

Course Syllabus

Visiting professor : Jaime Hart

Course	Occupational and Environmental Health		
Credit	1	Method of Teaching	Lecture and Seminar

Objective

The objective of this course is to provide students with a solid understanding of the fundamental principles and methods used in occupational and environmental health; to understand how to best apply them to evaluate public health questions; and develop skills in critiquing the literature.

At the end of the course the student will be able to:

1. Understand how occupational and environmental exposures are measured and how they can impact health
2. Understand how to assess potential sources of bias in studies of occupational and environmental exposures including confounding and selection bias.
3. Critique scientific manuscripts in occupational and environmental health

Outline

This course provides an introduction to occupational and environmental health, so that students can describe and apply basic concepts of exposure assessment and epidemiology and can understand the evaluation and decision-making related to issues such as air pollution, occupational hazards, the built environment, and climate change.

Class Schedule (90 minutes each)

Day 1 (January 21, 2025)

Session 1 Lecture: Overview and Introduction to Occupational and Environmental Health (9:00-10:30)

Session 2 Lecture: Environmental and Occupational Study Designs (10:45-12:15)

Day 2 (January 22, 2025)

Session 3 Lecture: Health Effects of Air Pollution (9:00-10:30)

Session 4 Seminar: Environmental Study Critique(10:45-12:15)

Day 3 (January 23, 2025)

Session 5 Lecture: Health Effects of the Built Environment (9:00-10:30)

Session 6 Lecture: Health Effects of Climate Change (10:45-12:15)

Day 4 (January 24, 2025)

Session 7 Lecture: The Healthy Worker Effect in Occupational Health Studies (9:00-10:30)

Session 8 Seminar: Occupational Study Critique (10:45-12:15)

Examination (January 24, 2025): (14:00-15:30)

We may add seminars by Japanese teachers to assist students with difficulty in language/background knowledge

Text

None

Related readings

Will be made available in advance of the lecture.

Achievement evaluation

Students are expected to attend all classes, read the course material before coming to class, and actively engage in course discussions.

There will be a written final exam after the completion of the course.