Environmental Risk and Society

ENVH 472/572

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Dept of Environmental & Occupational Health Sciences
4225 Roosevelt Bldg., Rm 2337 (543-5111)

Winter 2012
3 credits
MWF, 11:30-12:20
HSB T-531

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Office Hours: to be arranged, HSB E179F

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 equity. Specific topics include air pollution, malaria and DDT, and drinking water.

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 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;

Readings (books available at UW Bookstore in the South Campus Center)

- *Calculated Risks*, JV Rodricks, Cambridge University Press, Second Edition, 2007
- *Merchants of Doubt,* N Oreskes & EM Conway, Bloomsbury Press, 2010

Assignments and Examinations

- 472: midterm (25%), final exam (25%), hwks (25%), case report (25%)
- 572: midterm (20%), final exam (20%), hwks (20%), case report (20%), group project/presentation (20%)
- bonus of up to 10% for class participation

Students with Disabilities

To request academic accommodations due to a disability, please contact Disability Resources for Students, 448 Schmitz, 206-543-8924 (voice), 206-543-8925 (TTY). If you have a letter from Disability Resources for Students indicating that you have a disability that requires academic accommodations, please present the letter to me so we can discuss the accommodations you might need in this class.

ENVH 472/572: Environmental Risk and Society

Date		Instructor	Topic	Readings
January				
4	W	Kissel	EH Risks & Risk Paradigm	Handout
6	F	Kissel	Hazard Identification	Rodricks prologue, 5-6
9	M	Kissel	Dose-response assessment	Rodricks 3-4
11	W	Kissel	Exposure assessment	Rodricks, 1-2
13	F	Kissel	Exposure assessment	Smith article
16	M		*Martin Luther King Jr. Day*	
18	W	Kissel	Risk Characterization	Rodricks 7-8
20	F	Kissel	Risk management	Rodricks 10-11
23	M	Kissel	Risk Communication/Perception	Sandman
25	W	Kissel	Environmental justice	EO 12988
27	F	Kissel	CBA	Heinzerling & Ackerman
30	M	Leang	mid-term	
February				
1	W	Kissel	PM, Donora to Beijing	news articles
3	F	Kissel	melamine in milk	Hsieh
6	M	Kissel	sarin, Tokyo subway	Vale
8	W	Kissel	dioxin, Binghamton office bldg	Schecter
10	F	Kissel	more dioxin	"
13	M	Kissel	flame retardants	Blum
15	W	Kissel	residential use of Ops	Lovasi
17	F	Kissel	more OPs	"
20	M		*President's Day*	
22	W	Kissel	benzene	TBD
24	F	Kissel	ETS	Oreskes 5
27	M	Kissel	ETS	"
29	W	Kissel	DDT & malaria	Oreskes 7, Edwards
March				
2	F	Kissel	DDT & malaria	"
5	M	Kissel	DDT & malaria	"
7	W	grads	Student case study	
9	F	Kissel	wrap-up	
14	W		*FINAL EXAM (2:30-4:20 p.m)*	