

Environmental and Natural Resource Economics - ECON 322

Instructor: Tatyana Kuzmenko

Semester: Fall 2017

E-mail: tkuzmenko@wm.edu (Please include "ECON 322" in the subject line)

Office: Tyler 425

Office Hours: MWF 9:00 – 10:45 am, Friday 1:00 – 3:00 pm, or by appointment

Class Meetings:

- Section 1: MWF at 8:00 am in Tyler 133
- Section 2: MW at 11:00 am in Wren 200

Course Description

The application of efficiency and equity criteria to environmental issues. Topics include market failure and regulatory approaches to address environmental problems, natural resource management, and sustainability. This is a COLL 200 course; it is anchored in the CSI domain, and also considers aspects of the NQR domain.

Textbook and More

- Textbook: *Markets and the Environment* by Nathaniel O. Keohane and Sheila M. Olmstead 1st edition (ISBN: 9781597260473) or 2nd edition (ISBN: 9781610916073). The Swem Library offers online access to this book and it also holds physical copies of it.
- All other readings (required and supplementary) will be available on Blackboard.
- We will use PollEverywhere for interactive quizzes during class, so you will have to bring a smartphone, a tablet, or a laptop to all class meetings to be able to participate. Registration instructions will be provided on Blackboard. PollEverywhere is now free for all W&M students.

Grading

Grades will be based on homework assignments, quizzes, 3 midterms, and a cumulative final exam. Grade percentages are as follows:

- Homework assignments: 15%
- Quizzes: 3%
- Three midterm exams: 48% total (16% each)
- Final Exam: 34%
- **Homework assignments** will be available on Blackboard (under "Assignments"). There will be 11 problem sets; please see the attached course calendar for homework due dates. All homework assignments will be due at 11 am unless specified otherwise. Problem sets will be graded mostly for completion and suggested answers will be provided. Late homework will not be accepted; however, one lowest homework grade will be dropped.
- **Short quizzes** will be given in class during most class meetings. Most of them will be conducted via PollEverywhere but paper-and-pencil exercises might be occasionally assigned. Quizzes cannot be made up but 25% of your lowest scores on them will be dropped; moreover, your overall grade on these assignments will be replaced with your final exam grade if the latter is better.
- **Midterm exams** will be given on the following dates:
 - Midterm 1: September 20 (Wednesday), during class time
 - Midterm 2: October 20 (Friday), during class time
 - Midterm 3: November 15 (Wednesday), during class time

Midterm grade replacement: Your lowest midterm exam score will be replaced with your final exam score if the final is better. This applies to one midterm exam only.

Midterm make-up policy: If you know that you will not be able to attend an exam come see me ahead of time with a valid, documented excuse and we will attempt to arrange for you to take the exam before it is given. A midterm exam can be taken after the exam date ONLY if you miss it due to an emergency AND can provide a letter from the Dean of Students office. In all other situations, your final exam grade will be used in lieu of the missed midterm grade.

- **Final Exam** will take place:
 - For the MWF 8:00 am section: Dec 12 (Tuesday) at 9:00 am
 - For the MWF 11:00 am section: Dec 18 (Monday) at 9:00 am
- **Grading scale:**

93 or more = A	90 – 92.99 = A-	
87 – 89.99 = B+	83 – 86.99 = B	80 – 82.99 = B-
77 – 79.99 = C+	73 – 76.99 = C	70 – 72.99 = C-
67 – 69.99 = D+	63 – 66.99 = D	60 – 62.99 = D-
Below 60 = F		

Expectations and Additional Policies

- Please mute all cell phones and turn off any other electronic devices when entering class unless they are used for note-taking or legitimate class-related purposes.
- All files, announcements, assignments, and grades will be posted on Blackboard. Students should check this site regularly.
- Late night emails as well as weekend emails will not necessarily be responded to until the following school day. In all other cases, you should expect a response within 24 hours after sending your message.
- Class participation can greatly improve your learning experience and your ability to succeed in this course. Furthermore, in cases of borderline grades, class participation will be taken into account to boost (but never lower) your grade.
- There will be no individual extra credit opportunities. If I offer any extra credit assignments, they will be available to all students in the course.
- You are welcome to study together. However, homework assignments and all exams (midterm and final) should be completed without the aid of other students.
- Reference cards and reference sheets on exams: For each midterm exam, you can prepare and bring one 4"x 6" two-sided index card with handwritten notes, formulas etc. For the final exam, you can bring either: (i) one 8.5"x 11" two-sided sheet of paper with handwritten notes and formulas, or (ii) the three index cards you prepared for the midterms.
- The use of unauthorized aid on an exam will be considered a violation of the Honor Code. Please visit www.wm.edu/honor to learn more about the Honor Code at William and Mary.
- Grading errors and re-grading: If you believe that your score on an exam or homework was incorrect or that you should receive more credit for your work, you have to submit a written request for re-grading within one week from the day the exam or assignment was returned.
- It is the policy of The College of William & Mary to accommodate students with disabilities and qualifying diagnosed conditions in accordance with federal and state laws. Any student who feels s/he may need an accommodation should contact to Student Accessibility Services staff at 757-221-2509 or at sas@wm.edu. For more information please see www.wm.edu/sas.

