

## NATURAL RESOURCE POLICY & ECONOMICS

### Course Syllabus

#### Lectures and Discussion:

Lectures: On demand via UF's Canvas site

Discussion (times TBA): sec. 7002: 222 Newins-Ziegler Hall; All other sections: zoom link

#### Instructor: Dr. Damian C. Adams

Office: 355 Newins-Ziegler Hall

Email: (1) Canvas Inbox (*preferred*); (2) dcadams@ufl.edu

Phone: 352-846-0872

#### Office Hours: By appointment

**Course 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. 2013. *Environmental Politics and Policy, 9th 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, 9<sup>th</sup> 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, 3<sup>rd</sup> 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. 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.

14. 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.
15. 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.
16. 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.
17. Jenkins, P.T. 2013. "Invasive animals and wildlife pathogens in the United States: the economic case for more risk assessments and regulation." *Biological Invasions*, 15(2), 243-248.
18. Weber, M.L. 2002. "Conclusion." In: *From Abundance to Scarcity: A History of U.S. Marine Fisheries Policy*. Island Press, Washington, DC.
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:**

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 discussion (approx. once every two weeks). 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 (or will be assigned by the instructor to) 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:**

*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>

*Cell phone and Laptop Policy:* Before class starts, please turn your cell phone to silent (or off if it will distract you during class). Laptop use is allowed at the instructor's discretion. If you prefer to take notes on your laptop, that is fine; but checking social media or browsing the web is generally disruptive to your ability to learn and to engage with the class. If you are using your laptop in that way, you may be asked to close your laptop or leave the class.

### **UF Policies:**

*University Policy on Accommodating 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. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations. Contact: 0001 Reid Hall, 352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

*University Policy on Academic Misconduct:* 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 to 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/honorcodes/honorcode.php>

*Netiquette: Communication Courtesy:* All members of the class are expected to follow rules of common courtesy in all email messages, discussions and chats.  
<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

*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.

### **Getting Help with E-learning:**

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu)
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS 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 a make-up. Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

### **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/](http://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/](http://www.crc.ufl.edu/)*

**Evaluation of Student Learning (Grades):**

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|      |   |
|------|---|
| 10%  | Participation quizzes*  |
| 30%  | Exams** (3), 10% each <ul style="list-style-type: none"><li>• Exam 1 – Tuesday, 9/18</li><li>• Exam 2 – Thursday, 11/01</li><li>• Exam 3 – (Non-comprehensive final exam) – Thursday, 12/13</li></ul>   |
| 60%  | Assignments*** (4), 15% each <ul style="list-style-type: none"><li>• Assignment 1: Public meeting paper – due Thursday, 9/27</li><li>• Assignment 2: Application of economic principles to policy issue – due Tuesday, 10/23</li><li>• Assignment 3: Policy critique – due Thursday, 11/08</li><li>• Assignment 4: Policy position paper – due Tuesday, 12/04</li></ul> |
| 100% | Total   |

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\* 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 midnight* 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**

| Section I: Resource policy process, analytical framework | Week       | Dates      | Lecture Topics Covered  | Readings for Lecture                      | Assignments Due | In-class/online Discussions |
|--|------------|------------|---|---|-----------------|-----------------------------|
|  | 1          | Thu, 08/23 | Course introduction   |   |                 |                             |
|  | 2          | Tue, 08/28 | 1 - Overview of natural resource policy   | Rosenbaum Ch.1; Ellefson (1st half)       |                 |                             |
|  | 2          | Thu, 08/30 | 2 - Social welfare; Collective action   | Peterson; Stokey and Zeckhauser           |                 | Discussion (12:50-1:40)     |
|  | 3          | Tue, 9/04  | " (2 <sup>nd</sup> half)<br>3 - The study of policy (1 <sup>st</sup> half)                                    | "<br>Rosenbaum Ch. 2; Ellefson (2nd half) |                 |                             |
|  | 3          | Thu, 09/06 | " (2 <sup>nd</sup> half)  | "   |                 |                             |
|  | 4          | Tue, 09/11 | 4 - Policy issues and formation<br>5 - Policy implementation, evaluation, and analysis (1 <sup>st</sup> half) | Rosenbaum Ch. 3<br>Cubbage et al.         |                 | Discussion (12:50-1:40)     |
|  | 4          | Thu, 09/13 | " (2 <sup>nd</sup> half)  | "   |                 |                             |
|  | 5          | Tue, 09/18 | <b>EXAM I</b>   |   |                 | CLG Bonus 1                 |
|  | 5          | Thu, 09/20 | 6 - Local government and the policy process; Public support and policy pragmatism                             | Robbins                                   |                 |                             |
| 6  | Tue, 09/25 | "          | "   |   |                 |                             |

