

FNR4660 NATURAL RESOURCE POLICY & ECONOMICS

Lectures and Discussion: On demand via UF's Canvas site

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Course Technology and Website: UF *e-Learning in Canvas* at lss.at.ufl.edu. You can use Canvas to access lectures, take quizzes and exams, submit assignments, send class-related emails, check your grades, see class announcements, etc. Please check the Canvas site regularly.

Course Communications: Canvas's Inbox is the best way to get in touch about any class-related questions, concerns, etc. during the semester.

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

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
- Develop a policy position 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, and
- Advance your ability to critically evaluate natural resource policy issues from economic, policy, environmental, and social perspectives.

Required Text and Additional Readings:

Required text: Rosenbaum, W.A. 2020. *Environmental Politics and Policy, 11th Edition*. CQ Press: Washington, DC.

Additional readings (Available through Canvas):

Section I: Resource policy definition, process, and analytical framework

1. Ellefson, P.V. 1992. "Forest Resource Policies." In: *Forest Resource Policy: Process, Participants, and Programs*. McGraw-Hill, New York.
2. Peterson, F. 2001. "Public Policy and the Problems of Collective Action." In: *The Political Economy of Agricultural, Natural Resource, and Environmental Policy Analysis*. Iowa State University Press, Ames, IA.
3. Stokey, E. and Zeckhauser, R. 1978. *A Primer for Policy Analysis*. W.W. Norton & Co: New York.
4. Cabbage, F.W, J. O'Laughlin, and C.S. Bullock III. 1993. "Policy Analysis, Evaluation, and Implementation." In: *Forest Resource Policy*, John Wiley & Sons, New York.
5. Robbins, P. 2006. "The Politics of Barstool Biology: Environmental Knowledge and Power in Greater Northern Yellowstone." *Geoforum* 37(2): 185-199.

Section II: Economics of natural resource policies

6. Letson, D. 2002. "Principles of Economic Valuation." In: Letson, D. and J.W. Milon (eds.), *Florida Coastal Environmental Resources: A Guide to Economic Valuation and Impact Analysis*, Florida Sea Grant College Program, Gainesville, FL.
7. Tietenberg, T. and L. Lewis. 2011. "The Economic Approach: Property Rights, Externalities, and Environmental Problems." In: *Environmental and Natural Resource Economics, 9th Ed.*, Pearson Education, Boston, MA.
8. Hanley, N., J.F. Shogren, and B. White. 2001. "Valuing the Environment and Natural Resources." In: *Introduction to Environmental Economics*, Oxford University Press, Oxford.
9. Boardman, A.E., D.H. Greenberg, A.R. Vining, and D.L. Weimer. 2006. "Introduction to Cost-Benefit Analysis." In: *Cost-Benefit Analysis: Concepts and Practice, 3rd Ed.*, Pearson Education, Upper Saddle River, NJ.
10. VanDeVeer, D., and C. Pierce. 1994. "An Introduction to Ethical Theory." In: *The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics*, Wadsworth Publishing Co., Belmont, CA.
11. Jordan, Carl F. 1995. "Ecological Economics." In: *Conservation*, John Wiley & Sons, New York.
12. Chee, Yung En, 2004. "An Ecological Perspective on the Valuation of Ecosystem Services," *Biological Conservation*, 120:549-565.

Section III: Review of specific policies

13. Weyerhaeuser, R. and J.W. Giltmier. 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.
14. Winfree, R., B.J. Gross, and C. Kremen. 2011. "Valuing pollination services to agriculture." *Ecological Economics*, 71:80-88.
15. Christmann, S. 2019. "Under which conditions would a wide support be likely for a Multilateral Environmental Agreement for pollinator protection?" *Environmental Science and Policy*, 91:1-5.
16. Hall, Damon M., and Rebecca Steiner. "Insect pollinator conservation policy innovations at subnational levels: Lessons for lawmakers." *Environmental science & policy* 93 (2019): 118-128.
17. 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.
18. 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.
19. Weber, M.L. 2002. "Conclusion." In: *From Abundance to Scarcity: A History of U.S. Marine Fisheries Policy*. Island Press, Washington, DC.
20. 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 and Instructional Methods:

We will cover different topics using lectures and assigned readings, quizzes, discussion, and occasional out-of-class assignments. Please see the *Course Schedule* for more information about topics covered. In addition to quizzes and assignments, open-book exams are used to assess learning. Please see *Evaluation of Student Learning* for more information about exams and grades.

The class is taught in topic-focused modules that incorporate brief quizzes and collaborative learning group (CLG) discussion. Lectures are pre-recorded posted in Canvas, where they will be accessible throughout the semester. 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.

Collaborative Learning Group:

Each student will use Canvas to self-select a Collaborative Learning Group (CLG) of 3 to 5 students. The purpose of the CLG is to provide a ready network of peers that can meet regularly to discuss class readings, help with exam preparation and assignments, and generally improve your understanding of course topics. Students are encouraged to meet regularly with their CLG, and, occasionally, you can earn bonus points for CLG-related work (see Schedule). There will also be a space in Canvas for CLGs to meet or to post questions, comments, and discussion threads.

