

Natural Resource Policy & Economics **FOR6934 (3 credits) Fall, 2011**

Course Description: Factors in evolution of forest, range, wildlife and related natural resources administration and policies in the United States; policy components; policy formation implementation, administration and change processes; introduction to criteria for evaluating effectiveness of policies and administration.

Instructor

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Office hours: Mondays, Wednesdays and Thursdays
3:00 – 3:50 (8th period), and by appointment

Student Learning Outcomes

Upon satisfactory completion of the course, you should be able to:

- State the key provisions of major natural resource policies
- Explain the historical development of these policies
- Explain the dynamics of natural resource policy development, and identify factors that influence the success of resource policy implementation
- Critically evaluate natural resource policies using basic economic tools (e.g., graphical welfare analysis), and by applying ecological, social, and political criteria
- Explain the steps required to successfully develop a journal-ready paper that applies the above to a specific natural resource policy

Forests and other natural resources serve many economic, social, and environmental needs of people around the world. The patterns of use and management of natural resources can have a profound impact on the economy and the environment. However, public policies largely dictate the patterns of use and management of natural resources thereby influencing the lives of diverse stakeholders including future generations. Therefore, it is critical for resource professionals to understand concepts, administration, and economic and environmental impacts of resource policies.

The specific goals of *Natural Resource Policy & Economics* are to:

- Help you develop an understanding of concepts and theories of natural resource policy and economics
- Further your knowledge of major natural resource policies and public policy processes
- Advance your ability to critically evaluate natural resource policy issues from economic, policy, environmental, and social perspectives
- Further your understanding of academic writing and development of publications for scientific journals

Course Meeting Times

Times	Days	Classrooms
11:45am – 1:40pm (5 th and 6 th periods)	Tuesdays	219 Newins-Ziegler Hall
12:50pm – 1:40pm (6 th period)	Thursdays	112 Newins-Ziegler Hall
1:55 – 2:45 (7 th period) <i>grad only</i>	Thursdays	219 Newins-Ziegler Hall

Required Texts and Readings

Required texts:

1. Rosenbaum, W.A. 2010. *Environmental Politics and Policy, 7th Edition*. CQ Press: Washington, DC.
2. Tietenberg, T. and L. Lewis. 2009. *Environmental and Natural Resource Economics, 8th Edition*. Addison-Wesley: Boston, MA.

Additional readings (Available through Sakai or the UF Libraries Reserve <https://ares.uflib.ufl.edu/>):

1. Anderson, S.H. 1998. "The Evolution of the Endangered Species Act." In: Shogren, J.F. *Private Property and the Endangered Species Act*. University of Texas Press, Austin.
2. Bardach, E. 2000. *A Practical Guide for Policy Analysis: The Eighth Fold Path to More Effective Problem Solving*. Chatham House Publishers, New York.
3. Bowles, S. 2008. "Policies Designed for Self-Interested Citizens May Undermine "The Moral Sentiments": Evidence from Economic Experiments." *Science*, 320 (20 June):1605-1609.
4. Brody, S.D. 2008. "Principles of effective ecosystem management and planning." In *Ecosystem Planning in Florida: Solving Regional Problems through Local Decision Making*. Ashgate Publishing Ltd, Hampshire, England.
5. Chee, Yung En, 2004. "An Ecological Perspective on the Valuation of Ecosystem Services," *Biological Conservation*, 120:549-565.
6. Cubbage, F.W, J. O'Laughlin, and C.S. Bullock III.1993. *Forest Resource Policy*. John Wiley & Sons, New York.
7. Ellefson, P.V. 1992. *Forest Resource Policy: Process, Participants, and Programs*. McGraw-Hill, New York.
8. Feldman, M.D. and M.J. Brennan 1998. "Judicial Application of the Endangered Species Act and the Implications for Takings of Protected Species and Private Property." In: Shogren, J.F. *Private Property and the Endangered Species Act*. University of Texas Press, Austin.
9. Florida Department of Agriculture & Consumer Services. 2009. "Florida Silviculture Best Management Practices: 2009 Implementation Report." http://www.fl-dof.com/publications/2009_BMP_survey_report.pdf
10. Jordan, Carl F. 1995. "Ecological Economics," in *Conservation*, John Wiley & Sons, New York: pp. 87-120
11. Letson, D. and J.W. Milon (eds.), *Florida Coastal Environmental Resources: A Guide to Economic Valuation and Impact Analysis*, Gainesville: Florida Sea Grant College Program.
12. Peterson, F. 2001. *The Political Economy of Agricultural, Natural Resource, and Environmental Policy Analysis*. Iowa State University Press, Ames.

