Syllabus
ECON 322: Sections 1 & 2
Environmental/Natural Resource Economics – 3 credits
Spring 2020
January 22nd to May 13th

Instructor: Melissa A. Wright, Ph.D.
461 Tyler Hall
Email: mawright02@wm.edu
Office Hours: Tuesday and Wednesday 2:15-3:45 PM, & by appointment through Calendly at calendly.com/melissawright_econ

Classroom: Tyler Hall 123

Lecture: Section 1 Monday, Wednesday, & Friday 12:00-12:50 PM
Section 2 Monday, Wednesday, & Friday 1:00-1:50 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.
    - You can opt-in to class reminders or use this external link for Course Calendar:
        - https://blackboard.wm.edu/webapps/calendar/calendarFeed/0d0baf801d714829aecf015ad7cc0383/learn.ics
- Piazza: https://piazza.com
    - Find our class page at https://piazza.com/wm/spring2020/econ322/home
    - Rather than emailing questions, I encourage you to post your questions on Piazza.
    - If you have any problems or feedback for the developers, email team@piazza.com.
- Poll Everywhere: https://www.polleverywhere.com/login
    - MUST use William & Mary email to log in.
    - This will be used in the course to assess comprehension and for in-class activities.

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.
• Develop economic tool kit to evaluate applied problems.
• Understand complementary views of 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

Problem Sets: There will be six problem sets, each worth **25 points or 2.5%** of your grade, for a total of **150 points or 15%**. Problem Sets will be available on Blackboard. Students will submit through electronic form 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, submissions may receive up to a quarter of credit. After 48 hours, partial credit will not be available. I encourage you to work on homework together (may use Piazza to do so), but do not post answers.

Tentative due dates are listed in the Course Schedule on the last page of this Syllabus.

Problem Sets are graded on correctness. In most cases, grading is automated, and partial credit is unavailable. For open-ended exercises, partial credit is available at the discretion of the instructor.

*Hard copies of HW are NOT accepted. Students who prefer to use paper are welcome to work through problems on paper and submit their answers through Blackboard.

Instagram Projects: There will be three projects designed to apply the knowledge in this course. Each project will be a single post on the Instagram page for this class. Each project will be worth **100 points or 10%** of your grade, for a total of **300 points or 30%** of your grade. Students will work in groups of 3-5. Students may join groups across sections. This will be your group throughout the term. Issues over group contributions should be brought to the instructor as soon as they arise.

Tentative due dates are in your Course Schedule.

Instagram – Single Image – Environmental Problem Group is Passionate About
Instagram – Video – Environmental Problem Group is Passionate About (Same as single image or different)
Instagram – Single Image or Video – Explain a current environmental policy/standard and the implications

Detailed rubric and instructions are provided on Blackboard.

Midterm Exams: There will be two midterm exams, each worth **15% or 150 points —** Midterm Exam 1is **February 21st** during the regularly scheduled lecture in Tyler 123 and Midterm Exam 2 is **April 6th** during the regularly scheduled lecture in Tyler 123. There will be a portion of the lecture devoted to reviewing students questions the class before the exam.

Final Exam: The final exam will be cumulative (will draw more heavily from the latter third of course). Instead of the scheduled 3 hours, students will have **2 hours** to complete their exams. It is worth **25% or 250 points.**

Section	Date	Room	Duration
1	Thursday May 7th	TBD (likely 123)	9:00-11:00 AM
2	Tuesday May 12th	TBD (likely 123)	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, Lateness, Technology & Disruptions:

- Be **respectful** of your classmates and instructor.
- **Attendance** is your choice, but You are responsible for making sure you understand the missed content.
- **Lateness** can be distracting. Avoid arriving late and enter quietly.
- Students are welcome to use **laptops, tablets, and phones** 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 but are not a replacement for a calculator. I reserve the right to suspend technology privileges from any student causing disruption or violating this technology policy.
- **Technology** can distract other students. To minimize potential distractions, the default layout of the class will be laptops on the right (facing the board), and those who prefer no laptops in their line of sight can sit on the left. This policy does not apply to days when class time is allocated to computer demos or project work.
- Side conversations that **disrupt** the class, my ability to teach, or students' ability to learn are disrespectful to all those around you. If necessary, I will report disruptive behavior to the Office of Student Conduct.

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.

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 in 15-minute 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. As a rule of thumb, try Piazza first, if my reply does not address your question to your satisfaction, then schedule through Calendly. On the off chance that there is no availability during your free study time, please email me directly.

*For homework-specific questions, please try Piazza first.

Academic Integrity: We all are 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. I must 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. To read the Honor Code, see **www.wm.edu/honor**

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

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** 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**.