Course Policies on Assessments, Make-ups, and Late Submissions:

Quizzes and attendance: Active engagement with the course is critical to your success in FNR4660. To encourage this, you will be assessed via brief quizzes that follow each lecture module, and will be available for 1 week. There will be approximately 17 quizzes during the semester. You can drop 3.

Students are expected to stay current with all readings, lectures, and quizzes; to submit assignments and take exams on the scheduled dates; and to regularly communicate with their CLG group about the lectures and readings, and with the instructor about any questions or concerns about the course. Students are also encouraged to participate in bi-weekly discussions, which help 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.

Make-up exams and late assignments: Make-up exams are given at the discretion of the instructor, but they are generally not allowed, particularly without a 14-day advance notice or a valid doctor's note. Assignments are due via Canvas by midnight of their due date. Unless otherwise agreed, late assigned work will be penalized as follows:

- 10% if between 1 minute and 24 hours late
- 20% if 24 to 48 hours late
- 30% if 48 to 72 hours late
- 40% if 72 to 96 hours late
- Not accepted if more than 96 hours late

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies, which can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Policies and Requirements

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance through Canvas.

Late Submissions and Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. **Respect for individual differences and alternative viewpoints will be maintained in this class at all times.** All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, and Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

At the end of the semester, students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Academic Honesty Policy

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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."*

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct or appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website: <http://multicultural.ufl.edu>.

Services for 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. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. 0001 Reid Hall, 352-392-8565 <https://disability.ufl.edu/>

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

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFRC Academic Hub <https://ufl.instructure.com/courses/303721>

Student Life, Wellness, and Counseling Help

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.

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care <http://www.umatter.ufl.edu/>
- Career Connections Center <http://career.ufl.edu/>
- Student Health Care Center: <https://shcc.ufl.edu/>

- University Police Department: <https://police.ufl.edu/>
- UF Health Shands Emergency Room/Trauma Center: <https://ufhealth.org/emergency-room-trauma-center>
- GatorWell Health Promotion Services: <https://gatorwell.ufsa.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

Academic Resources

- Library Support: <https://uflib.ufl.edu/find/ask/>
- Teaching Center: <https://teachingcenter.ufl.edu/>
- Writing Studio: <https://writing.ufl.edu/writing-studio/>

Student Complaint Process

The School of Forest, Fisheries, and Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that all of our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered.

If you have a more urgent concern, your first point of contact should be the FFGS Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- Students in online courses: <http://www.distance.ufl.edu/student-complaint-process>
- Students in face-to-face courses: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

Hitchcock Field & Fork Pantry

The Hitchcock Field & Fork Pantry is a free resource to support UF undergraduate and graduate students, faculty, and staff experiencing any level of food insecurity. Experiencing food insecurity may mean you have faced challenges to meeting your needs in quantity and nutritional quality of food. For example, food insecurity may look like eating ramen because you can't afford foods you consider healthy, nutritious, or appropriate for yourself, to outright skipping meals or eating smaller meals.

If you're not sure about whether you fit the criteria, come anyway! You only need to bring your UFID; you do not need to prove that you are in need. The Pantry does not discriminate based on income, class, race, ethnicity, gender, out-of-state or international student status, housing status, or ability.

The Pantry doesn't just offer canned food! The Pantry offers fresh, seasonal produce, frozen meat, milk, eggs, vegan options, menstrual products, and select toiletries. They are happy to accommodate requests if you can't find what you need your first time.

The Pantry assures guests, potential and current, that accessing emergency services like the Pantry is not a reflector of one's self worth, nor are they taking resources from someone "more deserving" or "more in need" than themselves.

You can visit the Pantry website (pantry.fieldandfork.ufl.edu) for more information including current hours. The Pantry is located between Marston Science Library and McCarty Hall, behind the HUB, on the University of Florida Gainesville campus.

Evaluation of Student Learning (Grades):

10%	Participation quizzes*
30%	Exams** (3), 10% each <ul style="list-style-type: none">• Exam 1 – 9/20• Exam 2 – 11/1• Exam 3 – (Non-comprehensive final exam) – 12/13
60%	Assignments*** (4), 15% each <ul style="list-style-type: none">• Assignment 1: Public meeting paper – due 10/4• Assignment 2: Application of economic principles to policy issue – due 10/27• Assignment 3: Policy critique – due 11/10• Assignment 4: Policy position paper – due 12/8
100%	Total

* Quizzes follow each lecture module. There will be approximately 17 of these quizzes during the semester. You can drop 3.

** Exams are taken online via Canvas. They are open-book/open-notes, and they last about an hour. Your highest exam grade replaces your lowest one.

