

AEB 2450 (SECTION 6073)
VALUING ENVIRONMENTAL PROTECTION IN FLORIDA
FALL 2006

INSTRUCTOR

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OFFICE HOURS

I have an open door policy; you are welcome to knock on my door, email, or call me anytime. If you want to be sure I'll be in when it is convenient for you, please schedule an appointment. For the fastest response, use email. Please note that I teach another class during 5th and 6th periods on Mondays and Wednesdays so I will be unavailable from approximately 11:00am to 2:00pm on those days of the week.

CLASS TIMES AND LOCATION

Tuesday 7th period (1:55-2:45pm), McCarty A room G186
Thursday 7th-8th periods (1:55-2:45pm; 3:00-3:50pm); McCarty A room G186

DESCRIPTION AND OBJECTIVES

This course is designed to introduce students to how economists value the environment and regulations designed to protect our natural resources from overuse and degradation. The course will focus on current environmental issues facing Florida including growth management and land use, water/air quality, endangered species, and amenity/recreational uses. Guest speakers and video clips will provide compelling arguments for tightening or loosening current regulations. At the end of the course, students should be able to:

1. discuss current resource use issues in Florida;
2. describe the three primary resource valuation techniques and how they are used; and
3. identify and define relevant economic concepts related to resource valuation and use.

COURSE MATERIALS

WebCT Vista (<http://lss.at.ufl.edu>) will have a copy of the syllabus and will be your source for continually updated information on your grade. You will need to use your Gatorlink account to access this site. Look for the course titled “AEB2450 – Environmental Protection (Larkin) - Fall 2006 - Sect. 6073”. There is an email function within this website, which means you need to access the messages while you are in WebCT (i.e., if you send me a message through WebCT, you will need to log back in to see the response).

The required readings for this course will be available through Internet links or downloadable PDF files on WebCT in the "Readings" folder. If you would like more information on the valuation techniques, you are encouraged to explore the following site, which serves as the primary source of information discussed in class:

King, D.M. and M. Mazzotta. *Ecosystem Valuation*. Internet site funded by the U.S. Department of Agriculture Natural Resources Conservation Service, Washington, DC and the National Oceanographic and Atmospheric Administration, Silver Spring, MD. <http://ecosystemvaluation.org/>.

The course will also utilize articles printed in the *Gainesville Sun*. If you do not have a daily subscription to this local newspaper, you can register for free online access at: <http://www.gainesville.com>. While I will assign specific articles for discussion, I will expect you to read articles that are printed between classes. All information in the Gainesville Sun, especially those appearing on the front page, are sources of questions for the weekly assessments.

STUDENT EVALUATION

Your grade will be based on how many points you earn out of 500. The majority of those points (300 points or 60%) will be from weekly in-class assessments; the remainder (200 points or 40%) will be from a cumulative final exam. Course grades will be assigned as follows:

<u>Grade</u>	<u>Percentage</u>	<u>Total points</u>	<u>Performance</u>
A	90% or more	≥450	excellent
B+	87 - 89.9%	435-449	very good
B	80 – 86.9%	400-434	good
C+	77 – 79.9%	385-399	adequate
C	70 – 76.9%	350-384	acceptable
D+	67 – 69.9%	335-349	marginally acceptable
D	60 – 66.9%	300-334	weak
E	< 60%	≤ 299	unacceptable

The in-class assessments will occur each Thursday during class and will be worth 25 points each. We have a total of 13 class meetings on Thursdays (excluding August 24th, the first day of class) so 12 of those will count towards this component of your grade.

A total of 45 bonus points will be available through written assignments that describe the application of each non-market valuation method (i.e., contingent valuation, travel cost, and hedonic pricing). Each bonus will be worth 15 points and will need to be submitted electronically through the WebCT assignment page or through Turnitin.com. To be eligible for full credit, you must answer all questions in 600 to 1,000 words and submit your summary on time.

