

Syllabus
ECON 322: Section 1
Environmental/Natural Resource Economics – 3 credits
Fall 2019
August 29th to December 13th

Instructor: Melissa A. Wright, Ph.D.
461 Tyler Hall
Email: mawright02@wm.edu
Office Hours: Tuesday and Thursday 3:30-4:30 PM,
9:30-10:30 AM Friday, & by appointment through Calendly at
calendly.com/melissawright_econ

Classroom: Tyler Hall 133

Lecture: Section 1 Tuesday and Thursday 2:00-3:20 PM

Required Materials and Resources:

- Textbook: *Environmental and Natural Resource Economics*. Tietenberg and Lewis. 11th Edition.
 - Students are welcome to use earlier editions of this textbook. The chapter names are similar if not identical in both the 9th and 10th editions.
- Calculator:
 - Students ARE required to bring a calculator to every lecture (phones do not count).
 - Students will receive simple calculators for exams.
- Blackboard: <https://blackboard.wm.edu>
 - Students are responsible for studying the content available on Blackboard.
 - Grades post on Blackboard.
 - Class emails send through Blackboard.
 - You can opt-in to class reminders through the Blackboard Course Calendar.
- Poll Everywhere: <https://www.polleverywhere.com/login>
 - MUST use W&M email to log in.
 - This will be used in the course to assess comprehension and for in-class activities.
 - If a poll is part of a graded in-class exercise the final grade in Blackboard reflects the actual grade.

Prerequisites: ECON 101

Course Description: This course teaches students the application of economics to environmental issues. Students will learn how decisions are made surrounding property rights and externalities. In addition to applicable economic theory, students will receive the tools to evaluate trade-offs and measure the value of the environment. Topics covered in this course include Depletable and

Renewable Resources, Common-Pool Resources, Pollution, and Climate Change. Students will also complete a project that translates their economically informed view of an environmental issue to a broad audience.

Student Learning Outcomes:

- Learn an economic approach to environmental problems.
- Further develop their tool kit to evaluate applied problems.
- Understand complementary views to environmental economics.
- Present economic information in a technically complete way that is accessible to a non-technical audience.

This course is designed to meet the following Learning Goals:

LG1 – Information Literacy

LG2 – Quantitative Reasoning

LG3 – Critical and creative thinking

Homework: There will be ten homework assignments. Each assignment will be worth 20 points or 2% of your grade, for a total of 200 points or 20%. Homework will be assigned in class and posted to the Blackboard site. Students will submit an electronic copy of their assignment by 12 PM on the due date. Assignments turned in after the 12 PM will be eligible for a maximum of half credit. After 24 hours, partial credit will not be available. I encourage you to work on homework together, but you should submit your homework written in your own words, using YOUR descriptions and analytical work. (No close duplicates of another student's, even if you worked together).

For tentative due dates see the Course Schedule on the last page of this Syllabus.

For on-time assignments: Assignments that are complete and entirely correct will receive a ✓+ (20/20). Assignments that are complete with minor mistakes will receive a ✓ (16/20). Assignments that are complete with substantial errors will receive a ✓- (12/20). Assignments that are incomplete will receive a ✓-- (8/20).

Late assignments will be graded by the same criteria but only eligible for half the points: ✓+ (10/20), ✓ (8/20), ✓- (6/20), ✓-- (4/20). Assignments that are later than 24 hours are automatically 0/0.

*Hard copies are accepted as long as they are submitted directly to the instructor (not to my mailbox or under my door. Students who prefer to receive a printed copy of their homework can email the professor. Once the request is made a hard-copy will be supplied for each homework assignment.

In-Class Exercises: Throughout the semester, there will be in-class assignments worth a total of 5% or 50 points toward your grade. I will not announce in-class exercises.

In-Class Exercises will receive a ✓+ (100%), ✓(80%), ✓-(60%), or 0 if not complete. The criteria will be consistent with homework grading, except that partially complete assignments will not be eligible for submission or grading. Scores from exercises will be averaged at the midterm and close of the semester. Midterm grades will be 25 points multiplied by Avg. Percentage. Final Grades will be 50 points multiplied by Avg. Percentage.