*** Details of each assignment can be found in Canvas. All assignments are due online *by 11:59PM* of the due date.

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	

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Course Schedule

	Week	Dates	Lecture Topics Covered (and duration)	Readings for Lecture	Assignments Due	Online Discussions
Section I: Resource policy process, analytical framework	1	Thu, 8/25	Course introduction (22:11)			
	1	Tue, 8/30	1 - Overview of natural resource policy Part 1 (51:56), Part 2 (15:42)	Rosenbaum Ch.1; Ellefson (<i>1st half</i>)		
	2	Thu, 9/1	2 - Social welfare; Collective action Part 1 (27:55), Part 2 (22:51)	Peterson; Stokey and Zeckhauser		Discussion 1
	2	Tue, 9/6	3 - The study of policy Part 1 (23:33), Part 2 (18:29)	Rosenbaum Ch. 2; Ellefson (<i>2nd half</i>)		
	3	Thu, 9/8	3 - The study of policy Part 3 (16:58), Part 4 (16:21)	"		
	3	Tue, 9/13	4 - Policy issues and formation Part 1 (17:41), Part 2 (31:00)	Rosenbaum Ch. 3		
	4	Thu, 9/15	5 - Policy implementation, evaluation, and analysis Part 1 (27:47), Part 2 (39:03)	Cubbage et al.	CLG Bonus 1	Discussion 2
	4	Tue, 9/20	EXAM 1			
	5	Thu, 9/22	6 - Local government and the policy process; Public support and policy pragmatism Part 1 (19:34), Part 2 (23:57)	Robbins		
Section II	5	Tue, 9/27	7 - Valuing and categorizing goods and services Part 1 (25:18)	Letson		Discussion 3
	6		7 - Valuing and categorizing goods and services			

		Thu, 9/29	Part 2 (29:57) 8 - Welfare economics and policy evaluation; Economics of ecosystem services Part 1 (32:20)	" Tietenberg and Lewis		
	6	Tue, 10/4	8 - Welfare economics and policy evaluation; Economics of ecosystem services Part 2 (34:59)	"	Assign. 1: Public meeting paper	
	7	Thu, 10/6	9 - Valuation methods Part 1 (33:00), Part 2 (19:03)	Hanley et al.		
	7	Tue, 10/11	10 - Policy design and economic incentives Part 1 (26:43), Part 2 (16:26)	Rosenbaum Ch.5; Boardman et al.		
	8	Thu, 10/13	10 - Policy design and economic incentives Part 3 (36:59)	"		
	8	Tue, 10/18	11 - Ethical considerations in public policy Part 1 (18:09), Part 2 (15:27)	Rosenbaum Ch.4; VanDeVeer and Pierce		
	9	Thu, 10/20	11 - Ethical considerations in public policy Part 3 (40:51)	"	CLG Bonus 2	Discussion 4
	9	Tue, 10/25	12 - Ecological economics and system complexity Part 1 (45:30)	Jordan; Chee		
	10	Thu, 10/27	12 - Ecological economics and system complexity Part 2 (31:40)	"	Assign. 2: Applying economic principles	
	10	Tue, 11/1	EXAM 2			
Section III:	11	Thu, 11/3	13 - Forest management and policies in the US: <i>Organic Act, Weeks Act, Wilderness Act, National Forest Management Act</i> , and beyond	Rosenbaum Ch. 9; Weyerhauser and Gilmier		Discussion 5

		Part 1 (28:20), Part 2 (27:16), Part 3 (37:56)			
11	Tue, 11/8	14 - Climate change policies in the US and Florida: <i>Clean Air Act</i> , Kyoto Protocol, etc. Part 1 (22:42)	Rosenbaum Ch. 6 (pp. 198-219); Rosenbaum Ch. 10	CLG Bonus 3	
12	Thu, 11/10	14 - Climate change policies in the US and Florida Part 2 (52:39)	"	Assign. 3: Policy position paper	Discussion 6
12	Tue, 11/15	14 - Climate change policies in the US and Florida Part 3 (30:19)	"		
13	Thu, 11/17	15 - Pollination services policy in the US Part 1 (11:51), Part 2 (20:47), Part 3 (28:13)	Winfree; Christmann; Hall and Steiner		
13	Tue, 11/22	16 - Endangered species policies Part 1 (23:32)	Anderson; Feldman and Brennan		
14	Thu, 11/24	No Class - Thanksgiving			
14	Tue, 11/29	16 - Endangered species policies Part 2 (26:54), Part 3 (16:49), Part 4 (13:49)	"		Discussion 7
15	Thu, 12/1	17 - Fisheries management policies: <i>Magnuson- Stevens Act</i> ; <i>Florida's net ban</i> (art. X, § 16) Part 1 (17:05), Part 2 (19:45)	Weber; Yandle and Deweese		
16	Tue, 12/6	N/A		Assign. 4: Policy critique; CLG Bonus 4	
	Tue, 12/13	EXAM 3			

Disclaimer: This syllabus represents current course plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.