

Advanced Topics in Occupational and Environmental Health (OEH) OEHS  
6702

1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> Friday of the Month • 1:00 – 3:00 pm  
RMCOEH Classroom or Conference room

Course Access through Canvas: <https://utah.instructure.com/courses/598369>

Instructor(s): Eric Wood, MD, MPH

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Office Hours: As needed. Please email to schedule.

Office Location: RMCOEH

### **Course Description**

Advanced Topics in Occupational and Environmental Health is a seminar course that immerses occupational medicine residents and Master of Occupational Health students in occupational and environmental health topics. The course seeks to cover those OEM core competencies that are not well covered elsewhere

**Credit Hours:** 2 credit hours

### **Course Objectives**

1. Expand participants' knowledge of current occupational and environmental health topics.
2. Enhance critical thinking.
3. Improve communication skills.

### **Recommend Texts**

Students are encouraged to consult the following texts:

1. LaDou J, Harrison RJ. Occupational and Environmental Medicine: Current Treatment and Diagnosis, 6<sup>th</sup> ed. (2021). McGraw-Hill Education (Lange).
2. Bolton, M, Wallace RB. Wallace/Maxcy-Rosenau-Last. Public Health and Preventive Medicine, 16th Edition (2021). McGraw-Hill Education.
3. ACOEM Guidelines. 3rd edition.
4. Rom, William. Environmental and Occupational Medicine, 5th edition (2006). Lippincott, Williams & Wilkins.

### **Teaching and Learning Methods**

This course seeks to cover Occupational and Environmental core competencies that are not well covered elsewhere in the Masters of Occupational Health curriculum. The in-person course includes presentations on various topics as well as guest lectures and student presentations. Group discussions and case studies will aid in mastery of the various topics.

### Course Schedule

Week	Date	Topic/Discussion
1	Jan 21	Course Introduction, Career Opportunities, Board Review (Wood)
2	Feb 4	Utilization Review, Work relatedness and OSHA recordables (Phillips)
3	Feb 19	Laws, regulations and environmental medicine presentations* (Wood)
4	March 4	ACOEM Guidelines Review* (Hegmann)
5	Mar 18	Fatigue Risk Management (Leaman)
6	April 1	FEMA training due; disaster preparedness presentations (Wood)
7	Apr 15	Impairment ratings and Independent Medical Examination*
8	Apr 29	Billing and Coding* (Wood)

**Finals:** There is no final exam or project.

**Grading:** Evaluation of Enrolled Student Performance

Homework	33%
Topic Presentation	33%
Attendance/Participation	34%

**Attendance:** Is mandatory for all PGY-2. PGY-3 on away rotations will be excused. Additionally, if PGY-3's are on rotations that have valuable clinical experience, excuses can be arranged, if discussed in advance.

**Unexcused absences will result in no credit for the missed sessions.** Excused absences for residents must be formally requested through the residency program with reasonable advance notice. The instructors must be notified of excused absences in advance.

**Determination of Grades**

A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%

**Additional Course Details**

Including more detailed information related to assignments, projects, lecturer details, etc.

Jan 21 – **Introduction, Career Opportunities, Board Review (Wood):** We will go through a PowerPoint on these topics. Additionally, we will review useful resource for Board preparation, as well as do some example Board review questions.

Feb 4 - **Utilization Review, Work relatedness and OSHA recordables:** Dr. Phillips will present an overview of Utilization Review, Work relatedness and OSHA recordables. There is a JOEM article on “Work-Relatedness” in Canvas to read beforehand.

Feb18 - **Laws, Regulations and Environmental Medicine presentations:**

Topics for Environmental Laws, Regulations

- 1) NRC - Nuclear Regulatory Commission; RCRA- Resource Conservation and Recovery Act
- 2) Clean Air Act and NAAQS – National Ambient Air Quality Standards; Clean Water Act
- 3) FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act
- 4) CERCLA – Comprehensive Environmental Response, Compensation and Liability Act; SARA – Superfund Amendments and Reauthorization Act
- 5) ToSCA – Toxic substances control act; ATSDR – Agency for toxic substances and disease Registry

Assignment: Communicate with your classmates, No one should present on the same topics. Each person will pick one of the groups above and create a PowerPoint presentation for the group covering this material. The goal is teaching the other group members. Obviously, you could really get into the weeds on these topics, so just focus on the big picture... What it is, who manages or oversees it, why it was created and how it has changed, current projects or objectives, and of course the aspects/topics that most relate to Occupational and Preventive medicine. Feel free to include some pictures, diagrams, etc to make it a bit more interesting and memorable. Plan for 15-20 min total. Consider a summary slide at the end of each topic for board review purposes.