Final Project: This project will be discussed in more detail as the semester progresses, but will involve a short assignment (a topic proposal) to help you prepare for the final project. The final submission will be worth 10% of your grade or 100 points. The topic proposal will be worth 5% or 50 points towards your grade. An optional draft will be worth 50 points or 5% of your grade. Students that elect not to complete a draft will be evaluating out of 150 points on their final project. Students will work in groups of 2-4.

Tentative due dates are in your Course Schedule.

Midterm Exam: The midterm exam is Thursday, October 10th. There will be a portion of the lecture devoted to reviewing on Tuesday, October 8th. The midterm exam is worth 25% or 250 points.

Final Exam: The final exam will be cumulative. Instead of the scheduled 3 hours, students will have 2 hours to complete their exams. There will be a portion of the lecture devoted to an in-class review session, Thursday, December 5th. The cumulative final exam is worth 30% or 300 points.

Section	Date	Room	Duration
1	Friday, December 13th	TBD (likely 133)	2:00-4:00 PM

Please review your final exam times to avoid scheduling conflicts:
<https://www.wm.edu/offices/registrar/calendarsandexams/examschedules/index.php>

Attendance: Students are encouraged to attend and participate in class. I will occasionally take attendance at the beginning of class, but it will not count towards your grade. Attendance and exam scores are highly correlated.

Late Policy: Students are expected to be on-time and prepared for lecture. Lateness creates a disruptive atmosphere. The first lateness will not have an impact on your grade. Subsequent lateness will result in a 10 point or 1% reduction for EACH lateness from your total grade. You must email the instructor BEFORE class with late excuses. I will excuse tardiness for excused athletic and academic reasons.

Technology Policy: Students are welcome to use laptops or tablets through class to the extent that it doesn't distract the instructor or other students. Cell phones (on silent) may be used to take photos during lecture but are not a suitable replacement for a calculator. If you have a cell phone out during lecture, it must be visible on your desk. I reserve the right to suspend technology privileges from any student causing disruption or violating this technology policy.

Extensions/Makeups: Work cannot be submitted or accepted after the cutoff date for each assignment unless otherwise agreed upon with the instructor BEFORE the due date. I offer makeup exams at my discretion. Students are never required to submit health notes directly to instructors. For long-term health concerns, please work with the Dean of Students, though students are never discouraged from reaching out to me directly.

Classroom Disruptions: Any continued disruption of class will not be tolerated. Classroom discussion should be civilized and respectful to everyone and relevant to the topic we are discussing. Side conversations that disrupt the class, my ability to teach, or students' ability to learn will not be tolerated. I reserve the right to ask you to leave the classroom if your behavior is disrupting the class. If necessary, I will report disruptive behavior to the Office of Student Conduct.

Office Hours Policy: Office hours are a valuable resource in my course. Students are encouraged to take advantage of drop-in office hours or make appointments. Calendly is set up in 15 increments, but students can schedule 2 sessions for a total of 30 minutes. Students are also welcome to make group appointments and add classmates to the event. I am also available to address questions and concerns via email. As a rule of thumb, email first, if my reply does not address your question to your satisfaction, then schedule through Calendly.

Academic Integrity: Academic integrity is at the heart of the university, and we are all responsible for upholding the ideals of honor and integrity. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and I will report all suspected instances of academic dishonesty to the honor system. The *Student Handbook* (www.wm.edu/studenthandbook) includes your responsibilities as a student and the full Code. I expect full participation and observance of the Honor Code. To read the Honor Code, see www.wm.edu/honor

Student Accessibility Services: William & Mary accommodates students with disabilities under federal laws and university policy. Any student who feels they may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at [757-221-2509](tel:757-221-2509) or sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see www.wm.edu/sas.

Students with accommodations are encouraged (not required) to speak (or email) with me directly to ensure access to every resource needed.

