

**Human Systems and the Environment —Syllabus 2009**

Spring Semester

Lead Professors: Kaplowitz and Walker

**Description:** This course addresses human systems and environmental change at multiple scales from local to global. Materials covered explore linkages between natural and human systems, but focus primarily on human drivers of environmental and natural resource change and the social responses that such changes precipitate, including individual action, social movements, policy, legal and institutional responses. The course is designed for graduate students, especially those from the physical and life sciences, seeking to better understand the social forces giving rise to environmental problems as well as social responses taken to mitigate them.

The course seeks to develop students' competency in two social science arenas related to environmental change. Students will learn about commonly used analytical frameworks used for understanding and addressing environmental issues, such as environmental economics, political ecology, and institutional analysis. Students will also learn about various explanations that have been advanced by social scientists and others to explain environmental change, including population models, poverty and social stratification, and problems associated with poorly-defined property rights. In addition, the course will expose students to relevant legal theory and ethical dimensions concerning environmental change and equity.

**Course Materials:** The course materials are assigned readings, to be completed prior to each class. They will generally be available on the course website.

**Class preparation:** You are expected to be prepared for each class session. Preparation includes not only reading the assigned materials, but also reflecting upon the readings and being able to discuss them intelligently. The instructor will solicit class participation both by calling on students and by asking for volunteers.

**Office hours:** Instructors would like to get to know as many of you as possible, and encourage you to drop by during office hours (posted outside our offices and on our website).

**Announcements:** Class announcements (if any) will be made in class, distributed by e-mail, and posted on the course website (See [angel.msu.edu](http://angel.msu.edu)). You are responsible for checking your e-mail and the course website on a regular basis.

**Incompletes and Deferrals:** Final grades will be submitted for all students during finals week. No grades of incomplete or deferral will be submitted for students without a medical excuse or family emergency.

**Grading-Components**

The grading scale is:

96-100%: 4.0    91-95%: 3.5    86-90%: 3.0    70-85%: 2.5    less than 70%: let's talk

A. *Attendance and Participation* (40%)

Attendance and participation are mandatory. There is an expectation that each student will be prepared and will participate in class. You should not miss more than one class for any reason. Students should expect to be called on to answer questions in every class. Excessive absences and poor participation will result in final grades being lowered. Points in class will be assigned on the basis of discussions of the readings. Each week, a couple of students will be selected to lead these discussions. This will involve a set of typed notes, prepared by the students, to be distributed in class, with at least five discussion points. The expectation is that the student team will prepare about two pages of notes touching on and highlighting the five discussion points; they, in turn, will lead the class discussion. We want a joint, collaborative product, i.e., one set of notes. We will pay close attention to the extent to which students spark exchange and comprehension.

If you choose to present in power point, it is your responsibility to be sure to have the computer up and running, and your data ready to go. The instructors are not audio-visual technicians.

The presentation of the course readings should include: (1) a discussion of the papers; (2) a demonstration of the main principles through simulation, play-acting, or some form of structured class participation; and (3) an update on the main ideas through an example of how they might be applied today, as well as some sense of where the scholarly literature stands on the topic/issue (e.g., via web-search).

B. *Class Paper* (60%)

There will be one (1) research paper required for the course. The elements of this paper include an outline (5%), draft (5%), presentation of outline and final paper (10%), and final paper (40%). These elements are due at specified dates throughout the semester.

The class paper should be based upon a topic of interest to the student, one already familiar to them, and relevant to class materials. The paper should be at least 15 pages in length (double spaced, 1" margins, Times New Roman with 12 point font) **excluding endnotes, references, figures, tables, etc.**, which should follow the 15 (or more) pages of text.

The instructors expect the students' class paper to be written and organized at a level sufficient for submission to a peer-reviewed journal. The class paper should be comparable to the first part of a full manuscript excluding data collection, analysis, and discussion.

*Outline.* Students' draft outlines (due week 6) must show that students have selected an appropriate topic, have conducted preliminary research, and have begun to organize their thoughts and writing logically. They must be at least 2-pages in length and **should not** be restricted to simple outline format; rather phases, complete sentences, paragraphs, etc. are required.