March 4- **ACOEM Guidelines Review:** Create a presentation to teach your fellow classmates on ACOEM guidelines.

ACOEM guidelines presentation guidance:

The plan is to create a presentation to teach your fellow classmates on ACOEM guidelines.

**\*\*\*In order to avoid repeats, email the group with the body region you want to present.**

**Stick with a bodyregion somewhat common (neck, shoulder, low back, knee, wrist, forearm, elbow, ankle, etc.) \*\*\***

Each person will pick a case that you've had in clinic (example, FF with acute LBP and radiculopathy), present the case briefly to the group with a quick refresh on the condition and pathophysiology, and then jump into the ACOEM guidelines related to this condition, tying it back to your case as able. This will be somewhat similar to the Case Conferences the PGY-3's do, but much more focused on teaching how to navigate the guidelines regarding diagnosis and treatments, algorithms, and strength of evidence, etc. in the context of your case. Plan for 15-20 minute PowerPoint presentation per person. The idea is to get multiple different nuanced perspectives on navigating the ACOEM guidelines (and the website that hosts them) in the context of your body region or injury. Focus on how you feel the guidelines are useful

and relevant to your body region/injury and any tricks or nuance to navigating the website, as there are many layers of functionality and resources built into the website/guidelines that some of us are likely unaware of. Perhaps think of your audience as incoming Occ Med residents. What would you want them to know about the guidelines and how to navigate them in the context of your case.

A prerequisite is being able to login to MDguidelines and access ACOEM guidelines, hopefully you have all already done this as residents but if not, now is the time. As residents you should be able to contact them for free access.

Mar 18 - **Fatigue Risk Management with Howard Leaman, MD:** Plan to be present for a presentation on this topic from guest lecturer Dr. Howard Leaman. There is a JOEM article on “Fatigue Risk Management in the Workplace” in Canvas to read beforehand.

April 1- **FEMA training due: disaster preparedness presentations:**

## FEMA trainings and Disaster Preparedness presentations

FEMA: <https://training.fema.gov/is/searchis.aspx?search=PDS>

The training modules are found at the above link. Please complete 3 of these, and email or present your completion certificates to the course instructor and TA on the day of this class.

Pick one course of your choosing, in addition, the following 2 are required:

IS-230.d Fundamentals of Emergency Management

IS-235.c Emergency Planning

(Of note, these certificates may be beneficial to show completion of for a future employer, depending on the job requirements).

While doing the training, take notes and create a presentation on a FEMA related disaster that you would be interested in presenting, while applying the principles and concepts of your FEMA training. Consider: Earthquake, Forest Fire, Hurricane, viral pandemic, or others that are plausible disasters that you may encounter and potentially need to be involved in the disaster response as a local physician. Create a hypothetical event or base it on a historical event such as the fires in Paradise California, Hurricane Katrina, Spanish Flu of 1918, etc. If historical, think about how things went right and also how things went wrong or could have been improved upon in retrospect. Again, apply the principles of your FEMA trainings to this disaster. The presentation should be 15-20 minutes. Try to think “outside the box” and be creative to avoid repetitive topics/concepts between presenters.

\*\*\*In order to avoid repeat topics, email the group with the topic/disaster you want to present. \*\*\*

Apr 15 - **Impairment Ratings and Independent Medical Examination:** Plan to be present for a presentation on these topics. We will have guest lecturer, Alan Colledge MD, author of the Utah Labor Commission’s Impairment Rating Guide. Plan for participation and

review of cases. Please familiarize yourself with the first chapter of the Rating Guide, which can be found on Canvas.

Apr 29 – **Billing and Coding:** Plan to be present for a presentation on these topics. We will have guest presenter from U of U’s billing and coding team. Come prepared with any questions or cases you may have.

## University Policies

### ADA Statement

The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

**University Safety Statement.** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit <https://safeu.utah.edu/>

**Addressing Sexual Misconduct.** Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

**Undocumented Student Support Statement.** Immigration is a complex phenomenon with broad impact—those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center. Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students

from mixed-status families. To learn more, please contact the Dream Center at 801.213.3697 or visit [dream.utah.edu](http://dream.utah.edu).

**Wellness Statement.** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural difference, etc. can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at [www.wellness.utah.edu](http://www.wellness.utah.edu) or 801-581-7776.

*For Drop/Withdrawal dates and any other helpful University related information, please contact your Academic Advisor.*

**Please Note:** This syllabus is meant to serve as an outline and guide for this course. As your instructor I may modify it with reasonable notice to you. I may also modify the course schedule to accommodate the needs of our class. Any changes will be announced in class and or posted on Canvas under Announcements.