

**Department of Environmental Health Science
College of Public Health
University of Georgia**

**EHSC 7060
Fundamentals of Environmental Health Science
Fall 2009 Syllabus**

Course Information

Instructor: Luke P. Naehrer, Ph.D., Associate Professor
Office Location: 150 Environmental Health Science (EHS) Building
Phone: voice: 706-542-4104; fax: 706-542-7472
Email: LNaehrer@uga.edu
Office Hours: Tue/Thu 1-1:45pm or by appointment; Room 150, EHS Bldg

Teaching Assistant: Gideon St. Helen; Email: noedig912@gmail.com
Office Hours: Tue/Thu 3:15-4:30pm or by appointment, Room 136, EHS Bldg

Course Meeting Time and Location

Building: Coverdell
Room: 175
Day: Tue/Thu
Time: 2-3:15 pm

Textbooks and Other Required Course Material

- Environmental Health: From Global to Local, Howard Frumkin, Editor, ISBN-0-7879-7383
- Other lecture-specific readings will be made available for purchase, provided or put on Web CT.

Course Description

In this course students will learn the fundamentals of environmental health, including environmental control agencies, elements of the environment suffering from pollution, environmental pollutants and their sources, effects of environmental pollution, methods of pollution control, and environmental law and policy.

Course Learning Objectives

Upon completion of this course, students will be able to:

1. Review the fundamentals of environmental health, including exposure issues and related health problems resulting from biological, chemical, and physical agents found in air, water, food, soil, the workplace, and other environments.
2. Specify approaches for assessing, preventing and controlling environmental hazards that pose risks to human health and safety.
3. Describe the direct and indirect human, ecological and safety effects of major environmental and occupational agents.
4. Specify current environmental risk assessment methods.
5. Describe genetic, physiologic and psychosocial factors that affect susceptibility to adverse health outcomes following exposure to environmental hazards.
6. Discuss various risk management and risk communication approaches in relation to issues of environmental justice and equity.
7. Explain the general mechanisms of toxicity in eliciting a toxic response to various environmental exposures.
8. Develop a testable model of environmental insult.
9. Describe roles of federal and state environmental control agencies, their policies and regulatory programs related to controlling environmental health issues, and related pollution prevention and control strategies.

Course Requirements for Grading Purposes

- There are three **Individual Assignments** (due Sep 10, Oct 8, and Dec 4) – each includes a 2-3 pg personal response paper, including 3-5 bullet talking points for discussion of readings/assignment in class. More assignment-specific details will be provided when the assignments are given to the class on Aug 27 (for the Sep 10 assignment), Sep 24 (for the Oct 8 assignment), and Nov 19 (for the Dec 3 assignment).
- A **Group Assignment** (3-5 students/group) will be assigned on Sep 22, and is due in class Oct 20. Each group will prepare a 5-6 page paper to accompany a 10 min Powerpoint presentation that will be presented by the group in class on Oct 20 or 22. More assignment-specific details will be provided when the assignment is given to the class on Sep 22.
- Individual and Group papers should be typed, 12 Font Times New Roman or equivalent, and 1.5 spaced.
- All assignments above are due at the start of class on the day they are due – any assignments handed in after the start of class on the day they are due will be accepted at the Professor's discretion if circumstances warrant, but will only receive a maximum of half credit.

Topical Outline

See attached

Grading Policy

- Exams (4 exams, split evenly at 20% each): 80% of grade
- Individual Assignments (3 assignments, split evenly at 3.33% each): 10% of grade
- Group Assignment: 10% of grade

Make-Up Policy

If, for a legitimate reason as judged by the Professor, a student misses an exam, a class that a homework is due on, or a class that another course assignment is due on, the student can reschedule a day and time with the Professor to make-up the exam, homework, or assignment.

Attendance Policy

Attendance is expected.

University Honor Code and Academic Honesty Policy

All academic work must meet the standards contained in “A Culture of Honesty.” Students are responsible for informing themselves about those standards before performing any academic work. The link to more detailed information about academic honesty can be found at:
<http://www.uga.edu/ovpi/honesty/acadhon.htm>

Students with Disabilities

Students with disabilities who require reasonable accommodations in order to participate in course activities or meet course requirements should contact the instructor or designate during regular office hours or by appointment.

General Disclaimers

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

EHSC 7060: Fundamentals of Environmental Health Science Fall 2009 schedule Tue/Thu: 2-3:15pm <i>Text: Environmental Health: From Global to Local, Howard Frumkin (2005)</i>	
Date Tuesday	Date Thursday
18-Aug <i>Introduction to class</i>	20-Aug Time Management...
25-Aug Ecology and Human Health (1)	27-Aug Environmental Toxins and Toxicology (2)
1-Sep Occupational Health and Safety (4 [Industrial Hygiene], 23)	3-Sep Epidemiology and Environmental Diseases (3) <i>Assign Individual Paper #1 on Topic of Climate Change (due Sep 10)</i>
8-Sep Effects of the Environment on Public Health (10), Exposure Assessment <i>Reading: Needham et al., 2005</i>	10-Sep <i>Special Topic: Global climate change</i> <i>Reading: Robinson et al., 2007; IPCC Fourth Assessment Report (AR4)</i>
15-Sep Exam 1	17-Sep Air (14)
22-Sep Indoor Air (22) <i>Assign Group Project (due Oct 20)</i>	24-Sep Land (16, 17) <i>Assign Individual Paper #2 on topic of Katrina Response (due Oct 8)</i>
29-Sep Environmental Health Risk Assessment and Intervention (32)	1-Oct Genetics and Env Health (6)
6-Oct Environmental Health Policy (33)	8-Oct Public Health Responds to a Crisis: the Katrina Trailer Story
13-Oct Exam 2	15-Oct <i>Class time designated for groups to work together on Group Project</i> <i>Please note: Coverdell 175 is not available this day for group meetings</i>
20-Oct <i>Group Project In-Class Presentations</i>	22-Oct <i>Group Project In-Class Presentations</i>
27-Oct Energy (15) and Radiation (24)	29-Oct Pests and Pesticides (20)
3-Nov Water (18)	5-Nov Solid and Hazardous (19)
10-Nov Disaster Preparedness (26)	12-Nov War (12) <i>Special Topic: War and Environmental Health (readings to be provided)</i>
17-Nov Exam 3	19-Nov Doctoral Env Health Research <i>Assign Individual Paper #3 on topic of Individual Response (due Dec 3)</i>
24-Nov <i>Thanksgiving (no class)</i>	26-Nov <i>Thanksgiving (no class)</i>
1-Dec Environmental and Public Health Challenges (13)	3-Dec Local, National, and International Env Health Issues - Your Role?
	11-Dec Exam 4 (cumulative) 3:30-6:30 pm FRI