Unit Rationale
Environmental health is a part of public health where the primary goal is preventing disease and promoting the health of humans. Environmental health is associated with recognizing, assessing, understanding and controlling the impacts of people in their environment and the impacts of the environment on public. Because the environment is so broadly defined, the field of environmental health science is usually defined more by the problems faced than the approaches used. Environmental health scientists face various problems. Complexity of the problems requires multidisciplinary approaches. This course will provide an introduction to the principles, methods, and issues related to environmental health sciences.

Programmatic learning objectives for UCD MPH students

The EPP 262 course is a core required course for the MPH degree. The UCD MPH Program has developed a set of Programmatic Learning Objectives, or competencies that should be mastered by persons with the MPH degree. A full listing of these Programmatic Learning Objectives is contained in your Student Handbook, issued at the beginning of the academic year.

The EPP 262 course is relevant to following MPH competencies.

I. Understand how the tools of toxicology, epidemiology, risk assessment, risk management, and risk communication are useful in understanding environmental health problems, and the strengths and limitations of each.

II. Describe the human health effects of a few environmental and occupational agents and know how to obtain information on additional agents.

III. Understand that there are multiple techniques for preventing and controlling environmental hazards, and that there are multiple regulatory approaches that may govern environmental hazards.

The course has the following learning objectives:

1. Understanding how people are exposed to pollutants in the environment and likely routes of exposure
2. Understanding how toxicology can be a useful tool in determining if a compound is likely to cause health effects, as well as the limitations
3. Understanding how epidemiology can be a useful tool for identifying compounds or scenarios that may have led to an adverse health effect, as well as the limitations.
4. Understanding how risk assessment can be used to predict potential risks, and how risk management and risk communication can be used to help reduce risks and explain the likely risks to the population.
5. We consider exposures that occur through air, water, in occupational settings, and a unit on pests and zoonotic disease. Through these media specific units we touch on the following issues:
   a. Understanding the health effects of a few specific agents and where more information can be obtained on these agents
b. Understanding approaches for controlling hazards
   c. Understanding regulatory approaches
6. Develop general skills in working on a team and conveying information about environmental health issues

Course Instructor
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Office Hours: TBD

Class hours, room
Mon, Wed, Fri 3:10-4:00 PM, 172 Schalm

General information
Lecture--3 hours
Prerequisite: None

Course materials and website
https://smartsite.ucdavis.edu
Log in using your regular UCD Kerberos username and password

Readings
Required Textbook

Evaluation
Letter grade will be given. Grading is based on participation in class, homework/class exercises, a critical review of a journal article, one mid-term exam, and final examination.

- Attendance/Participation (5%)

- Homework/Class exercises (35%)
  There will be occasional homework assignments. In addition, we will have in class exercises. You will be asked to prepare for each one and will be graded on the prepared materials. Each will involve role playing and problem solving. Details will be presented in class.

- Critical review (20%)
  You will be asked to review and evaluate an article. Details to be posted.

- Mid-term exam (20%) and final exam (20%)
  Questions will be short answer.

Final examination will cover all aspects of the course, with a focus on the second half.
Grading criteria
All material is graded on a curve

Disability
If anyone in this class has a disability which may require some modification of seating, testing or other class requirements, please contact Dr. Bennett.

Statement on Academic Misconduct
Unethical behavior in the classroom, such as plagiarism, is reprehensible and will not be tolerated. Any questions or concerns about misconduct should be brought to the attention of the instructors.

Guest Lecturers
Michael Denison
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Ellen Gold
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Assignments

Environmental Epidemiology Homework – I,3

Toxicology Homework – II, 5a

Exposure Homework – I,1

Water Homework – III, 5c