

Introduction to Natural Resources and Environmental Economics

AEB 3450 Class Number 10143 (3 credit hours)

Spring Semester 2020

MWF 9:35-10:25 am Online

Instructor

Dr. Jana Hilsenroth

Pronouns: she, her, hers

Office Location: Zoom (Canvas Homepage)

Office Hours: W & R 10:30am-12pm and by appointment

Email: jana.hilsenroth@ufl.edu

Course website: <http://elearning.ufl.edu>

Teaching Assistant

Bixuan Yang, Ph.D. Candidate

Pronouns: she, her, hers

Office Location: Zoom (Canvas Homepage)

Office Hours: F 10:30-11:30 am

Email: yangbixuan@ufl.edu

Zoom Link for All Synchronous Sessions

<https://ufl.zoom.us/j/93623148736?pwd=R2g4VURIZGJjdnlZUXJxc0FYQ3RIUT09>

Required Text

Tietenberg, T. and L. Lewis. 2011. *Environmental and Natural Resource Economics*, 10th Edition. Addison-Wesley/Pearson: Boston, MA. ISBN: 0133479692

Course Description

This course is designed to introduce students to natural and environmental resource economics issues and theory. Emphasis is placed on understanding economic concepts such as resource scarcity, property rights, opportunity costs, sustainability, and valuation in their application to studies of natural resources and environmental amenities. Key social and demographic factors will be evaluated in the context of the demand for environmental assets and amenities.

Prerequisites: *AEB 3103* or *ECO 2023*.

Student Learning Outcomes

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

- Apply economic principles to problems involving public and private natural resources and the environment
- Critically evaluate natural resource and environmental policies using basic economic tools (e.g. graphical welfare analysis)
- Understand the economic justification for regulatory action in allocating, managing, and protecting the environment and natural resources

Course Communications

The preferred way to get ahold of the instructor outside of class and office hours is via Canvas e-mail, or direct e-mail. All students are expected to check the course web site on Canvas on a daily basis. Please ensure that you have access to this service as grades, assignments,

readings, announcements, and schedule changes will be posted there. In addition, the instructor may use the Canvas inbox or your UF e-mail for specific communications and, therefore, those should be checked daily. You should enable Canvas notifications for this class, so that you are notified immediately about grading, schedule changes, announcements, etc.

Expectations

Format

Within each week, this course will have synchronous and asynchronous sessions. The Zoom link and schedule for the synchronous sessions can be found on Canvas. I will send out a course announcement for any changes in the synchronous scheduling. It is expected to have your camera on and microphone muted during class discussions. While you can use any device to connect to our sessions, a computer is ideal to switch between programs, share your screen with your teammates, and simultaneously accessing Canvas.

Time Commitment

The University policy is that each credit hour is associated with a 45-hour commitment (=135 total hours), including the time spent studying and reading. This course has been accelerated to end right after Thanksgiving Break (December 2nd), resulting in a total of 13 weeks. An approximate breakdown of this time commitment is ~10 hours per week.

Conduct

I will not tolerate any language or behavior which violates the following expectations within the classroom or breakout sessions:

Meaningful and constructive dialogue is encouraged 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 at all times in this class. One's words and use of language should be temperate and within acceptable bounds of civility and decency.

Evaluation of Student Learning

Assessment	Points
<i>iRAT (15 pts each x 9) 10 overall, lowest dropped</i>	135
<i>tRAT (20 pts each x 9) 10 overall, lowest dropped</i>	180
<i>Pre/Post Survey (10 pts each)</i>	20
<i>Team Evaluation: Mid-semester</i>	10
<i>Team Evaluation: Final</i>	50
<i>Exam (100 pts each x 3)</i>	300
Total	695

Exams: Three exams will be given throughout the semester, accounting for 300 points of your grade. While these exams are not cumulative, the material does build on previous content.

Exam 1: September 28th

Exam 2: October 23th

Exam 3: December 2nd

Team-Based Learning (TBL):

Team-based learning advocates self-directed learning of course content and facilitates application of new knowledge within small collaborative teams. Team-based learning is conducted in the following steps:

1. Students individually prepare (i.e. read book chapter/article, watch a video, listen to podcast) for the upcoming class with specific learning objectives. This is done outside of the classroom.
2. Individual-readiness assurance test (iRAT). To ensure accountability students will take a short test on the prepared material.
3. Team-readiness assurance test (tRAT). Teams then take an identical test to the iRAT to ensure team accountability. This also allows for immediate feedback and helps identify misconceptions and works to clarify them.
 - a. ****Appeals:** A team, not individual, may appeal a question on the tRAT. To do so successfully, the team must provide a written rationale, with supporting evidence, which makes the case that the answer to the question is wrong or is unclear. Teams have three days from the date of the tRAT to submit their appeal to the instructor by e-mail.
4. Team applications. Teams work together to complete a team application. This application typically ask students to integrate their knowledge into real world problems.
5. Team Evaluation. Teams will evaluated team members' performance twice during the semester. A mid-semester evaluation will be an "informal" evaluation while the final evaluation will determine the team member's grade. All evaluations are anonymous.

