

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

**EHSC 8510 (3 credit hours)  
Environmental Risk Assessment and Communication  
Fall, 2007**

**Course Information**

Instructor: Jeffrey Fisher  
Office Location: Room 152, Environ. Health Sci. Bldg.  
Phone: 706-542-1001  
Email: jwfisher@uga.edu  
Office Hours: 1 hour before each class

**Course Meeting Time and Location**

Building: Environmental Health Science Building  
Room: Rowe Room (near dept office)  
Day: Tuesday and Thursday  
Time: 12:30 – 1:45

**Textbooks and Other Required Course Material**

*No text books, documents locations on the web.. UGA WebCT: <http://webct.uga.edu>  
Login with your UGA MyID and password.*

**Course Description**

The **goal** of this class is to prepare students to understand the fundamentals of chemical risk assessment, understand the underlying assumptions of risk assessment, and to conduct risk assessments for a variety of purposes, including communication of health risks. Students will learn about key environmental health federal regulations, fundamental toxicology assumptions, sensitive populations, risk communication, controlling environmental hazards, and environmental justice issues. Student participation in the class is substantial. **Pre- or Co-requisite:** EHSC 4490/6490 or PHRM 6910 or PHRM 8930 or permission of instructor.

**Course Learning Objectives**

*Learning objectives:*

1. The student will be able to critically review a environmental risk assessment.
2. The student will be able to create a simple environmental risk assessment and articulate the strengths and weaknesses of the methodology.

3. The student will gain an appreciation for how environmental contaminants (chemical, physical, and other exposures) interact with biological systems and effect human populations.
4. The student will be able to propose risk reduction strategies.
5. The student will gain an appreciation for sensitive human populations.
6. The student will recognize environmental justice issues.
7. The student will appreciate the demarcation between science and policy for risk assessment decisions.
8. The student will be capable of communicating the risk assessment outcomes from a public health perspective.

### Course Requirements for Grading Purposes

One written exam will be given covering the fundamental concepts in risk assessment (20%). Two projects will be completed by each student, which will entail oral presentations (40%). Current scientific literature on risk assessment and communication will be evaluated by students with oral presentations (40%).

### Topical Outline

<b>Date</b>	<b>Topic*</b>	<b>Primary Instructor</b>	<b>Activity</b>
8/16	Class expectations, Location of Information	Fisher	lecture
8/21	Selection of Literature for Chemical Risk Assessment Methods	Fisher	Independent Study
8/23	Hazard Assessment and ID	Fisher	lecture
8/28	Exposure Assessment (Intake)	Fisher	lecture
8/30	Dose- Response, Toxicity factors	Fisher	lecture
9/4	Risk Characterization	Fisher	lecture
9/6	Risk Characterization	Fisher	lecture
9/11	Review of Material/Project 1 start		
9/13	<b>EXAM 20%</b>	Fisher	Written TEST
9/18	Selection of Project 1/Discussion	Fisher	
9/20	<b>Project 1 Presentations 15%</b>	Fisher	Student Presentation
9/25	<b>Project 1 Presentations</b>	Fisher	Student Presentation
9/27	<b>Paper review on RA 10%</b>	Fisher	Student Presentation
10/2	<b>Paper review on RA</b>	Fisher	Student Presentation
10/4	Environmental Justice and Communication	Fisher	Lecture
10/9	Libby Montana film	Film,Eva	12-2 PM
10/11	Sensitive populations	Fisher	lecture
10/16	<b>Critical Literature Review 15%</b>	Fisher	Student Presentation
10/18	<b>Critical Literature Review</b>	Fisher	Student Presentation
10/23	Testable public health hypotheses	Fisher	lecture

	pertaining to environmental pollutants		
10/25	<b>FALL BREAK</b>		
10/30	<b>Critical Literature Review 15%</b>	Fisher	Student Presentation
11/1	<b>Critical Literature Review</b>	Fisher	Student Presentation
11/6	Guest Speaker on Risk Assessment	TBD	
11/8	Organization of Group Project 2		Student Discussion
11/13	Risk Communication	Jane Perry	lecture
11/15	Advanced topics in Risk Assessment (determining toxicity factors)	Fisher	lecture
11/20	No class, Work on role play project 2		Independent Study
11/22	<b>THANKSGIVING</b>		
11/27	Guest speaker on Risk Communication	TBD	Guest lecture
11/29	Role Play- Risk Assessment project and position paper	Fisher	Team project
12/4	Role Play Project – work in class	Fisher	Team project
12/6	<b>Role Play for Group Project, 25%</b>	Fisher	<b>Team project presentation and written reports</b>

\*Schedule is subject to change. Students will be notified of changes as far in advance as possible

### **Grading Policy**

A= 90% and above, B=80% and above, C=70% and above. Plus grading will be used.

### **Make-Up Policy**

*Instructor must be notified in advance if missing graded work. Emergency situations will be dealt with on a case by case basis.*

### **Attendance Policy**

Attendance is expected for all class periods. Participation in the class is expected.

### **University Honor Code and Academic Honesty Policy**

*All academic work must meet the standards contained in “A Culture of Honesty.” All students are responsible to inform themselves about those standards before performing any academic work.*

### **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.*