*Draft.* We expect a version of the paper that is basically “done.” This will enable us to make comments that truly advance the organizational and conceptual abilities of the students, without getting lost in copyediting and in premature thinking. A bibliography is required.

*Presentation.* A professional quality presentation is required, with PowerPoint. Length of presentation should be 15-minutes, plus 5 minutes of questions and answers. This will be conducted like a mini-conference, and people will be invited to attend, including other faculty and graduate students.

Note to all, especially non-native English speakers: your final paper will be graded on content AND form. You are strongly encouraged to make use of peer review, university resources, and other resources, to ensure your paper reads well and is free of grammatical errors. If grammatical errors persist in the final draft, you will be penalized.

**Plagiarism:** Plagiarism is the appropriation of the words, ideas, or thoughts of another and representation of them as one’s own original work. Notice the breadth of that definition. You must cite another author not only for direct quotations, but also for the use of *ideas* and for the *paraphrasing* of another’s work. To do a proper job of crediting your sources, it is not uncommon to have one citation for every two or three sentences of your paper.

**Submission of work:** Due dates for all assignments are in the syllabus. Papers are to be submitted electronically to the course drop boxes on the class website. Late papers will not be accepted without medical excuse or family emergency.

**Schedule**

<b>Class #</b>	<b>Date</b>	<b>Topic</b>	<b>Deadlines</b>
<b>1</b>	1/15/09	Introduction: Today's Environmental Policy Background	
<b>2</b>	1/22/09	Environmental Policy Cornerstones	
<b>3</b>	1/29/09	Economics and the Environment	
<b>4</b>	2/5/09	Risk, Uncertainty, Discounting	
<b>5</b>	2/12/09	Externalities and Market Failures	
<b>6</b>	2/19/09	Outline Presentations	Draft outline due
<b>7</b>	2/26/07	Property Rights	
<b>8</b>	3/5/09	Benefits, Costs, and Evaluation	
<b>9</b>	3/19/09	Environmental Law	
<b>10</b>	3/26/09	Malthus	Draft paper due
<b>11</b>	4/2/09	Critical Approaches: Marx and the critique of capitalism	
<b>12</b>	4/9/09	Critical Approaches: Political Ecology	
<b>13</b>	4/16/09	Critical Approaches: Post-structuralism	
<b>14</b>	4/23/09	Global Context: Is there a future?	
<b>15</b>	4/30/09	Paper Presentations	Final Paper Due

## READINGS

### **Today's Environmental Policy Background**

Zygmunt J. B. Plater. 2005. Dealing With Dumb and Dumber: The Continuing Mission of Citizen Environmentalism. *Journal of Environmental Law & Litigation* [pdf]

Kennedy, R.F. 2003. Crimes against Nature. *Rolling Stone*.

### **Week 2 Environmental Policy Cornerstones**

R.H. Coase. 1960. The Problem of Social Cost. *Journal of Law and Economics* 3:1-44. [pdf]

Garrett Hardin. 1968. The Tragedy of the Commons. *Science* 162(3859):1243-1248. [pdf]

### **Week 3 Economics and the Environment**

Krutilla, J.V. 1967. Conservation reconsidered. *American Economic Review*. 57: 777-789. <http://www.jstor.org/view/00028282/di950397/95p0252k/0>

R. David Simpson. 1998. Economic Analysis and Ecosystems: Some Concepts and Issues *Ecological Applications* 8(2):342-349. [pdf]

Don Fullerton and Robert N. Stavins. 1998. How Economists See the Environment. *Nature* 395:433-434. [pdf]

### **Week 4 Risk, Uncertainty, Discounting**

William J. Baumol. 1968. On the Social Rate of Discount. *American Economic Review* 58(4):788-802. [pdf]

Hirshleifer, J. 1970. *Investment, Interest, and Capital*. New Jersey: Prentice Hall. Assigned readings.

Slovic, P. 1987. Perception of Risk. *Science* 236(4799): 280-285.

Slovic, P. 1999. Trust, Emotion, Sex, Politics, and Science: Surveying the Risk-Assessment Battlefield. *Risk Analysis* 19(4): 689-701.

