Course	OEHS 6703	
Department	Clinical and Behavioral Aspects of Occupational Injuries and Diseases (OID)	
Pre- Requisites	Graduate Student standing. A background in clinical care or health sciences is strongly recommended.	
<b>Credit Hours</b>	3	

Description	This course is a didactic course to teach common diseases encountered in occupational medicine (as well as general medical practice). The course includes a significant amount of instructional time on musculoskeletal disorders and respiratory conditions. Evidence-based treatment regimens for common conditions will be discussed.
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This course is a didactic course to teach common diseases encountered in occupational medicine (as well as general medical practice) and is designed to help students develop a knowledge fund of evidence-based recommendations to diagnose and manage common occupational diseases and injuries.

At the end of this course, students will be able to:

- Integrate information to construct a reasonable differential diagnosed-based on history, presenting signs and symptoms
- Understand the etiology, treatment, and management of occupational injuries and disease on an individual and population-based level
- Confidently explain pathologies and treatment rationales to patients
- Feel comfortable in applying guideline-based recommendations to individual cases
- Establish a foundation for practicing Occupational Medicine in an evidence-based fashion
- Recognize the variety and depth of impact that an Occupational Medicine career can have on individuals and populations

## Required Materials

Required materials include webcam and microphone. Required educational resources will be published to Instructure Canvas. Other recommended materials required for this course are:

- ACOEM Guidelines, 3rd edition (free for residents)
- o Environmental and Occupational Medicine, 4th edition, by Dr. William N. Rom
- o The Praeger Handbook of Occupational and Environmental Medicine by Dr. Tee Guidotti
- o Current Occupational & Environmental Medicine by Dr. Joseph LaDou
- Agency for Toxic Substances and Disease Registry (ASTDR)
  - Taking an Exposure History (Links to an external site.)
  - Cadmium Toxicity (Links to an external site.)
  - Arsenic Toxicity (Links to an external site.)
  - Polychlorinated Biphenyls (PCBs) Toxicity (Links to an external site.)
  - Cholinesterase Inhibitors: Including Insecticides and Chemical Warfare Nerve Agents (Links to an external site.)
  - Ethylene Glycol and Propylene Glycol Toxicity (Links to an external site.)
  - Beryllium Toxicity (Links to an external site.)
  - Environmental Triggers of Asthma (Links to an external site.)
  - Uranium Toxicity (Links to an external site.)

- Radon Toxicity (Links to an external site.)
  Benzene Toxicity (Links to an external site.)
- Nitrate/Nitrite Toxicity (Links to an external site.)
- Cardiovascular Toxins (Links to an external site.)

Ensure you have these ahead of time as they will be required to complete assignments and activities throughout the course.

#### Course schedule:

Course schedule:	
Module 1 (MM/DD - MM/DD)	<ul> <li>Overview of Occupational and Environmental Medicine</li> <li>Assignments Due         <ul> <li>Physician in the field of occupational medicine</li> </ul> </li> <li>Optional resources:         <ul> <li>Irving J. Selikoff is Dead at 77; TB Researcher Fought Asbestos (Links to an external site.)</li> </ul> </li> <li>A Doctor's Crusade to Save Children from Lead Poisoning (Links to an external site.)</li> </ul>
Module 2 (MM/DD - MM/DD)	<ul> <li>Low Back Pain in Occupational Medicine, Pt. I</li> <li>Assignments Due</li> <li>Management of Theoretical LBP case</li> </ul>
Module 3 (MM/DD - MM/DD)	<ul> <li>Low Back Pain in Occupational Medicine, Pt. II</li> <li>Assignments Due         <ul> <li>Low back pain quiz</li> </ul> </li> </ul>
Module 4 (MM/DD - MM/DD)	<ul> <li>Behavioral Aspects of Occupational Medicine</li> <li>Assignments Due         <ul> <li>How to reduce stress video or video script</li> </ul> </li> <li>Optional resources:         <ul> <li>Ted Talks on Working Happier (Links to an external site.)</li> <li>NIOSH Research Rounds on Job Stress (Links to an external site.)</li> </ul> </li> </ul>
Module 5 (MM/DD - MM/DD)	<ul> <li>Hepatic and Renal Disorders in Occupational Medicine</li> <li>Assignments Due         <ul> <li>Hepatic toxin chart</li> <li>Renal toxin chart</li> </ul> </li> </ul>
Module 6 (MM/DD - MM/DD)	<ul> <li>Chronic Pain and Dermatological Skin Disorders in Occupational Medicine</li> <li>Assignments Due         <ul> <li>Chronic pain case (Links to an external site.)</li> <li>Dermatologic toxin chart</li> </ul> </li> </ul>

# Module 7 (MM/DD - MM/DD)

Mid Term

## **Semester Break** (MM/DD - MM/DD)

Semester Break

## Module 8 (MM/DD - MM/DD)

- Neurologic Disorders and Hearing Loss in Occupational Medicine
- Assignments Due
  - Neurologic toxin chart

## Module 9 (MM/DD - MM/DD)

- Eye disorders and Treating Burns in Occupational Medicine
- Assignments Due
  - Eye disorder quiz
  - Tearing burns quiz

## Module 10 (MM/DD - MM/DD)

- Pulmonary Disorders in Occupational Medicine, Pt. I
- Assignments Due
  - Spirometry cases
- Optional resources:
  - Silica article (Links to an external site.)