13. Robbins, P. 2006. "The Politics of Barstool Biology: Environmental Knowledge and Power in Greater Northern Yellowstone." *Geoforum* 37(2): 185-199.
14. Shogren, J. and S. Toman. 2006. "How much climate change is too much? An economics perspective." *The RFF Reader in Environmental and Resource Policy, Second Edition*. Wallace E. Oates, Ed. Resources for the Future, Washington, DC.
15. Society of American Foresters. 2011. "SAF Code of Ethics." <http://www.safnet.org/about/codeofethics.cfm>.
16. Weber, M.L. 2002. "Conclusion." *From Abundance to Scarcity: A History of U.S. Marine Fisheries Policy*. Island Press, Washington, DC.
17. Webster et al. 2006. "Woody Invaders and the Challenges They Pose to Forest Ecosystems in the Eastern United States." *Journal of Forestry* 104(7):366-74.
18. Weyerhaeuser, R. and J.W. Gilmier. 1997. "Forest Management and Policy in the U.S.: A Historical Perspective." In: Sample, V.A. et al. *Evolving Toward Sustainable Forestry: Assessing Change in U.S. Forestry Organizations*. Pinchot Institute for Conservation, Washington, D.C.
19. Yandle, T. and C. Dewees. 2003. "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, pp. 103-127.

Class Format, Policies on Attendance and Make-up Exams

Note that this graduate course is cross-listed with an undergraduate course. That is, lectures and most in-class activities will be mixed (including both graduate and undergraduate students). Both undergraduate and graduate sections will meet twice per week for lectures, for two hours on Tuesdays and one hour on Thursdays. An extra hour of class time is reserved for the graduate section, either for in-class discussion or work outside of class as needed.

Typically, each week we will cover a different topic using lectures, discussions, and in-class activities that include group work. We will actively use the UF Sakai website, through which you can send e-mails to classmates or to me, check your grades, check class announcements, access the syllabus, complete submit assignments, etc. *Check the Sakai website before every lecture.*

For students enrolled in an online section:

Lectures and videos of group discussion will be posted on the Sakai website. Typically, each lecture will be posted to Sakai a day or two before it is delivered to the live sections. Discussion videos will be posted as soon as possible and likely the day of recording.

Please be patient if technical difficulties arise, and let the instructor know as soon as possible if you cannot access lectures or other course materials.

You are expected to stay current with all readings and lectures. If you have any questions about course lectures and readings, you are encouraged to share them with the instructor as soon as possible. Reaction to the lectures and readings is encouraged and appreciated, and will factor into your participation grade (see *Discussion, Questions, and Reactions* below [p.5]).

For students enrolled in a live section:

Please do not be late to class. If you are late, please take your seat as quietly as possible. Please be respectful and polite to your classmates and instructor both in and out of class. Please, NO cell phones or food in class.

You are expected to attend all lectures, to read the assigned materials, and to actively participate in class discussion. Participation helps synthesize class material, improves public speaking skills (very important regardless of your career path), and allows the class to draw from students' diverse experiences, backgrounds, and insights. Active participation includes sharing thoughts, asking relevant questions, summarizing information in a way that informs discussion, and otherwise engaging with the class in a professional manner. Participation and attendance will be evaluated using short quizzes throughout the semester. Absences may (at the discretion of the instructor) be excused with either a 7-day advance notice or a valid doctor's note.

Assignments for: (1) Journal-ready paper; and (2) In-class exercises

It is imperative that graduate students gain experience with academic writing; scholarly writing is perhaps the most important skill that you will develop and refine while in grad school. Throughout the semester, each student in the graduate sections of the course will work toward applying their analytic toolkit to a natural resource policy problem, and develop a journal-ready paper.

There are five assignments related to development of the paper, worth 40% of your final grade. Additionally, there are two ‘fun’ class exercises that I would like you to engage with, worth 10% of your final grade.

In fairness to those who turn in their assignments on time, late work will be penalized @ -5% per day late (including weekends). Details of each assignment will be posted on the class website throughout the semester.

Assignments – Journal-ready paper		Deadline	% of course grade
1	Identify topic; summarize problem statement	Sept. 13	5%
2	Article map and outline	Sept. 27	5%
3	Introduction, literature review, and methods sections	Oct. 20	5%
4	Results, discussion, and conclusion section	Nov. 10	5%
5	Final draft of the paper	Dec. 1	20%
<i>Total.....</i>			<i>40%</i>
Assignments – Class exercises*		Deadline	% of course grade
1	Policy debate and short position paper	Debates Oct. 4 and 6; Short papers due Oct. 11	5%
2	Policy development - a play	Oct. 25 or Nov. 1	5%
<i>Total.....</i>			<i>10%</i>

*NOTE: Students enrolled in the online sections are expected to participate in the in-class group activities, which will be modified to ensure full participation.