I expect students who qualify for accommodations to go through this process whether they believe they need the accommodation or not. It is possible to accommodate a student mid-semester or during a final exam if eligibility has already been verified. Students who qualify for extra time and elect to take an exam during the regularly scheduled time-period without accommodation must live with that decision.

*Students who are struggling to navigate the accommodation process are welcome to seek my support through email or office hours. I have ASD, ADHD, and chronic illness. I am a member of the W&M Neurodiversity Working Group. My help is not limited to this course.

Important Dates and other Resources

- Add/drop deadline is January 31st
- Withdraw deadline is March 23rd
- 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:

Problem Sets (1 & 2) ---------- 14%, 50 points
Projects (1 & 2)----------43%, 150 points
Midterm Exam ---------- 43%, 150 points
Total ----------100%, 350 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). The Midterm grading period is March 2nd-22nd. Midterm grades for this course will post by the first day of the advising period March 16th.

Final Grade Breakdown:

Problem Sets ---------- 15%, 150 points
Projects----------30%, 300 points
Midterm Exam 1---------- 15%, 150 points
Midterm Exam 2---------- 15%, 150 points
Final Exam ---------- 25%, 250 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. I do not round grades. In this course, 929 points out of 1000 is an A-.

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	Wednesday, January 22, 2020	Expectations & Introduction		
	Friday, January 24, 2020	NO CLASS – Access Class Resources		
2	Monday, January 27, 2020	Introduction Cont'd & Property Rights	Ch. 1 & 2	
	Wednesday, January 29, 2020	Property Rights		
	Friday, January 31, 2020	Externalities & Environmental Problems		**Add/Drop Ends Jan 31st**
3	Monday, February 3, 2020	Expected Value & Benefit-Cost Analysis	Ch. 3	Problem Set 1 12 PM
	Wednesday, February 5, 2020	Discounting & Present Value Calculations		
	Friday, February 7, 2020	Types & Classification of Valuation	Ch. 4	
4	Monday, February 10, 2020	Valuation Cont'd & GIS		Problem Set 2 12 PM
	Wednesday, February 12, 2020	Ecosystem Services & Valuation	Ch. 13	
	Friday, February 14, 2020	Ecosystem Valuation		
5	Monday, February 17, 2020	Ecosystem Valuation		Project One – End of Day
	Wednesday, February 19, 2020			
	Friday, February 21, 2020	Midterm Exam 1		
6	Monday, February 24, 2020	GIS Guest Lecturer - Tyler 123		
	Wednesday, February 26, 2020	GIS Guest Lecturer - Tyler 123		
	Friday, February 28, 2020	NO CLASS – Work on Project Two		
7	Monday, March 2, 2020	Dynamic Efficiency	Ch. 5	Project Two – End of Day
	Wednesday, March 4, 2020	Applying Sustainability Criterion		
	Friday, March 6, 2020	Resource Taxonomy; Intertemporal Allocation	Ch. 6	
8	March 7th to March 15th	Spring Break		
9	Monday, March 16, 2020			Problem Set 3 12 PM
	Wednesday, March 18, 2020	Market Allocations of Depletable Resources	Ch. 6	
	Friday, March 20, 2020	Energy	Ch. 7	
10	Monday, March 23, 2020			**Last Day to Withdraw March 23rd**
	Wednesday, March 25, 2020	Recyclable Resources	Ch. 8	
	Friday, March 27, 2020			
11	Monday, March 30, 2020	Water	Ch. 9	Problem Set 4 12 PM
	Wednesday, April 1, 2020	Public Policy towards Land, Forests & Fisheries	Ch. 10, 11 & 12	
	Friday, April 3, 2020			
12	Monday, April 6, 2020	Midterm Exam 2		
	Wednesday, April 8, 2020	Efficient Allocation of Pollution	Ch. 14	
	Friday, April 10, 2020	Market Allocation & Cost-Effective Policies		
13	Monday, April 13, 2020	Air Pollution	Ch. 15	Project Three – End of Day
	Wednesday, April 15, 2020	Air Pollution		
	Friday, April 17, 2020	Air Pollution	Ch. 16	
14	Monday, April 20, 2020	Climate Change	Ch. 17	Problem Set 5 12 PM
	Wednesday, April 22, 2020	Water Pollution	Ch. 18	
	Friday, April 24, 2020	Environmental Justice	Ch. 19	
15	Monday, April 27, 2020			Problem Set 6 12 PM
	Wednesday, April 29, 2020	Sustainable Development	Ch. 20 & 21	
	Friday, May 1, 2020			
Finals	Thursday, May 7, 2020	Section 1 Final Exam 9-11 AM		
	Tuesday, May 12, 2020	Section 2 Final Exam 2-4 PM		