

Syllabus
ESP 421 Natural Resource Policy
Spring 2005

Instructor:

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Office Hours:

Tuesdays, 1:00 to 2:00
Thursdays, 1:00 to 4:00
Or by appointment

Class Meetings:

Tuesdays: 4:10 p.m. to 6:40 p.m., 319 Bailey Hall, Gorham Campus.

Course Objectives:

This is a senior level course; students are expected to perform work at a high level, including the ability to perform critical analysis, comprehend theory and its relevant application, and to effectively communicate orally and written. This course will be taught similar to a seminar thereby relying more on student involvement in leading discussions.

Upon completion of the course, students will be expected to possess the knowledge and skills to:

- Actively participate in reasoned discourse of natural resource policy issues from multiple viewpoints and by possessing a working knowledge of the role of scientific, economic, political, and ethical factors in natural resource policy formulation.
- Apply the rational policy process model to identify and define natural resource policy problems and to formulate realistic, worthwhile, and politically viable policy solutions.

Introduction:

Increased globalization, population, personal wealth, industrial expansion, and technological development place increasing pressure on the planet's finite natural resources. To many, natural resources are seen merely as resources to fuel human endeavors and exist to be consumed. To some, this anthropocentric view fails to consider the ecological importance of conserving natural resources. To others, this anthropocentric view ignores normative concerns (equity, intergenerational justice, and the rights of non-humans). These latter groups support conservation and preservation respectively. These conflicting views are the basis of most natural resource policy problems.

This course is a detailed examination of Natural Resource Policy from the policy science perspective. Policy science is problem-driven, contextual, and is based on a multi-disciplinary approach. The goal is to think more effectively about problems and to develop realistic, worthwhile, and politically viable solutions. Hence, we will examine the scientific, legal, economic, political, and ethical components of natural resource problems and explore optimal approaches to solve these problems. Within this context, we will explore natural resource issues such as consumption versus conservation and preservation; the open access component versus private property rights, and state versus market control of natural resources.

Throughout the course, we will be attempting to answer overarching questions at the root of most natural resource policy debates: To whom do "natural" resources belong? Who should decide whether and how natural resources are used? What should be the role of government, public interests, and private interests in protecting or consuming natural resources? What is the role of science in determining natural resource policy? Is economics the paramount concern in evaluating solutions? Is there a better approach to solving historical natural resource policy problems?

Course Outline:

PART I: *Basic Concepts and Theoretical Background for Policy Analysis:* problem analysis, basic environmental and ecological economics, open access, public goods, ethical and political dimensions of policy analysis, and the role of science.

PART II: *Approaches to Managing Natural Resources:* instruments used to protect natural resources, alternative dispute resolution, and non-governmental approaches to natural resource protection.

PART III: *Policy Analysis and Case Studies:* application of basic concepts and theory to specific cases: wildlife, fisheries, forests, and energy.

Course Materials:

- Required textbook, Bardach, Eugene, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*, Second Ed., (Seven Bridges Press, New York: 2004). (ISBN: 1-56802-923-3)



- Required readings are available on electronic reserve
<http://docutek.ursus.maine.edu> (password is **WAGESP421**)
- Readings also are available in hard copy at the Gorham Library’s course reserves.
- Selected materials will be posted on Blackboard including:
 - Course Power Point slides
 - Course Research Guide
 - Supplemental materials/readings
 - Grades

Schedule of Topics*

Class	Topics		Readings+	Assignments
Jan. 18	<ul style="list-style-type: none"> • Course introduction • Philosophical Conflict • Global conflict 	PART I	<ul style="list-style-type: none"> ▪ Norton ▪ Rosenbaum <i>Video: Water, Land, People & Conflict</i>	
Jan. 25	Policy Formulation & Policy Analysis		<ul style="list-style-type: none"> ▪ <u>All</u> of Bardach (except the Appendices) ▪ Jones 	
Feb. 1	<ul style="list-style-type: none"> • The Commons • Open Access • Private Property 		<ul style="list-style-type: none"> ▪ Hardin (D) ▪ Dolšak & Ostrom (D) ▪ Acheson & Brewer (D) 	Yes
Feb. 8	Politics of Natural Resource Management		<ul style="list-style-type: none"> ▪ Mininis (D) ▪ Bath & Buchanan (D) ▪ Nie (D) 	Yes
Feb. 15	Economics of Natural Resource Management		<ul style="list-style-type: none"> ▪ Jordan ▪ Chee ▪ Manning (D) ▪ Green (D) 	
Feb. 22	NO CLASS – WINTER BREAK			
March 1	Science and Natural Resources: The Case of Endangered Species	PART II	<ul style="list-style-type: none"> ▪ CRS (D) ▪ Roemer and Wayne (D) <i>Video: God Squad</i>	
March 8	Culture and Natural Resource Problems		Mid-Term Exam <i>Video: End of Suburbia</i>	Yes



