

Environmental Risk and Society

ENVH 472

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Dept of Environmental & Occupational Health Sciences
Health Sciences Bldg, F-226A (543-0916)
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Office Hours: to be arranged

Autumn 2016
3 credits
MWF, 9:30-10:20
HSB, T-473

Course Description

This course examines the development and uses of environmental risk analysis, particularly in regard to public health concerns. Environmental risk analysis is practiced within a context of social and cultural values, leading to differing perceptions, rankings of risks, and challenges in effective risk communication. Risk assessment and risk management procedures will be examined in light of several themes, including the relationship between natural and technological hazards, the long-term consequences of environmental contamination, public participation processes, and movements towards environmental justice. Specific topics include mercury, pesticides, dioxins, children's exposure to lead, and Mad Cow disease.

Learning Objectives

At the end of this course, students will be able to

- Describe the primary components of current risk assessment and risk management procedures used for environmental health hazard evaluation and resolution;
- Explain how social and cultural values shape perceptions and communication of environmental risks;
- Identify the key aspects of public participation processes aimed at resolving environmental risk conflicts;
- Apply critical thinking to emerging issues in environmental risk;
- Demonstrate "environmental literacy" through analysis of news media reports of environmental health risk issues;
- Apply risk assessment principles to a specific environmental health risk controversy.

Required Reading (available at UW Bookstore in the South Campus Center)

- *Calculated Risks*, JV Rodricks, Cambridge University Press, 2nd Edition, 2007
- Additional readings will be posted on the Canvas site

Recommended Reading

- *Mad Cows and Mothers Milk*, W Leiss & D Powell, McGill-Queens UP, 2nd Edition, 2004

Assignments and Examinations

- Homework = 10%
- Midterm exam (take home) = 25%
- Final exam =35%
- Written assignment and presentation (individual/team project) =30%

Academic Integrity

Students at the University of Washington (UW) are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity.

The UW School of Public Health (SPH) is committed to upholding standards of academic integrity consistent with the academic and professional communities of which it is a part. Plagiarism, cheating, and other misconduct are serious violations of the University of Washington Student Conduct Code (WAC 478-120). We expect you to know and follow the university's policies on cheating and plagiarism, and the SPH Academic Integrity Policy.

<http://sph.washington.edu/students/academicintegrity/>

Any suspected cases of academic misconduct will be handled according to UW regulations. For more information, see the UW Community Standards and Student Conduct website.

Access and Accommodation

Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or disability.uw.edu. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. For more information:

<http://depts.washington.edu/uwdrs/faculty-resources/syllabus-statement/>

ENVH 472: Environmental Risk and Society

Date	Instructor	Topic	
<i>September</i>			
28	W Fenske	Environmental health risks	Lecture
30	F Fenske	Risk assessment overview	Lecture
<i>October</i>			
3	M Fenske	Exposure pathways	<i>Discussion: Cohen Hubal paper</i>
5	W Fenske	Exposure analysis	Lecture
7	F Fenske	Dose-response analysis	Lecture
10	M Fenske	Animal bioassays	<i>Discussion: Aldridge paper</i>
12	W Fenske	Cancer and risk	Lecture
14	F Fenske	Risk perception/communication	Lecture
17	M Burbacher	Children's environmental health	Lecture
19	W Burbacher	Mercury and risk	Lecture
21	F Fenske	Environmental justice	Lecture
24	M Fenske	Risk management	Lecture
26	W Fenske	Proposition 65	Lecture
28	F Fenske	Risk management trade-offs	<i>Discussion: Gregory paper</i>
31	M Fenske	Project discussion breakout	
<i>November</i>			
2	W Fenske	Pesticide risks alar case study	<i>Discussion: 60 Minutes Video</i>
4	F Fenske	Pesticide risk assessment	Lecture
7	M Fenske	Chlorpyrifos risk assessment	Lecture
9	W Fenske	Dioxins and risk	Lecture
11	F	<i>Holiday -- Veterans Day</i>	
14	M Fenske	Dioxins: risk communication	<i>Discussion: Ben & Jerry's</i>
16	W Fenske	Science, policy and doubt	Lecture
18	F Fenske	Comparative risk	Lecture
21	M Fenske	Health risks of lead	Lecture
23	W Fenske	Children and lead exposure	<i>Discussion: Needleman paper</i>
25	F	<i>Holiday -- Thanksgiving</i>	
28	M Fenske	Mad Cow disease – 1	Lecture
30	W Fenske	Mad Cow disease – 2	<i>Discussion: Oprah Winfrey</i>
<i>December</i>			
2	F	Grad student presentation	Graduate students
5	M Fenske	Student case reports – 1	
7	W Fenske	Student case reports – 2	
9	F Fenske	Student case reports – 3	
14	W	<i>FINAL EXAM (HSB, T-473)</i>	