

EPP262: Principles of Environmental Health Sciences

Fall 2009

CRN: 54018

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 Programmatic Learning Objectives, or competencies.

- 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.
- Describe the human health effects of a few environmental and occupational agents and know how to obtain information on additional agents.
- Understand that there are multiple techniques for preventing and controlling environmental hazards, and that there are multiple regulatory approaches that may govern environmental hazards.

Course Instructor

Deborah H Bennett, PhD
Dept. Public Health Sciences
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754-8282

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

Environmental Health, 3rd Edition, Dade. W. Moeller, Harvard University Press, 2005

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

Dean O. Cliver, Ph.D., Professor
Department of Population Health and
Reproduction
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Michael Denison
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Jon Marshack
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Christian Sandrock,
Division of Pulmonary and Critical Care
Division of Infectious Diseases
Deputy Health Officer, Yolo County
UC Davis School of Medicine
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Date	Unit	Subject	Lecturer	Reading
25-Sep		Welcome Lecture	Bennett	
27-Sep	Tools	Intro to Environmental Health	Bennett	1
30-Sep	Tools	Exposure Assessment	Bennett	On-Line
2-Oct	Tools	Toxicology	Denison	2
5-Oct	Tools	Environmental Epidemiology	Gold	3
7-Oct	Tools	Environmental Epidemiology	Gold	
9-Oct	Tools	Toxicology	Denison	
12-Oct	Air	Intro to Air Pollution	Bennett	5
14-Oct	Air	Air Pollution Epidemiology	Bennett	On-Line
16-Oct	Air	Air Pollution Toxicology and Epi	Pinkerton	
19-Oct	Air	Ideas for Reducing Air Pollution	Students	
21-Oct	Water	General Concepts	Marshack	7,8
23-Oct	Water	General Concepts	Marshack	
26-Oct	Water	Waste Water Treatment Plant	Field Trip	
28-Oct	Water	A California Perspective	Marshack	
30-Oct		Midterm		
2-Nov	Workplace	Intro to Occupational Settings	Schenker	4
4-Nov	Workplace	Intro to Workplace Injuries	McCurdy	11
6-Nov	Workplace	Workplace Regulation	Krysia	
9-Nov	Zoonotic	Intro to Pests and Pesticides	Bennett	On-Line
11-Nov		holiday		
13-Nov	Zoonotic	Infectious Disease	Sandrock	On-Line
16-Nov	Zoonotic	Health Impacts of Global Warming	Bennett	329-336, 546-549, On-Line
18-Nov	Zoonotic	West Nile Town Hall Meeting	Students	
20-Nov	Food Safety	Intro to Food Safety		On-Line
23-Nov	Risk	Intro to Risk Assessment	Bennett	17
25-Nov	Risk	Intro to Risk Communication	Bennett	
27-Nov		Thanksgiving		
30-Nov	Risk	Risk Assessment Case Study	Johnson	
2-Dec	Risk	In Class Exercise	Students	
4-Dec		Final Review		