
<td>Be open to changing your perspectives based on what you learn from others.</td>
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<td>6.</td>
<td>Understand that there are different approaches to solving problems.</td>
</tr>
<tr>
<td>7.</td>
<td>Speak with fairness and call out bias, exclusion, prejudice and discrimination.</td>
</tr>
<tr>
<td>8.</td>
<td>Understand that others will come to these discussions with different experiences from yours.</td>
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Descriptions of the learning agreements are outlined below for your reference:

- **Understand that your words have effects on others.** Speak with care. If you learn that something you’ve said was experienced as disrespectful or marginalizing, listen carefully and try to understand that perspective. Acknowledge the difference between intent and impact. Learn how you can do better in the future.
- **Listen respectfully.** Don’t interrupt, turn to technology, or engage in private conversations while others are speaking. Use attentive, courteous body language. Comments that you make (whether asking for clarification, sharing critiques, or expanding on a point) should reflect that you have paid attention to the previous speakers’ comments.
- **Understand that we will make mistakes in this space,** as anyone does when approaching complex tasks or learning new skills. Strive to see your mistakes and others’ as valuable elements of the learning process. Accept discomfort related to making mistakes as necessary for growth.
- **Share responsibility for including all voices in the conversation.** If you tend to have a lot to say, make sure you leave sufficient space to hear from others. If you tend to stay quiet in group discussions, challenge yourself to contribute so others can learn from you.
- **Be open to changing your perspectives based on what you learn from others.** Try to explore and remain curious about new ideas and possibilities. Think critically about the factors that have shaped your perspectives. Seriously consider points-of-view that differ from your current thinking. Strive for intellectual humility.
• **Understand that there are different approaches to solving problems.** If you are uncertain about someone else’s approach, ask a question to explore areas of uncertainty. Listen respectfully to how and why the approach could work.

• **Speak with fairness and call out bias, exclusion, prejudice and discrimination.**

• **Understand that others will come to these discussions with different experiences from yours.** Be careful about assumptions and generalizations you make based only on your own experience. Recognize that we have different backgrounds. Recognize how your own social positionality (e.g., race, class, gender, sexuality, ability) informs your perspectives and reactions. Be open to hearing and learning from other perspectives.