

REP 371  
**Introduction to Natural Resource Economics and Policy**  
Fall 2006

**Time:** Tuesday & Thursday, 9:30 a.m. to 10:45 a.m.

**Location:** 201 Winslow Hall

**Instructor:** Mark W. Anderson, Senior Instructor, Department of Resource Economics and Policy; Coordinator, Ecology & Environmental Sciences Program

**Office:** 305 Winslow Hall

**Phone:** 581-3198

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**Office Hours:** Wednesdays, 8:00 to noon. Other times as available or by appointment.

**Course Purpose:**

- To build on your fundamental understanding of economic principles by application to issues of natural resources and the environment
- To begin to understand some of the debates within the economics discipline over resource and environmental issues and their economic aspects
- To apply economic theory to contemporary resource and environmental policy issues

**Course Pre-requisite:** The course assumes satisfactory completion of INT 110 or ECO 120. While we will do some review of relevant microeconomic principles at the beginning of the course, this review and the subsequent work in the course will assume a good understanding of the principles of microeconomics. This is a course designed to show how economic theories may help in resource and environmental policy. You should not be registered for this course if you have not successfully completed the pre-requisite.

**Texts:** Steven C. Hackett. 2006. Environmental and Natural Resources Economics. Armonk, NY: M.E. Sharpe.

Jonathan M. Harris and Anne-Marie Codur, "Microeconomics and the Environment" Medford, Mass.: Global Development and Environment Institute, Tufts University. This is available as a free .pdf download at:  
[http://www.ase.tufts.edu/gdae/education\\_materials/student\\_module\\_reg\\_form.html](http://www.ase.tufts.edu/gdae/education_materials/student_module_reg_form.html)

Additional readings for case studies will be supplied during the semester. These are

called Team Work Handouts in the syllabus below.

**Team Activities:** The majority of the course work in this class will be done in learning teams.<sup>1</sup> Course grades will be based on individual performance on Readiness Assessment Tests (RATs) and a final exam; on the product of team work; and on peer assessments by your team members. You will be assigned to one team for the semester.

**Grading:** Letter grades (no +/- grading) will be assigned based on the following class work:

Readiness Assessment Tests (RATs)		
Individual scores	15%	
Team scores	15%	
Team Exercises	15%	
Team papers (2)	15%	
Peer evaluation scores	20%	
Final Exam	20%	Per Final Exam Schedule

Missed classes and grades: RATs will be administered on the dates in the syllabus. There are no make ups if you miss that class. Everyone will get two missed RATs not counted in your final grade for official university travel, illness, and other personal reasons. Likewise, each Team will have their lowest Team RAT score dropped.

The final exam will be held as scheduled by Student Records. **Do not make your December travel plans until you know when the final is scheduled.**

**Late Work Policy:** Team work assignments are due on the date that is specified, either in the syllabus or on the paper assignments. Work not received on the date and time specified in the assignment will be considered one day late. Work received 24 hours after that will be considered two days late, and so on. For every day late, work will be assessed a one letter grade penalty off the grade the work earns before any penalty is assessed.

**Course Expectations:** What you can expect from me:

◆ that the requirements of the course are made clear;

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<sup>1</sup> See Larry K. Michaelsen, Arletta Bauman Knight, and L. Dee Fink. 2004. Team-Based Learning: A Transformative Use of Small Groups in College Teaching. Sterling, Virginia: Stylus Publishing.

- ◆ that I have thought about how what I ask you to read fits with what we do in class;
- ◆ that I will design exams and other course work that fairly evaluate whether you have learned and can apply the material from the course;
- ◆ that I will answer your questions in class and to be available outside of class as much as you need to meet your learning objectives;
- ◆ that I will offer course materials in ways accessible to students with various learning styles.

What I expect from you:

- ◆ that you will become familiar with the syllabus and take responsibility for knowing what you need to do in this class and when;
- ◆ that you will read assignments before class sessions, to take good and sufficient class notes, and to relate your class notes to the reading assignments;
- ◆ that you come to class prepared to discuss the reading assignments and to place them in the context of the material developed earlier in the semester. Attendance is necessary, but not sufficient, to meet the participation requirement of this course. You are responsible to other members of your team for your preparation and participation.
- ◆ that you invest sufficient time throughout the semester to meet your learning objectives — the course is designed such that the average students will need to spend six to nine hours outside of class each week to learn the material

**Reading Assignments:**

Tuesdays	Thursday
	September 7 -syllabus review -team-based learning explanation -RATs and careful reading -RAT #1 --pre-test individual and group (not graded)

