

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

**EHSC 8510 (3 credit hours)  
Environmental Risk Assessment and Communication  
Fall, 2009**

**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 and links 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. **Expected outcome:** Technical: The student will be capable to critically review risk assessments, conduct a risk assessment, and articulate the strengths and weaknesses of the methodology. Public Health: The student will be capable of communicating the risk assessment outcomes from a public health perspective. **Pre- or Co-requisite:** EHSC 4490/6490 or PHRM 6910 or PHRM 8930 or permission of instructor.

**Course Learning Objectives**

*Learning objectives:* Learn how environmental contaminants (chemical, physical, and other exposures) are thought to interact with biological systems and effect human populations, including evaluation of risk

reduction strategies. Understand issues for sensitive human populations; recognize environmental justice issues and appreciate the demarcation between science and policy for risk assessment decisions.

### 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 critical review of the published literature (40%). Final project involves role play town meeting (40%).

### Topical Outline

Date	Topic	Primary Instructor	Activity
8/18	Class expectations, Location of Information	Fisher	lecture
8/20	Selection of Literature for Chemical Risk Assessment Methods	Fisher	lecture
8/25	Hazard Assessment and ID	Fisher	lecture
8/27	Exposure Assessment (Intake)	Fisher	lecture
9/1	Exposure Assessment	Fisher	lecture
9/3	Dose-Response	Fisher	lecture
9/8	Risk Characterization	Fisher	lecture
9/10	Risk Characterization/Paper Review	Fisher	lecture
9/15	Review for Exam	Fisher	
9/17	<b>EXAM 20%</b>	Fisher	Written TEST
9/22	<b>Paper Review</b>	Fisher	Student Guided Discussion
9/24	<b>Paper Review</b>	Fisher	Student Guided Discussion
9/29	<b>Paper Review</b>	Fisher	Student Guided Discussion
10/1	Libby Montana film	Grad Student	Invited Speaker
10/6	Exposure Assessment, Advanced	Simon	Invited Speaker
10/8	Case Study for RA	Simon	Invited Speaker
10/13	Sensitive populations	Fisher	lecture
10/15	Environmental Justice	Fisher	lecture
10/20	Contemporary RA Issues	Fisher	lecture
10/22	Testable public health hypotheses pertaining to environmental pollutants	Fisher	lecture
10/27	<b>TBD</b>		
10/29	Final Project Organization	Fisher	Open Discussion
11/3	<b>Paper Review</b>	Fisher	Student Guided Discussion
11/5	<b>Paper Review</b>	Fisher	Student Guided Discussion
11/10	<b>Paper Review</b>	Fisher	Student Guided Discussion

11/12	Risk Communication	Fisher/Invited Guest?	Discussion
11/17	Advanced topics in Risk Assessment (determining toxicity factors)	Fisher	Lecture
11/19	Technical Issues for Final Project	Fisher/Team	Discussion
11/24	THANKSGIVING, NO CLASS		
11/26	THANKSGIVING, NO CLASS		
12/1	Role Play- Risk Assessment project and position paper	Fisher/Team	Team project
12/3	Role Play Project – work in class	Fisher/Team	Team project
12/8	<b>Role Play for Group Project</b>	Fisher, faculty, graduate students	<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.*