Absence Policy:

Team-based learning: We are expected to complete 10 TBL modules during this course. The lowest iRAT and tRAT will be dropped. In the event you are absent during an iRAT/tRAT, this would count as your lowest grade.

Exams: In the case of documented illnesses or emergencies, arrangements for completing the make-up exam should be made upon return to class.

If experiencing truly extenuating circumstances resulting in longer absences, the instructor should be notified as soon as possible to develop plan of action.

Grading Scale and Policy

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	

Note: Minus grades are not assigned. In case of a grading dispute, students must notify the instructor via e-mail within *three days of the date the assignment is returned* on Canvas.

Course Outline

Subject to change to enhance the class learning opportunity. Such changes will be communicated clearly and can happen. Up-to-date scheduling and prep work will be posted on Canvas.

Day	Topic	Book Chapter	Format
8/31	Course introduction		Synchronous
9/2	Visions of the future	Ch. 1	Asynchronous
9/4	Intro to TBL	-	Synchronous
9/7	Labor Day		
9/9	TBL Teams	-	Synchronous
9/11	Property rights, externalities, and market failures: iRAT/tRAT/App	Ch. 2	Synchronous
9/14	Benefit-Cost Analysis	Ch. 3	Asynchronous
9/16	→iRAT/tRAT		Synchronous
9/18	→Application		Synchronous
9/21	Valuating the environment	Ch. 4	Asynchronous
9/23	→iRAT/tRAT		Synchronous
9/25	→Application/Review		Synchronous
9/28	Exam 1	-	Asynchronous
9/30	Dynamic efficiency and sustainable development	Ch. 5	Asynchronous
10/1	→iRAT/tRAT		Synchronous
10/5	→Application		Synchronous
10/7	Depletable Resource allocation	Ch. 6	Asynchronous
10/9	→iRAT/tRAT		Synchronous
10/12	→Application		Synchronous
10/14	Energy & Recyclable resources	Ch. 7 & 8	Asynchronous
10/16	→iRAT/tRAT		Synchronous
10/19	→Application		Synchronous
10/21	Catch-up/Review		Synchronous
10/23	Exam 2		Asynchronous
10/26	Allocation of Water	Ch. 9	Asynchronous
10/28	→iRAT/tRAT		Synchronous
10/30	→Application		Synchronous
11/2	Forests	Ch. 11	Asynchronous
11/4	→iRAT/tRAT		Synchronous
11/6	→Application		Synchronous
11/9	Fisheries	Ch. 12	Asynchronous
11/11	Veteran's Day		
11/13	→iRAT/tRAT		Synchronous
11/16	→Application		Synchronous
11/18	Climate Change	Ch. 17	Asynchronous
11/20	→iRAT/tRAT		Synchronous
11/23	→Application		Synchronous
11/25	Thanksgiving Break		
11/27	Thanksgiving Break		
11/30	Catch-up/Review		Synchronous
12/2	Exam 3		Asynchronous

UF Policies

Recorded Materials

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. 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 and Plagiarism

Academic honesty and integrity are fundamental values of the University community. University of Florida students are bound by The Honor Pledge, which states:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code."

On all work submitted for credit by students 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"*. The UF Honor Code is available in its full form at <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>.

Students with Disabilities

Students requesting accommodation for disabilities must first register with the Disability Resource Center (DRC). The DRC 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. Upon registering, the DRC 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 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. The DRC may be contacted by visiting 001 Reid Hall, calling 352-392-8565, or visiting their web site at www.dso.ufl.edu/drc/.

Campus Helping Resources

Your well-being is important to me and the University of Florida community. Students experiencing crises or personal problems that interfere with their general well-being or academic performance are strongly encouraged to talk to the instructor or take advantage of the university's counseling resources, available at no cost for currently enrolled students.

- *U Matter, We Care.* 292-2273. UF's umbrella program for UF's caring culture. Provides students in distress with support and coordination of the wide variety of appropriate resources. <http://umatter.ufl.edu>
- *University Counseling Center & Wellness Center,* 3190 Radio Rd., 392-1575. Personal and career counseling, as well as therapy for anxiety, stress and mental health issues. <http://www.counseling.ufl.edu/cwc/>
- *Dean of Students Office,* 202 Peabody Hall, 392-1261. Among other services, the DSO assists students who are experiencing situations that compromises their ability to attend classes. This includes family emergencies and medical issues (including mental health crises). <https://www.dso.ufl.edu/care>
- *Teaching Center,* Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- *Writing Studio,* 2215 Turlington Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-center/>.
- *Career Connections Center,* First Floor JWRU, 392-1601, <https://career.ufl.edu/>.
- *Fork and Field Pantry.* Food and toiletries for students experiencing food insecurity. <https://pantry.fieldandfork.ufl.edu/>.
- *UF Help Desk.* 392-4357. Technical support for computer issues and UF web services. <http://helpdesk.ufl.edu/>
- *University Police Department,* 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>
- *Library Support,* <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with using the libraries or finding resources.