Course Outline and Readings

- *TEXT* refers to *Markets and the Environment* by Keohane and Olmstead. Ed.1 stands for the first edition, Ed. 2 for the second.
 - *Note: This is a tentative schedule, and some of the readings might change. As we move throughout the semester please visit Blackboard often for updates.*
1. Introduction and Microeconomics Review
 2. The Efficiency of Markets; Market Failures: Externalities and Public Goods
 - *TEXT*: Chapters 4 and 5
 3. Economic Efficiency and Environmental Protection
 - *TEXT*: Chapter 8 (pages 125-137 in Ed.1, or pages 139-153 in Ed.2) and Chapter 2.
 4. The Benefits and Costs of Environmental protection
 - *TEXT*: Chapter 2, pages 28-29 in Ed. 1, or pages 31-33 in Ed. 2; Chapter 3
 - Goulder and Stavins, "An Eye on the Future." *Nature*, 2002.
 - Krutilla, "Conservation Reconsidered", *American Economic Review*, 1967.
 - Viscusi, "The Devaluation of Life", *Regulation & Governance*, 2009.
 5. Managing Stocks: Efficient Extraction of Natural Resources
 - *TEXT*: Chapter 6
 - Livernois, "On the Empirical Significance of the Hotelling Rule." *Review of Environmental Economics and Policy*, 2009
 6. Renewable Resource Management: Fisheries
 - *TEXT*: Chapter 7 and select pages from Ch. 8 and 10
 7. Sustainability and Economic Growth
 - *TEXT*: Chapter 11
 - Solow, "Sustainability: An Economist's Perspective." *National Geographic Research & Exploration*, 1992.
 - Solow, "An almost practical step toward sustainability." *Resources Policy*, 1993.
 8. Market-based Instruments in Environmental Policy
 - *TEXT*: Chapters 8 and 9
 - Goulder and Parry, "Instrument Choice in Environmental Policy." *Review of Environmental Economics and Policy*, 2008.
 9. Market Based Instruments in Practice
 - *TEXT*: Chapter 10
 - Schmalensee and Stavins, "The SO₂ Allowance Trading System: The Ironic History of a Grand Policy Experiment." *Journal of Economic Perspectives*, 2013.
 10. Economics and Environmental Policy Making
 - *TEXT*: Chapter 12
 - Keohane, Revesz, and Stavins "The Choice of Regulatory Instruments in Environmental Policy", *Harvard Environmental Law Review*, 1998.
 11. Climate change
 - Sandel, "It's Immoral to Buy the Right to Pollute," *New York Times*, 1997; and replies by Shavell, Stavins, Gaines, Leifman, and Maskin.
 - More readings TBA (see course Blackboard).

Econ 322 Course Calendar

	Monday	Tuesday	Wednesday	Thursday	Friday
Aug	28	29	30 First class	31	1
Sep	4 HW 1 due	5	6	7	8 Drop/add ends
	11 HW 2 due	12	13	14	15
	18 HW 3 due	19	20 Midterm 1	21	22
	25	26	27	28	29
Oct	2 HW 4 due	3	4	5	6
	9 HW 5 due	10	11	12	13
	16 Fall break	17 Fall break	18 HW 6 due	19	20 Midterm 2
	23	24	25	26	27 Last day to withdraw
	30 HW 7 due	31	1	2	3
Nov	6 HW 8 due	7	8	9	10
	13 HW 9 due	14	15 Midterm 3	16	17
	20	21	22 Thanksgiving	23 break	24 Thanksgiving
	27 HW 10 due	28	29	30	1
Dec	4 HW 11 due	5	6	7	8 Last class
	11	12 at 9 am Final exam 11 am section	13	14	15
	18 at 9 am Final exam 8 am section	19	20	21	22