Discussion, Questions, and Reactions

Each Thursday, the grad-only sections will meet to discuss assigned readings and other matters. These discussions will be recorded and posted on the Sakai site for graduate students in the online sections to watch. To facilitate active discussion of the readings, I ask that each student **submit one discussion question per reading** that was assigned that week. These are due by **5pm each Wednesday** by email.

Online sections only: In lieu of direct participation in the discussion, you are asked to submit a brief (less than a page) reaction to the prior week's discussion video. These are also due by **5pm each Wednesday** by email.

Evaluation of Student Learning

50%	Assignments (7)
20%	Midterm exam
20%	Final exam
10%	<u>Class participation (discussion questions, reaction to video, etc.)</u>
100%	Total

Grading Scale (NOTE: minus grades are not assigned)

90-100%: A	87-89.9%: B+	77-79.9%: C+	67-69.9%: D+	0-59.9%: E
	80-86.9%: B	70-76.9%: C	60-66.9%: D	

Please see <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html> for information about UF course grade policies.

Schedule of Class Topics (subject to change):

Dates	Topics	Readings	Due* (excl. discussion)
<i>Section I: Resource policy definition, process, and analytical framework</i>			
Tue, Aug 23	Course introduction	None	
Thu, Aug 25	Overview of natural resource policy	Tietenberg Ch.1; Rosenbaum Ch.1; Ellefson 1992: Forest Resource Policy.	
Tue, Aug 30	Valuing and categorizing goods and services	Tietenberg Ch.2; Letson and Milon Ch.2.	
Thu, Sep 01	Social welfare; Collective action	Peterson 2001: Public Policy and the Problem of Collective Action.	
Tue, Sep 06	The Study of Policy, part 1	Rosenbaum Ch. 2.	
Thu, Sep 08	The Study of Policy, part 2; Policy issues and formulation	Rosenbaum Ch. 3.	
Tue, Sep 13	Policy implementation, evaluation, and analysis	Cubbage et al. 1993: Policy Analysis, Evaluation and Implementation; Bardach 2000: Introduction to 'A Practical Guide for Policy Analysis'.	Paper assignment 1: Topic and Problem statement
Thu, Sep 15	Local government and the policy process; Public support and policy pragmatism	Robbins 2006: The Politics of Barstool Biology; Brody 2008: Principles of Effective Ecosystem Management and Planning".	
<i>Section II: Economics of natural resource policies</i>			
Tue, Sep 20	Welfare economics and policy evaluation	Tietenberg Ch.2 (reprise).	
Thu, Sep 22	Economics of ecosystem functions, goods, and services	Tietenberg Ch.3.	
Tue, Sep 27	Valuation methods	Tietenberg Ch.3 (reprise).	Paper assign. 2: Article map and outline

Thu, Sep 29	Policy design and economic incentives	Tietenberg Ch.4; Rosenbaum Ch.5; Bowles 2008: Policies Designed for Self-Interested Citizens...	
Tue, Oct 04	Class exercise	Handouts assigned.	Class ex. assignment 1: Debate (1st assigned groups)
Thu, Oct 06	Class exercise	Handouts assigned.	In-class assignment 1: Debate (2nd groups)
Tue, Oct 11	Review for Midterm Exam		Position papers from In-class assignment 1 (all groups)
Thu, Oct 13	<i>Midterm Exam</i>		Exam
Tue, Oct 18	Ethical considerations in public policy	Rosenbaum Ch.4; Society of American Foresters Code of Ethics; Tietenberg Ch.21.	
Thu, Oct 20	Equity and policy evaluation	Tietenberg Ch.5.	Paper assign. 3: Intro., lit. review, and methods
Tue, Oct 25	Class exercise		Class exer. assignment 2: Policy play (1st assigned group)
Thu, Oct 27	Ecological economics and system complexity	Jordan 1995: Ecological Economics; Chee 2004: An Ecological Perspective on the Valuation of Ecosystem Services.	