March 15	Natural Resource Policy Instruments		<ul style="list-style-type: none"> ▪ Bardach (Appendix A) ▪ Steelman & Wallace ▪ Yandle & Dewees (D) 	
March 22	Private Trusts		<ul style="list-style-type: none"> ▪ Daniels & Lapping ▪ Guest Speaker: Dr. Sam Merrill, Assistant Research Professor, Muskie School of Public Service 	
March 29	NO CLASS – SPRING BREAK			
April 5	Wildlife	PART III	<ul style="list-style-type: none"> ▪ Hamilton (D) ▪ Mangun (D) ▪ Mangun, O’Leary, & Mangun (D) 	
April 12	Alternative Dispute Resolution: Fisheries		Guest Speaker: Dr. Jack Kartez, Professor of Community Planning, Muskie School of Public Service	
April 19	Forests		<ul style="list-style-type: none"> ▪ Strittholt & Dellasala (D) ▪ Hoberg (D) 	
April 26	Energy		TBA	
May 3	Student Debate: Maine Woods National Park <u>or</u> the Klamath Basin			Yes
Final Exam	Make-up class if needed due to weather cancellation or other unforeseen problem.			

* The topics are subject to change.

+ Readings are to be completed before class

Schedule and Grading:

Assignment	Points	Due Date
Discussion Questions	35	Ongoing
Discussion Facilitation	15	As assigned
Quizzes (each)	10	Feb. 1+
Research Topic Proposal	10	Feb. 8
Research Problem Analysis	40	March 1



Mid-term Exam	30	March 8
Final Research Paper	40	May 3
Student Debate	20	May 3
TOTAL	200	

Assignments:

- Electronic submissions will not be accepted--no exceptions.
- All citations must adhere to APA style. See: <http://dianahacker.com/writersref/pdf/Hacker-DocSources.pdf>
- Assignments must use a standard 12-point type, 1.5 spacing, and one-inch margins

Quiz(zes)

There will be at least one quiz. The first quiz will be on the terms and concepts regarding policy formulation and policy analysis from the assigned reading (Bardach, Jones) and the lecture. Additional quizzes will be given if it appears that students are not doing the required readings.

Discussion Questions:

For each article denoted with a **(D)**, students are required to develop five discussion questions that must be typed and handed in following the lecture. Students will be expected to use these questions to foster discourse during class. Evaluation will be based on quality of the questions, relevance of the questions to the course objectives, and grammar. Hand written or late submittals will NOT be accepted; no exceptions.

Discussion Facilitation:

Each student will select an article from the assigned reading to facilitate a discussion. The designated facilitator must submit a written abstract of the article and 10 questions both pertaining to the course objectives. The student will use this to facilitate a discussion.

NOTE: A crucial element to a successful democracy is civil public discourse. The intent of discourse is the open exchange of ideas and facts to identify problems and find the best solution. The purpose of student-facilitated discussion is to foster civil public discourse regarding natural resources. To be successful, you must make a commitment to civility; you need to recognize that other thoughtful and caring people have very different views on how best to address complex natural resource problems. Constructive debate needs to focus on solutions that are most likely to be successful, and not upon personal attacks leveled by adversaries against one another. Thus, basic rules of civility will be respected and enforced. By fostering a civil and open atmosphere, as a class, we will better able to explore a wider variety of solutions.



Research Topic Proposal:

Students are required to submit a research topic proposal. The research topic can focus on any natural resource policy problem of interest. The proposal is to consist of the title, a one-paragraph discussion of your interest in the topic, and a two-page literature review with a minimum of five peer-reviewed journal articles focusing on the topic. Only peer-reviewed journals are acceptable; Internet or popular articles are unacceptable for this assignment. You must attach the first page of each article to the assignment.

Research Problem Analysis:

Students will be expected to submit a ±10-page paper describing in detail the natural resource policy problem. The bulk of the paper will focus on the Background where you will present referenced empirical evidence to establish that it is a problem worthy of action. The Policy Problem will identify each major stakeholder and summarize their perspectives to the problem. In addition, you need to clearly and succinctly state your policy goal. That is, what do you want to achieve with your proposed solution?

- I. Title
- II. Background
 - A. Background Information
 - B. Empirical Evidence
- III. Policy Problem
 - A. Stakeholder Perspectives
 - B. Policy Goal
- IV. References

Final Research Paper:

Students will be expected to submit a ±20-page paper (this will include the previously written and corrected problem analysis) that will describe in detail the natural resource policy problem and present a recommended solution. The research paper will document the policy alternatives you selected, how you evaluated the policy alternatives, how you compared the policy alternatives, and how you arrived at the recommended solution.

Student Debate:

Near the end of the semester, the class will be divided into groups representing major stakeholders involved in the debate over the Klamath Basin. During the debate, each student will be required to present. Grades will be assessed on individual participation.

Mid-term Exam:

The mid-tem will focus on terms and concepts discussed in Part I of the course.



Extra Credit:

Any student submitting a paper or poster for USM's Thinking Matters Research Symposium that is part of their Natural Resource Policy research project will receive extra credit.