PROTOCOL AND COURSE POLICIES

- Class attendance is required in the sense that you will be responsible for all material covered and all reading reassignments. We will continually be discussing relevant articles from the Gainesville Sun, so material will be timely.
- In addition to reviewing articles from the Gainesville Sun, class time will consist of guest speakers, videos, lectures, and the assessments. Please be courteous of your fellow students and guest speakers by arriving to class on time, staying the duration, turning off cell phones, and leaving laptops in your bag.
- I will not take role for credit, nor will I provide copies of my notes. Consider making arrangements with other students for class notes (including any assigned readings) if needed.
- If you have a question regarding grading, you **MUST** contact me immediately. If you wish to 'appeal' a grade (i.e., get more points), you must state your case in writing within one week. Be specific about your concern and the resolution you desire. Include your original assignment since I will re-evaluate your entire submission.
- For clarification, you cannot ask about past assessments or any grades more than a week after they have been returned to you.
- Begging for more points, especially in December, will be fruitless.
- Missed assessments cannot be re-scheduled unless you (1) contacted me in advance through WebCT or by telephone and (2) have a documented extraordinary situation.
- You are allowed to drop your lowest in-class assessment scores since only 12 of the total 13 will be counted toward your grade. This is your insurance policy for missing an assessment, or doing poorly on an assessment.
- All email **MUST** be through WebCT since it is tractable and all course information will be in one place; any emails to my ufl.edu address will be *ignored*.
- Please see me with any questions or issues you may have, that's what I'm here for.

UF POLICIES AND ASSISTANCE

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.

Academic Dishonesty

As a result of completing the registration form at UF, every student has agreed to the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

The Dean of Students Office (DSO) can be contacted for questions regarding the Student Honor Code, which can be found at: <http://www.dso.ufl.edu>, by following links to Judicial Affairs - Academic Honesty - Student Honor Code.

Counseling Services

Resources are available on campus for students having personal problems or lacking clear career and academic goals that may interfere with their academic performance. These resources are listed in the following table.

Counseling Service	Center	Location	Telephone
Personal and career	Univ. Counseling Center	301 Peabody Hall	392-1575
Personal	Student Mental Health	Student Health Care Ctr.	392-1171
Sexual assault	Sexual Assault Recovery Services (SARS)	Student Health Care Ctr.	392-1161
Career assistance	Career Resource Center	Reitz Union	392-1601

Disabilities

Students with disabilities are not required to register with any agency on campus. However, if you would like to request specific classroom accommodations as a result of a disability, you are required to register with the Office for Student Services (OSS). Students with disabilities are responsible for ensuring that the university is aware of disabilities requiring accommodations in the educational process. Students with disabilities should contact the Dean of Students Office in P202 Peabody Hall, as it is the only designated campus agency responsible for classroom accommodations.

Student Services

The Dean of Students Office provides a variety of services to students, in addition to help with disabilities. On the Internet they can be found at <http://oss.ufl.edu>. The College of Agricultural and Life Sciences also has a student website with additional information on a variety of student-related issues at <http://cals.ufl.edu>.

COURSE CONTENT

Local Resource Use Issues

- Florida aquifer
- Stormwater
- Water quality
- Water policy
- Rodman Reservoir vs Ocklawaha River
- Management of threatened/endangered species (e.g., manatees)
- Growth management
- Land use: resiliency, non-renewability, agricultural vs. development, local government
- Forestlands, agricultural lands, natural lands: benefits of natural services vs. public costs
- Residential lawns
- Land conservation programs
- Energy: costs and benefits of alternatives
- Economic value of environmental quality

Resource Valuation Techniques

- Three non-market valuation techniques: contingent valuation, hedonic pricing, travel cost
- “Stated” and “revealed” preference techniques
- Application to value: manatees, Ichetucknee Springs, Rodman Reservoir, Ocklawaha River, farmland, parks (e.g., Westside, Cofrin, vs. San Felasco State Park)

Relevant Concepts (definitions of key terms)

- Non-market valuation
- Option, existence, bequest, and non-use values
- Willingness to pay (WTP)
- Eminent domain
- Cost of community services (COCS)
- Agritourism
- Clustering as a growth management tool
- Carbon sequestration
- Opportunity cost
- Anthropocentrism with respect to environmental policy
- Common pool, private, vs. public goods
- Externalities
- Market failure
- Xeri-scapingTM vs. zero-scaping
- Conservation easements
- Transferable development rights (TDRs)
- Eutrophication
- Ecological footprint
- Sustainability

Synthesis Questions

- Do all decisions require us to put “the economy versus the environment”? Why or why not?
- Does environmental protection need to be “all or nothing”? Why or why not?
- Does the environment (i.e., quality of air, water, and soils) need to be cleaner and safer regardless of the cost? Why or why not?