|   |    |            |   |   |  |                            |
|---|----|------------|---|---|--|----------------------------|
| <b>Section II: Economics of natural resource policies</b> | 6  | Thu, 09/27 | 7 - Valuing and categorizing goods and services   | Letson                                  | Assign. 1:<br>Public meeting paper         | Discussion<br>(12:50-1:40) |
|   | 7  | Tue, 10/02 | " (2 <sup>nd</sup> half)<br>8 - Welfare economics and policy evaluation;<br>Economics of ecosystem services | Tietenberg and Lewis                    |  |                            |
|   | 7  | Thu, 10/04 | " (2 <sup>nd</sup> half)  | "                                       |  |                            |
|   | 8  | Tue, 10/09 | 9 - Valuation methods   | Hanley et al.                           |  |                            |
|   | 8  | Thu, 10/11 | " (2 <sup>nd</sup> half)  | "                                       |  |                            |
|   | 9  | Tue, 10/16 | 10 - Policy design and economic incentives  | Rosenbaum Ch.5;<br>Boardman et al.      |  | Discussion<br>(12:50-1:40) |
|   | 9  | Thu, 10/18 | 11 - Ethical considerations in public policy  | Rosenbaum Ch.4;<br>VanDeVeer and Pierce |  |                            |
|   | 10 | Tue, 10/23 | " (2 <sup>nd</sup> half)  | "                                       | Assign. 2:<br>Applying economic principles |                            |
|   | 10 | Thu, 10/25 | 12 - Ecological economics and system complexity   | Jordan; Chee                            |  |                            |
|   | 11 | Tue, 10/30 | " (2 <sup>nd</sup> half)  | "                                       |  | Discussion<br>(12:50-1:40) |

|   |    |            |   |  |   |                         |
|---|----|------------|---|--|---|-------------------------|
| <b>Section III: Review of specific policies</b> |    |            | 13 - Forest management and policies 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      |   |                         |
|   | 11 | Thu, 11/01 | <b>EXAM 2</b>   |  |   | CLG Bonus 2             |
|   | 12 | Tue, 11/06 | " (2 <sup>nd</sup> half)  | "  |   |                         |
|   | 12 | Thu, 11/08 | 14 - Climate change policies in the US and Florida: <i>Clean Air Act</i> (1963 and amendments), Kyoto Protocol, etc.  | Rosenbaum Ch. 6 (pp. 198-219); Rosenbaum Ch. 9 | Assign. 3: Policy position paper        |                         |
|   | 13 | Tue, 11/13 | " (2 <sup>nd</sup> half)  | "  |   | Discussion (12:50-1:40) |
|   | 13 | Thu, 11/15 | 15 - Invasive species impacts and policies: <i>Lacey Act</i> (1900), <i>Plant Protection Act</i> (2002), etc.   | Webster et al.; Jenkins                        |   |                         |
|   | 14 | Tue, 11/20 | " (2 <sup>nd</sup> half)  |  |   |                         |
|   | 14 | Thu, 11/22 | <b>No Class – Thanksgiving</b>  |  |   |                         |
|   | 15 | Tue, 11/27 | 16 - Endangered species policies: <i>CITES</i> (1973), <i>Endangered Species Act</i> (1973 and amendments)  | Anderson; Feldman and Brennan                  |   |                         |
|   | 15 | Thu, 11/29 | " (2 <sup>nd</sup> half)  | "  |   | Discussion (12:50-1:40) |
|   | 16 | Tue, 12/04 | 17 - Fisheries management policies: <i>Magnuson-Stevens Fishery Conservation and Management Act</i> (1976 and amendments); <i>Florida's net ban</i> (art. X, § 16).                       | Weber; Yandle and Dewees                       | Assign. 4: Policy critique; CLG Bonus 3 |                         |
|   | 16 | Thu, 12/13 | <b>EXAM 3</b>   |  |   |                         |

**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.