# Module 11 (MM/DD - MM/DD)

- Pulmonary Disorders in Occupational Medicine, Pt. II
- Assignments Due
  - Pulmonary toxin chart
- Optional resources:
  - - Causation in Common Pulmonary Problems **Download Causation** in Common Pulmonary Problems

## Module 12 (MM/DD - MM/DD)

- Cardiovascular and Hematological Disorders in Occupational Medicine
- Assignments Due
  - Cardiovascular toxin chart
  - Hematologic toxin chart

## Module 13 (MM/DD - MM/DD)

- Upper Extremity Disorders in Occupational Medicine Pt. I
- Assignments Due
  - Upper extremity case

## Module 14 (MM/DD - MM/DD)

- Upper Extremity Disorders in Occupational Medicine Pt. II
- Assignments Due
  - Safety video on a topic of own choosing (video or video script)

## Module 15 (MM/DD - MM/DD)

Reproductive and Oncological Conditions in Occupational Medicine

- Assignments Due
  - Reproductive toxin chart
  - Oncological toxin chart

#### **Finals Week**

Final exam

(MM/DD - MM/DD)

Your performance in this course will be evaluated by:

### **Assignments 50%**

- Case studies:
  - Low back pain due on week 2
  - Chronic pain case due on week 6
  - Spirometry cases due on week 11
  - Upper extremity case due on week 15
- A short paper on occupational medicine physician due on week 1
  - Submit 1-2 paragraphs discussing a physician who contributed to occupational medicine and how they furthered the science/awareness or our specialty
- Charts on toxins. This is intended to help you build a study guide that will not only be beneficial for this class but also boards. Recommend building it to be as comprehensive as possible to make an efficient reference. Suggested details include toxin, industry toxin is found in, effect on the body system, treatment, etc.
  - o Renal and hepatic due on week 5
  - Dermatologic due on week 6
  - Neurologic due on week 9
  - Pulmonary due on week 12
  - Cardiovascular and hematologic due on week 13
  - Reproductive and oncologic due on week 16
- Quizzes:
  - Low back pain quiz week 2
  - Eye disorder quiz week 10
  - Treating burns quiz week 10
- Safety videos (either video or detailed script). The purpose of these videos would be a safety
  video that a company could utilize to show to their employees to improve the safety culture of their
  campus.
  - How to decrease stress week 4
  - Topic of choosing week 15
- Midterm Exam Module 7 (25%)

Mid-term examinations will be administered during normal class time.

#### • Finals Exam - Module 15 (25%)

The final will be administered in accordance with scheduling protocols as set forth by the University.

#### **EXAMS**

Exams will be administered on the week of the module indicated. The exams will be administered on paper and will be proctored according to the section (hybrid or online) for which you are enrolled

#### HYBRID SECTIONS

The exams will be administered on paper, given in the classroom, and proctored either by myself or an administrative assistant.

Should extenuating circumstances prevent in-person testing, exam questions will either be uploaded onto Canvas, or some other remote proctoring service to be taken electronically with appropriate proctoring.

You can find more information on how to do this on the <u>Course Resources</u> page in the Exams section.

#### **ONLINE SECTIONS**

The exams will be administered on paper, and proctored in the Exam Center on campus, or in an approved proctoring location off-campus.

Should extenuating circumstances prevent in-person testing, exam questions will either be uploaded onto Canvas, or some other remote proctoring service to be taken electronically with appropriate proctoring.

You can find more information on how to do this on the <u>Course Resources</u> page in the Exams section.

Assignments are due by 11:59 PM on the day of class of the week indicated. For example, if the week 1 class is on August 21st, an assignment due week 1 would need to be submitted by August 21st at 11:59 PM. Quizzes are to be completed according to the same schedule as assignments. These will be designated as practice quizzes, and punctual completion of the quizzes will result in full credit.

Regarding the toxin chart assignment. These can be freely shared with one another after you have submitted your assignment. As mentioned above, the purpose of making these charts is to help develop a study tool for this class and future board examinations. While each individual needs to put forth their own work, sharing charts after submission will help fine-tune each individuals' chart for future use.

All assignments, unless otherwise announced, must be submitted to the designated area of Canvas. Do not submit assignments via email.

## Late Assignments

Assignments submitted after the due date and time will be reduced in value by 25% of what would otherwise have been earned. Required assignments submitted more than a week late will not be graded (zero for the assignment).

## Grading

#### GRADING FOR THIS COURSE

#### Case Studies:

 Grading criteria: Completion, and participation in a forum discussion regarding other people's approaches to the case (at least 1 comment on another submission)

A short discussion on Occupational Medicine Physician who has made an impact:

 Grading criteria: Completion, and participation in a forum discussion regarding other people's approaches to the case (at least 1 comment on another submission)

#### **Toxin Charts:**

Grading criteria: Completion

#### Quizzes:

Grading criteria: Completion

#### Safety videos:

- Grading criteria:
  - Creativity/ability of an idea to engage the audience: 10 points
  - Content appropriate to the purpose of video: 10 points
  - Effective communication to target audience: 10 points

#### UNIVERSITY OF UTAH GRADING SCALE

Letter	Scoring
A	100% - 93%
A-	92.9% - 90%
B+	89.9%–87%
В	86.9%–83%
B-	82.9% - 80%

Letter	Scoring
C+	79.9%–77%
С	76.9%–73%
C-	72.9% - 70%
D+	69.9%–67%
D	66.9%–63%
D-	62.9% - 60%
E	59.9%–0%

# **Accommodations**

# Changes to the Syllabus

**This syllabus is not a contract.** It is meant to serve as an outline and guide for your course. Please note that your instructor may modify it to accommodate the needs of your class.

You will be notified of any changes to the Syllabus.