Resource Economics (NRES 372/572) Spring 2023

(3 credits: two hours asynchronous online lectures and one-hour F2F discussion per week)

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

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Class Time: Lecture: Asynchronous online via Canvas

 Discussion:
 Section 1: Thursday
 10:00 am - 10:50 am
 TNR 320

 Section 3: Thursday
 2:00 pm - 2:50 pm
 TNR 320

 Section 2: Friday
 11:00 am - 11:50 am
 TNR 320

Final Exam Slot: None since lecture is online – I selected Tuesday May 16, 2023, but TBD

Student Hours: Monday 1-2 pm 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 by sending me an email from Canvas 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**)

General Education Program (GEP): Successful completion of this course will fulfill 3 credits of Human Cultures and the Sciences requirements with the UWSP GEP in the Social Sciences Category. Social Sciences GEP (hereafter Soc Sci GEP) Outcomes are:

- 1) Explain or apply major concepts, methods, or theories used in the social sciences to investigate, analyze, or predict human behavior.
- 2) Examine and explain how social, cultural, or political institutions influence individuals or groups.

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 natural resource management decisions (Soc Sci GEP 1)
- 2. Define economic and ecological values for ecosystem services and propose appropriate methods to assess these values (Soc Sci GEP 1)
- 3. Identify market failures in natural resource economies and reasons for, and effects of, policy interventions (Soc Sci GEP 1, 2)
- 4. Apply calculations to make economically sound decisions and comparisons (Soc Sci GEP 1, 2)

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** prerequisites in the biological, physical, mathematical, **and social sciences**, humanities, and communications **to support student success in the professional curriculum**. (C4-3)
- an understanding of the valuation procedures, including market and nonmarket forces, that play a role in forest management decisions (SAF C4-C.6)

- an ability to synthesize product utilization and pricing, management costs, financial discounting and land and timber valuation in the context of a management plan or evaluation of competing management alternatives or strategies (SAF C4-C.7)
- an understanding of the non-market, cultural, and ecological values that forest can provide (SAF C4-C.8)
- an ability to analyze existing data to predict the economic, environmental, and social consequences of forest resource management strategies and decisions. (SAF C4-D.6.)

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 350 total points. There will be:

- 3 case studies each counting for 17 points: Case study articles and directions will be uploaded to Canvas.
- 3 written exams each counting for 60 points: Written exams will be delivered in person during assigned times in the respective discussions, the final will be online in Canvas during finals week.
- 9 problem sets each counting for 9 points (there are 10 assigned problem sets, I will drop your lowest score if it doesn't negatively impact your grade): Problem sets will be assigned in discussion (Thurs or Fri) and due on the following Tuesday as an upload to Canvas.
- Weekly "knowledge check" lecture quizzes due Thursdays (starting week 2) prior to the first discussion period, 9:59 am, 7 points per third of the class: These will accumulate and total to 21 points over the course of the semester.
- Jim and Katie Krause CNR Undergraduate Research symposium assignment 11 points
- Initial discussion assessment 6 points

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 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 discussion materials.
- (4) All written work is expected to be neat and well organized. Work that is illegible will receive a zero.

- (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.

Attendance Policy: Lectures will be asynchronous online – you are expected to view them as outlined and complete any associated tasks in a timely manner and by any deadlines provided. Discussion sessions are very important. You will learn concepts in lectures and put them into practice in discussion where you will also learn, review and gain practice with applications of course material. Absences from discussion, inability to view lectures and/or complete tasks due to illness, family emergency, or University sponsored activities will be excused provided a written explanation, provided by the students, is given to and acknowledged by the instructor prior to the intended absence, except for emergencies, in which case explanation should be submitted as soon as practical. If you are feeling ill, please do stay away from our F2F meetings out of respect to others, just let your instructor know in advance, if possible. If any absence of any kind occurs on days when assignments are due, it is your responsibility to see that the assignment is turned in by assigned due date/time in order to receive credit. Habitually missing classes and not viewing/studying online materials almost always results in lower grades! You are strongly encouraged to attend all class meetings, view, and study all class material.

Additional Support Resources: The Tutoring-Learning Center (TLC) offers <u>free</u> STEM Individual and Drop-In tutoring to support you in this class. Times and locations will be listed during the 2nd week of class, see: https://www3.uwsp.edu/tlc/Pages/CA-tutoring.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. Discussing concepts and processes 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 at the previous link, in CCC 234, email (tlctutor@uwsp.edu), or call (715) 346-3568 for information.