Tue, Nov 01	Class exercise		Class exer. assignment 2: Policy play (2nd group)
<i>Section III: Review of specific policies</i>			
Thu, Nov 03	Forest management and policy in the US: <i>Organic Act</i> (1897), <i>Weeks Act</i> (1911), <i>Wilderness Act</i> (1964), <i>National Forest Management Act</i> (1976), and beyond	Rosenbaum Ch. 9; Weyerhauser and Giltmier 1997: Forest Management Policy in the US; Tietenberg Ch.13.	
Tue, Nov 08	Climate change and bioenergy policies in the US and Florida: <i>Clean Air Act</i> (1963 and amendments), Renewable portfolio standards, Regional Cap-and-Trade programs, Kyoto Protocol and beyond	Tietenberg Ch.8; Rosenbaum Ch. 6 and 10.	
Thu, Nov 10	Climate change and bioenergy policies in the US and Florida, cont'd	Shogren and Toman 2006: How much climate change is too much? An economics perspective; Tietenberg Ch.17	Paper assignment 4: Results, discussion and conclusion
Tue, Nov 15	Endangered species: <i>CITES</i> (1973), <i>Endangered Species Act</i> (1973 and amendments)	Anderson 2000: The Evolution of the Endangered Species Act; Feldman and Brennan 2000: Judicial Application of the Endangered Species Act.	
Thu, Nov 17	Invasive species impacts and policies: <i>Lacey Act</i> (1900), <i>Animal Health Protection Act</i> and <i>Plant Protection Act</i> (2002)	Webster et al. 2006: Woody Invaders and the Challenges They Pose to Forest Ecosystems in the Eastern United States; other readings TBA.	

Tue, Nov 22	Fisheries management: <i>Magnuson-Stevens Fishery Conservation and Management Act</i> (1976 and amendments); <i>Florida's net ban constitutional amendment</i> (art. X, § 16).	Weber 2002: From Abundance to Scarcity: A History of U.S. Marine Fisheries Policy; Yandle and Dewees 2003: Privatizing the Commons ... Twelve Years Later: Fisher's Experiences with the New Zealand's Market-Based Fisheries Management; Tietenberg Ch.14.	
Thu, Nov 24	University holiday (Thanksgiving) - No class		
Tue, Nov 29	Water resource policy: <i>Clean Water Act</i> (1972 and amendments); <i>Florida's Silviculture Best Management Practices</i> (1979 and 2008)	Tietenberg Ch.10; In-class movie: <i>Flow</i> ; Florida Silviculture BMPs.	
Thu, Dec 01	To be announced	TBA.	Paper assignment 5: Final draft
Tue, Dec 06	Review for Final Exam		
TBA	<i>Take Home Final Exam</i>		Exam

***Excludes discussion questions and reactions**

Additional References

Recommended web sites:

U.S. government:

[U.S. Army Corps of Engineers](#)
[U.S. Bureau of Land Management](#)
[U.S. Department of the Interior](#)
[U.S. Fish and Wildlife Service \(USDOJ\)](#)
[U.S. Forest Service](#)
[U.S. Department of Agriculture](#)
[U.S. Geological Survey](#)
[National Oceanic and Atmospheric Administration](#)
[Environmental Protection Agency](#)
[PARKNET: The National Park Service on the Web](#)
[Council on Environmental Quality - NEPA](#)
[Government Printing Office: Bill Browsing](#)
[Tracking Government Bills \(govtrack.us\)](#)
[Government Accountability Office](#)
[Congressional Budget Office](#)
[Library of Congress](#)
[CRS Issue Briefs](#)
[United States Senate](#)
[U.S. House of Representatives](#)
[Congressional Quarterly](#)

Environmental and forestry non-governmental organizations:

[American Forests](#)
[American Rivers Home Page](#)
[Sierra Club Home Page](#)
[The Nature Conservancy](#)
[Natural Resources Defense Council](#)
[Resources for the Future](#)

Other Information

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted an [honor code](#) and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

[Property and Environment Research Center](#)
[Competitive Enterprise Institute](#)
[National Parks Conservation Association](#)
[Environmental Law Institute](#)
[Environmental Defense Fund WorldWide](#)
[Greenpeace International Home Page](#)
[Natural Resource Defense Council: Environmental Links](#)
[World Resources Institute](#)
[International Institute for Sustainable Development \(IISD\)](#)

Florida-specific:

[Florida Department of Environmental Protection](#)
[Florida Fish & Wildlife Conservation Commission](#)
[Florida Division of Forestry](#)
[Gainesville City Commission Meeting Schedule](#)
[Alachua legacy lands](#)

Other useful information sources:

[UNEP - Geneva Executive Center](#)
[Yale Environment 360](#)
[ConservationEconomy.net](#)
[Water Center Home Page](#)
[EnviroLink](#)
[EarthTrends \(environmental database\)](#)
[Natural Resources Research Info Pages](#)
[Commission for Environmental Cooperation \(CEC\)](#)
[Earth Resources Observation Systems](#)

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, Student Honor Council, or Student Conduct and Conflict Resolution in the Dean of Students Office.

(Source: 2011-2012 Graduate Catalog)

It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor.

This policy will be vigorously upheld at all times in this course.

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/*
Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Training Programs
Community Provider Database
- *Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/*

Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/