### **Week 5 Externalities & Market Failures**

Pigou, A.C. 1932. *The Economics of Welfare*. London: MacMillan and Co. Assigned readings

Ralph Turvey. 1963. On Divergences between Social Cost and Private Cost. *Economica* 30(119):309-313 [pdf]

Ayres, R.U. & A.V. Kneese. 1969. Production, Consumption, and Externalities. *American Economic Review* 59: 282-296.

<http://www.jstor.org/view/00028282/di950411/95p06951/0>

### **Week 6 Outline Presentations**

### **Week 7 Property Rights**

Harold Demsetz. 1967. Towards a Theory of Property Rights. *American Economic Review* 57(2):347-359.[html]

Dietz, Tom, Ostrom, Elinor, and Stern, Paul. The Struggle to Govern the Commons. *Science* 12 December 2003: Vol. 302. no. 5652, pp. 1907 – 1912 [pdf]

### **Week 8 Benefits, Costs, and Evaluation**

Kenneth J. Arrow, Maureen L. Cropper, George C. Eads, Robert W. Hahn, Lester B. Lave, Roger G. No11, Paul R. Portney, Milton Russell, Richard Schmalensee, V. Kerry Smith, and Robert N. Stavins. 1996. Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation? *Science* 272:221-222 [pdf]

Costanza, R. et al. 1997. The value of the world's ecosystems services and natural capital. *Nature* 307: 321-326.

### **Week 9 Environmental Law**

Two cases of law to be distributed and read.

### **Week 10 Malthus**

Assigned readings from *First Essay*, pp. 3-143. Malthus, T.R. 1960. *On Population* (G. Himmelfarb, ed.). New York: Random House. [pdf]

pp. 100-132. Himmelfarb, G. 1984. *The Idea of Poverty*. New York: Alfred Knopf. [pdf]

Brown, L. 1988. Analyzing the Demographic Trap, in *State of the World, 1987*. pp 20-37. eds. L. Brown and others. New York: W.W. Norton. [pdf]

### **Week 11 Critical Approaches to the Environment: Marx and the critique of Capitalism**

*Economic and Philosophic Manuscripts*, assigned readings.

### **Week 12 Critical Approaches to the Environment: Political Ecology**

Walker, P.A. 2005. Political ecology: where is the ecology? *Progress in Human Geography* 29(1): 73-82.

Walker, P.A. 2006. Political ecology: where is the policy? *Progress in Human Geography* 30(3): 73-82.

Blaikie, P. and Brookfield, H. 1987. *Land Degradation and Society*. London: Methuen. [pdf] (pp. 1-48.)

### **Week 13 Critical Approaches to the Environment: Post-structuralism**

Braun, B. and Wainwright. 2001. Nature, Post-structuralism, and Politics. In *Social nature: Theory, Practice, and Politics*. N. Castree and B. Braun (eds.) pp. 41-63. Malden, MA: Blackwell Publishers. [pdf]

Gregory, D. 2001. (Post) Colonialism and the Production of Nature. In *Social nature: Theory, Practice, and Politics*. N. Castree and B. Braun (eds.) pp. 84-111. Malden, MA: Blackwell Publishers. [pdf]

Bryant, R.L. 2001. Political Ecology: A Critical Agenda for Change? In *Social nature: Theory, Practice, and Politics*. N. Castree and B. Braun (eds.) pp. 151-169. Malden, MA: Blackwell Publishers. [pdf]

### **Week 14 Global Context: What does the Future Hold?**

Gene M. Grossman and Alan B. Krueger. 1995. Economic Growth and the Environment. *The Quarterly Journal of Economics*. 110(2)353-377. [pdf]

York, R., Rosa, E.A., and Dietz, T. 2003. Footprints on the Earth: The Environmental Consequences of Modernity. *American Sociological Review* 68(2): 279-300. [pdf]

Diamond, Jared. 2005. *Collapse: How societies choose to fail or succeed*. New York: Penguin Books. Chapters 1 & 2.

**Week 15 Student Presentations**