Accessibility Statement: Any student who needs an academic accommodation due to the impact of a disabling condition (including ADHD, learning disabilities, psychological and/or medical conditions, or temporary injury) should contact the Disability Resource Center (DRC) at 715-346-3365, dre@uwsp.edu, or www.uwsp.edu/drc to determine reasonable accommodations. The DRC supports students and faculty in the notification and implementation of those accommodations, in accordance with the University's obligations under federal law and Board of Regents policy (see https://www.uwsp.edu/datc/Pages/law-regent-policy.aspx). Students can seek accommodations in a course at any time but are advised to do so early in the semester to ensure sufficient time to establish.

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.

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

Know/remember that course takes place at the University of Wisconsin-Stevens Point, which occupies lands of the Ho-Chunk and Menominee people. Please take a moment to acknowledge and honor the ancestral Ho-Chunk and Menominee land and the sacred land of all indigenous peoples.

Emergency procedures:

In the event of a medical emergency, call 911 or use the red emergency phone located immediately outside OR near the discussion classroom. 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 second floor interior hallway near central lobby stairs.

In the event of a fire alarm, evacuate the building in a calm manner (going north and east). Meet on the east lawn near the pipe sculpture. 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://www3.uwsp.edu/emergency/Pages/emergency-procedures.aspx

NRES 372 - Spring 2023 - Tentative Lecture Outline

Week of (Wk)	Topic(s)	Readings (EEP)
1/22 (1)	Introduction; Economics for the environment	Chap 1 & 2
1/30 (2)	Markets: Consumers & Demand	Chap 2 & 4
2/6 (3)	Markets: Producers & Supply; Outcomes & Interactions	Chap 2 & 4
2/13 (4)	Markets, Methods of valuing the environment	Chap 7 & 3
2/20 (5)	Methods for valuing the environment, exam 1 review	Chap 3
2/27 (6)	Valuing the environment: Concepts	Chap 2 & 3
3/6 (7)	Concepts for valuing the environment; Market failures	Chap 2, 3, 4
3/13 (8)	Positive consumption externalities public goods market failures	Chap 4
3/20 (9)	Spring break no class March 18 - March 26, 2023	No class
3/27 (10)	Forest management decisions as public goods externalities	Chap 12
4/3 (11)	Forest and land use decisions and policies, exam 2 review	Chap 12 & 10
4/10 (12)	Negative consumption externalities aka open access & common property failures	Chap 4 & 13
4/17 (13)	Marine Fisheries as negative consumption externalities and policies	Chap 13
4/24 (14)	Negative production externalities & the pollution problem	Chap 13
5/1 (15)	Approaches and policies to address pollution	Chap 4 & 14
5/8 (16)	Pollution policies, final exam review	Chap 14
FINALS	Final Exam** Will be scheduled online in Canvas	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	Initial assessment	In discussion			
2*	Consumers & Demand	Problem set 1	2/2, 2/3	2/7/23		
3*	Producers & Supply; Interactions	Problem set 2	2/9, 2/10	2/14/23		
4*	Price elasticity and shifts; valuation	Problem set 3	2/16, 2/17	2/21/23		
	methods					
5	Exam (Introduction – Methods for valuing	Exam 1 (in	2/23 & 2/24	2/23/23,		
	env.)	discussions)		2/24/23		
6*	Concepts for valuing the environment	Problem set 4	3/2, 3/3	3/7/23		
7*	Concepts for valuing the environment	Problem set 5	3/9, 3/10	3/14/23		
8*	Public goods	Problem set 6	3/15,3/16	3/28/23		
9	Spring Break		No new assignment			
10*	Forest mgmt. and previous concept review	Problem set 7	3/30, 3/31	4/4/23		
11	Exam (Concepts for valuing env	Exam 2 (in	4/6 & 4/7	4/6/23,		
	forest/land pol)	discussions)		4/7/23		
12*	Negative consumption externalities	Problem set 8	4/13, 4/14	4/18/23		
13*	Jim and Katie Krause CNR Undergrad	Symposium	4/21/23	4/25/23		
	Research Symposium	assignment via				
		Canvas				
14*	Negative production externalities	Problem set 9	4/27, 4/28	5/2/23		
15*	Pollution problem & policies	Problem set 10	5/4, 5/5	5/9/23		
16	Hold discussion for review semester end					
	items					
	Assignments distributed via Canvas					
3	Case study 1 distributed	Case study 1	2/6/23	3/1/23		
7	Case study 2 distributed	Case study 2	3/6/23	3/29/23		
12	Case study 3 distributed	Case study 3	4/10/23	5/3/23		
Finals	Finals Exam (Neg cons. extern. – Pollution policies) during finals week TBD TBD					

^{*}Expect "knowledge check" quizzes in each module covering the week's lecture material. These should be completed prior to coming to discussion (Thursdays 9 am) each week.