Assigned Readings:

ASSIGNED READINGS ARE AVAILABLE THROUGH USM'S ELECTRONIC RESERVE. Go to <http://docutek.ursus.maine.edu/>. Find and select the course then type in the course password: WAGESP421

1. Acheson, James M. and Jennifer F. Brewer, "Changes in the Territorial System of the Maine Lobster Industry," IN *The Commons in the New Millennium: Challenges and Adaptations* (MIT Press, Cambridge, MA: 2003) pp., 37-59.
2. Bath, A.J. and T. Buchanan, 1989. "Attitudes of Interest Groups in Wyoming Toward Wolf Restoration in Yellowstone National Park," *Wildlife Society Bulletin*. 17:519-525.
3. Chee, Yung En, 2004. "An Ecological Perspective on the Valuation of Ecosystem Services," *Biological Conservation*, Vol. 120:549-565.
4. Congressional Research Service (CRS), *Endangered Species: Difficult Choices*, August 26, 2004, 16 pp.
5. Daniels, T., and M. Lapping, (In press). "Land Preservation: An Essential Ingredient in Smart Growth," *Journal of Planning Literature*.
6. Dolšak, Nives and Elinor Ostrom, "The Challenges of the Commons," IN *The Commons in the New Millennium: Challenges and Adaptations* (MIT Press, Cambridge, MA: 2003) pp., 3-34.
7. Eilperin, J. "New Rules Issued for National Forests Some Environmental Protections Eased," *The Washington Post*, Thursday, December 23, 2004; Page A01.
8. Green, Trellis G., "The Use of Economics in Federal and State Fishery Allocation Decisions: Case of the Gulf Red Drum," IN W.R. Mangun, ed. *American Fish and Wildlife Policy: The Human Dimension* (Southern Illinois University Press, Carbondale: 1992) pp. 136-171.
9. Jones, Charles W, Chapter Four: "Getting Problems to Government," IN C.W. Jones. *An Introduction to the Study of Public Policy*. Third ed. (Harcourt Brace & Company, Orlando: 1984) pp. 51-75.
10. Jordan, Carl F., "Ecological Economics," IN *Conservation* (John Wiley & Sons, New York: 1995), pp. 87-120.



11. Hamilton, Cliff, "Pursuing a New Paradigm in Funding State Fish and Wildlife Programs," IN W.R. Mangun, ed. *American Fish and Wildlife Policy: The Human Dimension* (Southern Illinois University Press, Carbondale: 1992) pp. 119-135.
12. Hardin, Garrett, 1968. "The Tragedy of the Commons," *Science*, 162:1243-1248.
13. Hoberg, George, *Science, Politics, and U.S. Forest Law: The Battle over the Forest Service Planning Rule*, Resources for the Future, Washington, DC, Discussion Paper 03-19, June 2003, 33 pp.
14. Mangun, Jean C., O'Leary, Joseph T., and William R. & Mangun, "On-consumptive Wildlife-Associated Recreation in the United States: Identity and Dimension." IN W.R. Mangun, ed. *American Fish and Wildlife Policy: The Human Dimension* (Southern Illinois University Press, Carbondale: 1992) pp. 175-200.
15. Mangum William R., "Fish and Wildlife Policy Issues," IN W.R. Mangun, ed. *American Fish and Wildlife Policy: The Human Dimension* (Southern Illinois University Press, Carbondale: 1992) pp. 3-32.
16. Manning, Edward W., 1987. "Prophets and Profits: A Critique of Benefit/Cost Analysis for Natural Resource Decisions," *Alternatives*, Vol. 15, No. 1:36-41.
17. Minnis, Donna L., 1998. "Wildlife Policy-Making by the Electorate: An Overview of Citizen-Sponsored Ballot Measures on Hunting and Trapping," *Wildlife Society Bulletin*, 26(1):75-83.
18. Nie, Martin, 2003. "Drivers of Natural Resource-Based Political Conflict," *Policy Sciences*, 36:307-341.
19. Norton, Bryan G., 2000. "Population and Consumption: Environmental Problems as Problems of Scale," *Ethics and the Environment*, 5(1):23-45.
20. Roemer, Gary W., and Robert K. Wayne, 2003. "Conservation in Conflict: the Tale of Two Endangered Species," *Conservation Biology*, Volume 17, No. 5, pp., 1251-1260.
21. Rosenbaum, Walter A., "Our 700 Million Acres: The Battle for Public Lands," IN W.A. Rosenbaum, *Environmental Politics and Policy*, Fifth Ed. (CQ Press, Washington, DC: 2002), pp. 305-341.
22. Strittholt, James R. and Dominick A. Dellasala, 2001. "Importance of Roadless Areas in Biodiversity Conservation in Forested Ecosystems: Case Study of the Klamath-Siskiyou Ecoregion of the United States," *Conservation Biology*, Volume 15, No. 6, pp. 1742-1754.
23. Yandle, Tracy, and Christopher M. Dewees, "Privatizing the Commons ... Twelve Years Later: Fisher's Experiences with the New Zealand's Market-Based Fisheries Management," IN *The Commons in the New Millennium: Challenges and Adaptations* (MIT Press, Cambridge, MA: 2003) pp., 103-127.