Important Dates and other Resources

- Add/drop deadline is September 6th
- Withdraw deadline is October 28th
- Hidden Rules For Office Hours
<https://www.wm.edu/sites/neurodiversity/documents/hidden-rules-for-office%20hours.pdf>
- Tribe TutorZone
<https://www.wm.edu/offices/deanofstudents/services/academicenrichment/tutors/index.php>

Grading:

Approximate Midterm Grade Breakdown:

Homework -----	23%, 100 points
In-Class Exercises-----	6%, 25 points
Project Proposal-----	12%, 50 points
Midterm Exam -----	59%, 250 points
Total -----	100%, 425 points

Three classifications are given: AC for acceptable performance (A-C level grades), an MR for marginal or D level grades, or a UN for unsatisfactory performance (F level).

Final Grade Breakdown:

Homework -----	20%, 200 points
In-Class Exercises-----	5%, 50 points
Project Proposal-----	5%, 50 points
Final Paper (including optional draft) -----	15%, 150 points
Midterm Exam -----	25%, 250 points
Final Exam -----	30%, 300 points
Total -----	100%, 1000 points

Grade Determination:

A letter grade will be assigned at the end of the semester based on points accumulated in class. The grading schedule is subject to change during the semester, but will not become more difficult.

A tentative grading schedule is as follows:

- A 93-100%
- A- 90-92.99%
- B+ 87-89.99%
- B 83-86.99%
- B- 80-82.99%
- C+ 77-79.99%

C 73-76.99%
C- 70-72.99%
D+ 67-69.99%
D 60-66.99%
F less than 60.00%

*The syllabus and course schedule are subject to change to facilitate instructional and student needs.

Course Schedule:

Week	Day	Topic	Reading	Assignment Due	Important Dates
1	Thursday, August 29, 2019	Syllabus & Expectations			
2	Tuesday, September 3, 2019	Visions of the Future; Property Rights	Ch. 1 & 2		Add/Drop Ends Sept. 6th
	Thursday, September 5, 2019	Externalities			
3	Tuesday, September 10, 2019	Benefit-Cost Analysis	Ch. 3	HW1 12 PM	
	Thursday, September 12, 2019	Discounting			
4	Tuesday, September 17, 2019	Types & Classification of Valuation	Ch. 4	HW2 12 PM	
	Thursday, September 19, 2019	Experiment, Revealed Preference, GIS			
5	Tuesday, September 24, 2019	Dynamic Efficiency	Ch. 5	HW3 12 PM	
	Thursday, September 26, 2019	Applying Sustainability Criterion		Project Proposal	
6	Tuesday, October 1, 2019	Efficient Intertemporal Allocation	Ch. 6	HW4 12 PM	
	Thursday, October 3, 2019	Market Allocations of Depletable Resources			
7	Tuesday, October 8, 2019			HW5 12 PM	
	Thursday, October 10, 2019	Midterm Exam			
8	Tuesday, October 15, 2019	NO CLASS Fall Break			
	Thursday, October 17, 2019	GIS Demonstration			
9	Tuesday, October 22, 2019	Energy	Ch. 7		
	Thursday, October 24, 2019	Recyclable Resources	Ch. 8		Last Day to Withdraw Oct. 28th
10	Tuesday, October 29, 2019	Water	Ch. 9	HW6 12 PM	
	Thursday, October 31, 2019	Public Policy Toward Fisheries	Ch. 12	Project Draft	
11	Tuesday, November 5, 2019	Efficient Allocation of Pollution	Ch. 14	HW7 12PM	
	Thursday, November 7, 2019	Market Allocation & Cost-Effective Policies			
12	Tuesday, November 12, 2019	Air Pollution	Ch. 15 & 16	HW8 12PM	
	Thursday, November 14, 2019	Climate Change	Ch. 17		
13	Tuesday, November 19, 2019	Water Pollution	Ch. 18	HW9 12PM	
	Thursday, November 21, 2019	Environmental Justice	Ch. 19		
14	Tuesday, November 26, 2019	Sustainable Development	Ch. 20 & 21	Final Project 12 AM	
	Thursday, November 28, 2019	NO CLASS Thanksgiving Break			
15	Tuesday, December 3, 2019			HW10 12PM	
	Thursday, December 5, 2019				
Final	Friday, December 13, 2019	Final Exam 2-4PM			