<p>September 12  RAT #2 -- Supply and Demand and Market Decisionmaking  Hackett, Chapters 1, 2, &amp; 3.</p>	<p>September 14  Case Study -- Market Allocation of Gasoline  Team Work Handouts.</p>
<p>September 19  RAT #3 -- Externality Theory  Hackett, Chapter 4. Harris and Codur pp. 1-15.</p>	<p>September 21  Case Study -- Automobile Externalities  Team Work Handouts.</p>
<p>September 26  Case Study Continued</p>	<p>September 28  RAT #4 -- Common Property  Hackett, pp. 88-90; 92-97; 105-107; 123-125 &amp; Chapter 6 (excluding pp. 134-139). Harris and Codur, pp. 12-15 &amp; 36 - 43. Team Work Handouts. (N.B. this is the first RAT where handouts will be included in the tested materials.)</p>
<p>October 3  Case Study -- Dolphin Safe Tuna</p>	<p>October 5  Case Study Continued</p>
<p>October 10  Fall Break</p>	<p>October 12  RAT #5 -- Public Goods and Benefit/Cost Analysis  Hackett, Chapters 5 &amp; 7. Harris and Codur, pp. 9-15. Team Work Handouts: 1) Benefit Cost Analysis and 2) OMB A -94.</p>

<p>October 17 Case Study -- Maine Woods National Park</p>	<p>October 20 Case Study Continued Term Paper #1 prompt handed out.</p>
<p>October 24 RAT #6 Policy Template Development Hackett, Chapters 8 &amp; 9. Team Work Handouts: Congestion tax readings.</p>	<p>October 26 Policy Development Exercise  Preliminary Peer Feedback Forms due.</p>
<p>October 31 RAT #7 -- Natural Resource Allocation Hackett pp. 90-93. Team Work Handouts.</p>	<p>November 2 Case Study -- Should we drill for oil in ANWR?  Team Paper #1 Due</p>
<p>November 7 Case Study Continued</p>	<p>November 9 RAT #8 -- Climate Change Economics Hackett, Chapter 11. Harris and Codur, pp. 16 - 35. Team Work Handouts.</p>
<p>November 14 Case Study--Should the U.S. Join the Kyoto Protocol?</p>	<p>November 16 Case Study Continued Team Paper # 2 Prompt handed out.</p>
<p>RAT #9 -- Endangered Species Act. Team Work Handouts. Valuation taxonomy. ESA Prompt for Nov. 28 handed out.</p>	<p>Thanksgiving</p>

November 28 Case Study -- Should wolves be re-introduced to New England under the E.S.A.?	November 30 Case Study Continued
December 5 RAT #10 -- Trade and the Environment Hackett, Chapters 12 & 13. Team Work Handouts.	December 7 Case Study -- Should CAFTA be retained? <a href="http://www.stopcafta.org/">http://www.stopcafta.org/</a> <a href="http://www.fas.usda.gov/itp/CAFTA/cafta.html">http://www.fas.usda.gov/itp/CAFTA/cafta.html</a>
December 12 Case Study Continued	December 14 -Post-test individual and group (not graded) -evaluations  Team Paper #2 Due

Final Examination – per final exam schedule

Grading Rubric for team papers is below. I will use this when I evaluate the two papers that are due from teams during the semester.

After that is a rubric that I will ask each of you to complete for each of the other members of your team when you assign team contribution scores at the end of the semester.

**Grading Rubric for Team Work & Papers:**

Category	Superior	Good	Adequate	Inadequate
Organization: How clear and logical was the structure of the paper?	4	3	2	1
Source Materials: Were sources credible, current, and complete? (beyond Google?)	4	3	2	1
Academic Integrity: How thoroughly were source materials cited?	4	3	2	1
Citation/References: How well was the style guide followed?	4	3	2	1
Argument/Development: Were conclusions supported by fact and logic developed in the paper?	4	3	2	1
Application: How well were relevant theory and knowledge in the discipline applied?	4	3	2	1
Spelling, Grammar, and Punctuation	4	3	2	1
Style	4	3	2	1

Paper Grade: \_\_\_\_\_

Comments:

**Peer Evaluation Rubric for Contribution to Team Work:**

Name: \_\_\_\_\_

Category	Superior	Good	Adequate	Inadequate
Arrives fully prepared -- has read and thought about assignments	4	3	2	1
Actively supports, engages, and listens to other team members	4	3	2	1
Plays an active and constructive role in discussions	4	3	2	1
Comments advance the level and depth of the dialogue	4	3	2	1
Group dynamic and level of discussion are better because of his or her presence	4	3	2	1
Comments are respectful of the ideas of others	4	3	2	1
Comments draw on materials beyond those assigned	4	3	2	1
Comments demonstrate increasing mastery of key concepts over course of semester	4	3	2	1

Overall the strengths of this person’s contributions were as follows:

Overall, this person could have contributed more by doing the following: