Resource Economics (NRES 372/572) Spring 2022

(3 credits: two 1-hour lectures and one 1-hour discussion)

INSTRUCTOR: Dr. Melinda Vokoun **OFFICE:** TNR 376

PHONE: 715-346-2342 (office) EMAIL: mvokoun@uwsp.edu

Class Time:	Lecture Section 1 : Tues. & Thurs. 8:00 am – 8:50 am	TNR 254
	Discussion Section 1: Thurs. 10:00 am – 10:50 am	TNR 352

Lecture Section 2: Tues. & Thurs. 2:00 pm - 2:50 pmTNR 170Discussion Section 1: Fri. 11:00 am - 11:50 amTNR 320Discussion Section 2: Thurs. 4:00 pm - 4:50 pmTNR 320

Final Exam: <u>Lecture 1</u>: Tues., May 17, 2022 10:15 am – 12:15 pm TNR 254

Lecture 2: Thurs., May 19, 2022 8:00 am - 10:00 am TNR 170

Office Hours: Tuesday 9-10 am and Wednesday 11 am - 12 pm in person or via Zoom (link available in Canvas course page). If you have a question and these hours do not work for you, please ask for an appointment, just send me an email with some days/times that you have available.

Text: Tietenberg, Tom & Lynne Lewis. 2010. *Environmental Economics & Policy*. 6th ed. Addison-Wesley, Boston, Mass. 526 p. (**EEP**)

Course Learning Outcomes: Students in this course will learn the principles of microeconomics, their use and application, specifically relating to natural resource management and policy. Upon completion of this course, students will be able to:

- 1. Use economic tools and frameworks to make decisions regarding natural resource management
- 2. Define economic and ecological values for ecosystem services and propose appropriate methods to assess these values
- 3. Identify market failures in natural resource economies and reasons for, and effects of, policy interventions
- 4. Apply calculations to make economically sound decisions and comparisons of policy approaches to address market failures

Forestry Core: This course is part of the Forestry Core Curriculum. All forestry concentrations include the Forestry Core Curriculum and are accredited by the Society of American Foresters (SAF). Students in this course will fulfill part of SAF curriculum competencies (parts fulfilled are bolded):

- Foundational knowledge in the biological, physical, mathematical, and social sciences, humanities, and communications to support student success in the technical curriculum. (C4-3)
- Foster analytical and critical reasoning skills, including systematic problem solving and decision making (SAF C4-6)
- Knowledge of the multiple uses of forest land and the potential conflicts that can arise between uses (SAF C4-C.1)
- Knowledge of natural resource and environmental policy (SAF C4-C.2)
- Understanding the value of various tree species and products (SAF C4-C.7)

Assessment: Class activities will be conducted to determine whether course learning outcomes are being met. You will never be individually identifiable in any information collected & used for this purpose however I may use any information provided (but will never associate a name with it).

Grading: This class consists of 320 total points. There will be:

- 4 case studies each counting for 19 points: Case study articles and directions will be uploaded to Canvas, you are expected to participate in a discussion associated with the article and prompts.
- 3 written exams each counting for 60 points: Written exams will be delivered in person during assigned times in the respective lecture rooms, on the date listed in the syllabus.
- 8 problem sets each counting for 8 points (there are 9 assigned problem sets, drop the lowest score): Problem sets will be assigned on the first discussion day listed in the syllabus and due on the following Tuesday.

Grading scale: 100-92 = A, 91-90 = A-, 89-88 = B+, 87-82 = B, 81-80 = B-, 79-78 = C+, 77-72 = C, 71-70 = C-, 69-68 = D+, 67-60 = D, <60 = F

Instructor's rules:

- (1) Discussion of course material and assignments between students is encouraged, however all work must be done independently, unless directed otherwise.
- (2) Cheating and/or plagiarism will not be tolerated. https://www.uwsp.edu/dos/Documents/UWSP14-Final2019.pdf
- (3) Absences: If you plan to miss an exam, you must let me know ahead of time <u>and</u> provide a legitimate explanation as for your absence. Unexcused absences or delayed notification (unless reasonable) will result in a ZERO for the exam. Discussion assignments will be due the lecture period following discussion (Tuesday), unless otherwise specified. Late assignments incur a <u>5% per day penalty</u>. If you are subject to quarantine or isolation because of COVID, please notify me so that we can arrange for alternate delivery of course materials.
- (4) All written work is expected to be neat and well organized. Work that is illegible will receive a zero.
- (5) Students will be responsible for downloading and printing course notes from Canvas. Students find it very helpful to do this before lecture to better follow along and take notes during lecture.
- (6) Disruptive behavior will not be tolerated. It diminishes the opportunity for learning by peers, and shows disrespect to your peers and to your instructor. Students will receive ONE warning about disruptive behavior. At the second instance the student will be asked to leave class and will forfeit **ALL** opportunities to receive credit for any activities conducted that day. A third instance will result in disciplinary action following university guidelines, see: https://www.uwsp.edu/dos/Documents/UWSP-CH17-Updated-August2020.pdf
- (7) A simple calculator with the ability to compute exponents <u>will be necessary</u> for this class. Use of phones or other electronic devices to conduct calculations <u>IS NOT</u> an acceptable practice.
- (8) Upon entering the classroom, cell phone/smart phones ringers will be turned off or muted.

Tips for success, from former successful students:

- 1. Attend class. If you do miss, get notes from someone who takes complete notes.
- 2. Notes: Write down what's on the slides and what the instructor is saying. It is helpful to print out PowerPoint handouts prior to class for note-taking purposes.
- 3. Attend group tutoring. Use the study guides to make exam notecards.
- 4. If you have questions, see Dr. V she'll make sure that you understand.

Face Coverings: At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

Additional Support Resources: The Tutoring-Learning Center (TLC) offers <u>free</u> group tutoring to support you in this class. Times and locations will be listed during the 2nd week of class, for group tutoring that begins the week of 9/20, see: http://www.uwsp.edu/tlc/Pages/schedules.aspx
Tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and content knowledge to help others succeed. Reviewing, discussing, and practicing concepts together clarifies and solidifies knowledge, and the tutors are eager to study with you. If you have questions or would like to make an appointment, please visit the TLC in ALB 018 (library basement), email (tlctutor@uwsp.edu), or call (715) 346-3568 for information.

Disability Statement: Any student who anticipates they may need an accommodation based on the impact of a disability (including mental health, chronic or temporary medical conditions) should contact me privately to discuss your specific needs. Students are also encouraged to contact the Disability and Assistive Technology Center (DATC) at 715-346-3365 or at datctr@uwsp.edu to seek further assistance. Students currently registered with the DATC may provide their Notice of Accommodation letter during office hours, electronically via email, after class, or all.

Copying, recording, and use of instructional materials: Lecture materials and recordings for Resource Economics are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Principles of professionalism: The College of Natural Resources at the University of Wisconsin – Stevens Point prepares students for success as professionals in many fields. As a professional, there are expectations of attainment of several personal characteristics. These include:

Integrity

Integrity refers to adherence to consistent moral and ethical principles. A person with integrity is honest and treats others fairly.

Collegiality

Collegiality is a cooperative relationship. By being collegial you are respecting our shared commitment to student education through cooperative interaction. This applies to all involved in the process: students, staff, faculty, administration and involved community members. You take collective responsibility for the work performed together, helping the group attain its goals.

Civility

Civility refers to politeness and courtesy in your interactions with others. Being civil requires that you consider the thoughts and conclusions of others and engage in thoughtful, constructive discussion to express your own thoughts and opinions.

Inclusivity

Inclusivity requires you to be aware that perspective and culture will control how communication is understood by others. While many values are shared, some are quite different. These differences in values should be both considered and respected.

Timeliness

Timeliness is the habit of performance of tasks and activities, planned in a way that allows you to meet deadlines. This increases workplace efficiency and demonstrates respect for others' time.

Respect for Property

Respect for property is the appreciation of the economic or personal value an item maintains. Maintaining this respect can both reduce costs (increase the operable life of supplies and equipment) as well as demonstrate respect for others rights.

Communication

Professional norms in communication require that you demonstrate the value of your colleagues, students, professors or others. The use of appropriate tone and vocabulary is expected across all forms of communication, whether that communication takes place face to face, in writing or electronically.

Commitment to Quality

Quality is the ability to meet or exceed expectations. By having a commitment to quality, we intend to provide a learning environment that is conducive to learning. Intrinsic to this commitment to quality is defining expectation (committed to in a syllabus through learning outcomes), implementation (with quality control in place) and assessment (where meeting of learning outcomes is determined).

Commitment to Learning

Learning is a lifelong process. By being committed to learning you are providing a model for all to follow. This model is not only professor to student but involves all combinations of people within our university and broader community

Adherence to this compact is required of the faculty and staff of the College of Natural Resources and of all students enrolled in College of Natural Resources courses.

Inclusivity Statement

Your instructor, as a member of the forestry discipline, following the lead of the Society of American Foresters which accredits the B.S. forestry degree, believes we all have a responsibility in creating a safe, inclusive, professional environment in all forestry-related activities and events. All forms of discrimination, harassment, and bullying are prohibited. This applies to all participants in all settings (online and in-person) and locations (on- and off-campus) where classes and associated activities are conducted, including student organization events and activities, committee meetings, workshops, conferences, and other work and social functions where employees, volunteers, sponsors, vendors, or guests are present.

Discrimination is prejudicial treatment of individuals or groups of people based on their race, color, creed, religion, age, sex, sexual orientation, gender identity or expression, national origin, ethnicity, ancestry, disability, pregnancy, marital or parental status, veteran status, or any other category protected by law.

Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that creates an intimidating, hostile, or offensive environment. Sexual harassment constitutes discrimination and is illegal under federal, state, and local laws.

Bullying is unwelcome, aggressive behavior involving the use of influence, threat, intimidation, ridicule, hazing or coercion to dominate others in the professional environment. Bullying behavior may go beyond characteristics protected by applicable laws, including but not limited to, political views, dress, or other outward physical appearances.

Other types of harassment include any verbal or physical conduct directed at individuals or groups of people because of their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws, that creates an intimidating, hostile, or offensive environment.

The following list, while not exhaustive, includes examples of unacceptable behavior: slurs, jokes, threats, or derogatory comments relating to the characteristics noted above. Examples of inappropriate physical harassment that violate this statement include, but are not limited to: assault, unwanted touching, or impeding or blocking movement. In addition, no individual may be denied admission to, or participation in or the benefits of, any UWSP-associated events. Similarly, the display or circulation of derogatory or demeaning posters, cards, cartoons, emails, texts, videos, and graffiti which relate to characteristics noted above violate this statement.

Reporting

Students, staff, faculty, or guests associated with Forestry-related programming who experience or witness incidents of harassment are strongly encouraged to report the incident. The Forestry discipline strongly urges the prompt reporting of complaints or concerns so that rapid and constructive action can be taken.

Reporting can be done online or in person, to a faculty or staff member, and/or the UWSP Dean of Students. Anonymous reporting is available.

The UWSP Title IX Website is the home for all information related to harassment and discrimination, including reporting options, student and employee resources, and information about what happens after a report is submitted:

https://www.uwsp.edu/titleix/Pages/default.aspx

Emergency procedures:

In the event of a medical emergency, call 911 or use red emergency phone located immediately outside OR near the classroom (TNR 170, TNR 254) and for discussion (TNR 352, TNR 320). Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure at classroom (TNR 170, TNR 252), second floor interior hallway near central lobby stairs (discussion).

In the event of a fire alarm, evacuate the building in a calm manner. Meet at Pointer dog sculpture on TNR west side (lecture 1), in the sundial (lecture 2 and discussion in TNR 352) on east lawn (discussions meeting in TNR 320). Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders. See UW-Stevens Point Emergency Management Plan for details on all emergency response at UW-Stevens Point at https://www.uwsp.edu/emergency/Pages/emergency-procedures.aspx

NRES 372 – Spring 2022 – Tentative Lecture Outline

Dates	Topic(s)	Readings (EEP)
1/25, 1/27	Introduction; Economics for the environment	Chap 1 & 2
2/1, 2/3	Markets: Consumers & Demand	Chap 2 & 4
2/8, 2/10	Markets: Producers & Supply; Outcomes & Interactions	Chap 2 & 4
2/15, 2/17	Markets, Valuing the environment methods introduction	Chap 7 & 3
2/22, 2/24	Methods for valuing the environment	Chap 3
3/1, 3/3	Exam 1; Valuing the environment: Concepts	Chap 2 & 3
3/8, 3/10	Valuing the environment: Concepts	Chap 2 & 3
3/15, 3/17	Market failures; public goods market failures	Chap 4
3/21 - 3/25	Spring break no class	No class
3/29, 3/31	Integrating Natural & Social Science: Forest management	Chap 12
4/5, 4/7	Integrating Natural & Social Science: Forest management and forest/land policies	Chap 12 & 10
4/12, 4/14	Exam 2; Negative consumption externalities	Chap 4 & 13
4/19, 4/21	Integrating Natural & Social Science: Marine Fisheries	Chap 13
4/26, 4/28	Integrating Natural & Social Science: Fisheries Policies	Chap 13
5/3, 5/5	Negative production externalities; Integrating Natural & Social Science: Pollution	Chap 4 & 14
5/10, 5/12	Integrating: Natural & Social Science: Pollution policies	Chap 14
FINALS	Final Exam** Lecture 1 5/17 10:15 am – 12:15 pm Lecture 2: 5/19 8:00 am – 10:00 am	EXAM

^{**}The Final course exam will NOT cover all material learned over the course of the semester, however understanding economics, its role & importance in natural resource management is a cumulative process.

NRES 372 Spring 2022 Tentative Discussion and Assignment Schedule

Week	Topic	Assignment	Assigned	Due	
1	Introduction discussion	Pre-test	In discussion		
2	Consumers & Demand	Problem set 1	2/3/22	2/8/23	
3	Producers & Supply; Interactions	Problem set 2	2/10/22	2/15/22	
4	Price elasticity and shifts	Problem set 3	2/17/22	2/22/22	
5	Review				
5	Case study 1		2/2/22	2/23/22	
6	Exam (Introduction – Methods for valuing env.)	Exam 1	3/1/22	3/1/22	
7	Concepts for valuing the environment	Problem set 4	3/10/22	3/15/22	
8	Case study 2		2/28/22	3/16/22	
9	Spring Break				
10	Public Goods	Problem set 5	3/31/22	4/5/22	
11	Review				
12	Exam (Concepts for valuing envforest/land pol)	Exam 2	4/12/22	4/12/22	
12	Case study 3		3/28/22	4/13/22	
12	Negative consumption externalities	Problem set 6	4/14/22	4/19/22	
13	Marine fisheries	Problem set 7	4/21/22	4/26/22	
14	Pollution/neg prod externalities	Problem set 8	4/28/22	5/3/22	
15	Case study 4		4/18/22	5/4/22	
15	Pollution policy outcomes	Problem set 9	5/5/22	5/10/22	
16	Review				
Finals	s Exam Lecture 1: 10:15 am to 12:15 pm			5/17/22	
Finals	nals Exam Lecture 2: 8:00 am to 10:00 am			5/19/22	