Guest Speakers

- Jerry A. Scarborough, Executive Director, Suwannee River Water Management District
- Edward Regan, AGM-Strategic Planning, Gainesville Regional Utilities
- Lauren Day, Executive Director, Alachua Conservation Trust, Inc.
- Mike Byerly, Board of County Commissioners, Alachua County
- Scottie J. Butler, Admin-Asst/General Counsel, Florida Farm Bureau Federation
- Karen Ahlers, Ocklawaha River Project Coordinator, Florida Defenders of the Environment
- Ed Taylor, President, Save Rodman Reservoir, Inc.
- Ramesh P. Buch, Program Manager, Alachua County Forever Land Conservation Program
- Barry Rutenberg, President, Barry Rutenberg Homes

Videos

- “Discoveries America... Florida”
- “Water’s Journey: The Hidden Rivers of Florida”
- “Water’s Journey: The River Returns”
- “Manatees: Species in Peril”
- “Gimme Green”
- “The Ecological Footprint: Accounting for a Small Planet”

SUMMARY OF READINGS

Journal Articles and Book Chapters:

- Blanchard, B. 2006. “Humans Living Far Beyond Planet’s Means, WWF Says.” *Environmental News Network*, Reuters (24 October 2006).
- Carlson, S. 2006. “The Sustainable University: In Search of the Sustainable Campus,” *The Chronicle of Higher Education*, 20 October 2006.
- Cason, J.D., D.L.Grebner, A.J. Londo and S.C. Grado. 2006. “Potential for Carbon Storage and Technology Transfer in the Southeastern United States.” *Journal of Extension* 44(4): 4FEA6.
- Irwin, E. 1999. “Explaining Sprawl in Exurban Areas: The Role of Open Space.” *Agricultural, Environmental and Development Economics (AEDE)*, The Ohio State University.
- Lerner, S. and W. Poole. 1999. *The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line*. The Trust for Public Land, pp. 48.
- Letson, D. 2002. “Principles of Economic Valuation,” Chapter 2, p. 7-14. In *Florida Coastal Environmental Resources: A Guide to Economic Valuation and Impact Analysis*, D. Letson and J.W. Milon, eds. Florida Sea Grant, pp. 229.

- Letson, D. 2002. "Valuing Market and Non-Market Goods and Services," Chapter 4, p. 25-40. In *Florida Coastal Environmental Resources: A Guide to Economic Valuation and Impact Analysis*, D. Letson and J.W. Milon, eds. Florida Sea Grant, pp. 229.
- Loomis, J. 2005. "Economic Values without Prices: The Importance of Nonmarket Values and Valuation for Informing Public Policy," *CHOICES* 20(3):179-182.
- Madsen, T. and R. Sargent. 2006. *Making Sense of the "Coal Rush": The Consequences of Expanding American Dependence on Coal*. Executive Summary (p. 4-6). Florida PIRG Education Fund, July 2006, pp. 56.

American Farmland Trust Fact Sheets (www.farmlandinfo.org):

- Cost of Community Services (COCS) Studies (August 2004, pp. 6)
- Right-to-Farm Laws (September 1998, pp. 2)
- Why Save Farmland? (January 2003, pp. 3)
- Agricultural Conservation Easements (June 2005, pp. 2)
- Transfer of Development Rights (TDR) (January 2001, pp. 4)

The Conservation Fund, The Trails and Greenways Clearinghouse Fact Sheets (www.trailsandgreenways.org):

- Enhancing the Environment with Trails and Greenways (pp. 4)
- Economic Benefits of Trails and Greenways (pp. 4)

Ecosystem Valuation (www.ecosystemvaluation.org):

- Basic Concepts of Economic Value
- Valuation of Ecosystem Services
- Dollar-based Ecosystem Valuation Methods
- Application of Ecosystem Value Estimates: Benefit-Cost Analysis

Gainesville Sun Articles, Fall 2006 (www.Gainesville.com):

- "Changing the Rules Affecting Conservation Easements"
- "County to Get \$13M for Land Preservation"
- "Danger: Hazards Lurking"
- "Developers Eye Forests North of Gainesville."
- "What's Putting the Itch in the Ichetucknee?"
- "Hurdles for Manatees"
- "Manatees Lose Their Status"
- "Sante Fe High Paving over Pasture"
- "County Looks to Take Steps to Protect Springs"
- "Pay to Paddle? State Considers New Boating Tax"
- "Protecting Pristine Places"
- "Initiatives would return power to property owners"
- "Nelson: Clean up Polluted Koppers"
- "Septic Tanks Blamed for Coastal Pollution"