

Economics 372  
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Environmental Economics  
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Class meets: MW 3:30-4:50  
TA: Boli Xu - [bolixu2022@u.northwestern.edu](mailto:bolixu2022@u.northwestern.edu)  
Office Hours: After class at other times by appointment  
Readings & Notes: <https://sites.google.com/site/markwitteeconomics/home/economics-372-environmental-economics>

<b>Week of April 6</b> - Introduction, Externalities, Public Goods, Measuring Social Costs & Benefits
Keohane-Olmstead (KO) 1, 2, <a href="#">Fullerton &amp; Stavins</a> , Krugman “ <a href="#">Green Econ</a> ”, KO 2 pp. 31-34, KO 3, <a href="#">Kling et al</a> , <a href="#">Carson</a> , <a href="#">Taylor 1</a> , <a href="#">Hausman</a> , <a href="#">Racial Gap</a>
<b>Week of April 13</b> - Tragedy of the Commons, Discount Rates,
KO 5, <a href="#">Hardin</a> , <a href="#">Landsburg</a> and <a href="#">Romm</a> , <a href="#">Giglio et al</a> , <a href="#">Newell &amp; Siikamäki</a> ,
<b>Week of April 20</b> - Market Based Policies versus Command & Control
<a href="#">Roberts 1</a> , <a href="#">Greenstone</a> , <a href="#">Taylor 2</a> , <a href="#">Carbon Offsets 1</a> , <a href="#">Carbon Offsets 2</a> KO 4, KO 8 pp. 139-158, 160-167, KO 9 pp. 168-184, 185, 190-198, <a href="#">Kiesling</a> , <a href="#">Levinson</a> , <a href="#">Coase</a>
<b>Week of April 27</b> - Climate I
KO 10 pp. 200-207, 208-210, 217-220, 223-224. <a href="#">Hsiang &amp; Kopp</a>
<b>Week of May 4</b> - Climate II
<a href="#">Nobel Committee</a> (pp. 23-44, skim), <a href="#">Lomborg</a> , <a href="#">Schelling</a> , <a href="#">Wagner &amp; Weitzman</a>
<b>Friday, May 8: Exam 1</b>
<b>Week of May 11</b> - Energy
<a href="#">Roberts 2</a> , <a href="#">Roberts 3</a>
<b>Week of May 18</b> - Technology, International Agreements
<a href="#">Puffert</a> , <a href="#">Rosling</a> , <a href="#">Schelling Tip</a> , Nordhaus <a href="#">Climate Club</a> , <a href="#">Harstad</a>
<b>Week of May 25</b> -, Political Economy, Conclusions
KO 12, <a href="#">Shorter Rich</a> , <a href="#">Bakkensen &amp; Barrage</a>
<b>Friday, May 29: Exam 2</b>

The following are questions that many of you will have about the class.

Q: How are office hours going to work?

A: I'll let usual MWF noon-12:50 lecture run on from 1:00-2:00 and take questions there "in the large." If you'd like to talk or Zoom with me at another time, send me an e-mail about what you want to talk about (it can be just stuff in general), what times might work for you, and what the best medium for communication would be (phone, Zoom, semaphore flags, etc.)

Q: How is the teaching going to work?

A: I will pre-record video of some of the material and then repeat it in "class" in Zoom where you will be able to "raise your hands" and ask questions. The TA will pre-record video of some material as well. We will hold "office hours" on Zoom.

Q: Are you good at running this sort of online class? Will it be a disaster?

A: No. Probably.

Q: How is the grading going to work?

A: The class is going to be graded "Pass" (P) or "Not pass" (N). There will be homework, and an "Exam 1" and an "Exam 2." To pass the class, you will need to score 70% or better on \*each\* of these three components. All of these will be handled through Canvas.

Q: How does the homework work?

A: We will post questions and you will submit answers through Canvas. The computational problems will be graded by Canvas, and you will get three chances to get them right. You can collaborate with your peers on these and ask us questions through Piazza (anonymously if you wish). Some of the homework will involve you submitting hand drawn graphs or hand written summaries of the lecture contents.

Q: How will the "Exams" work?

A: We will post questions on Canvas, ~~and you will answer them using Lockdown/Respondus (which we will practice before "Exam 1").~~ The "Exams" will have problems like from the homework, some graph drawing, and some short essays. They will be open book, open notes, open whatever, except you **may not consult with any other person**. On the computational problems, you will only get one shot at putting in the correct answer. We hope that the "Exams" will take about 30 minutes to complete but you will get two hours to do so, and you will be able to choose which two hour span you want during a 24-hour window.

Q: Wait, what?! Will this class be recorded?

A: "This class or portions of this class will be recorded by the instructor for educational purposes. These recordings will be shared only with students enrolled in the course and will be deleted at the end of the Spring Quarter. Your instructor will communicate how you can access the recordings.

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact AccessibleNU. Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's Copyright Policy, faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a

recording or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.”

Q: What are the “learning objectives” for this class?

A: This course should give you frameworks for understanding the efficiency issues that result from the interaction of economic forces and the natural world. Why do problems result, what can we know about them, what might we be able to do about them?

Q: I am not now nor have I ever taken the prerequisites. Am I in trouble in here?

A: Probably; this class uses the tools of Econ 310-1 Intermediate Microeconomics I a lot, 281 Econometrics and 310-2 Intermediate Microeconomics II some as well.

Q: What’s the deal with the readings?

A: Keohane and Olmstead’s book is good (and available through Canvas), but covers some natural resources material that we leave for Econ 373 (such as anything to do with fishing, forestry, or sustainability). The other readings add depth and I will likely add a few articles as the quarter progresses. Most of the readings can be accessed through the online version of this syllabus and the [readings area on the class Google Sites page](#).

Q: What are the basic work expectations for the class?

A: I hope that you will do about two hours of study for every hour of lecture, and that you will get read the material assigned for the lecture before class (and catch up on the first lecture assigned reading too).

Q: What is your electronics communication policy?

A: **(1)** I expect you to have your preferred e-mail address entered into Canvas so that I can send messages to the class, and I expect you to check that e-mail on a daily basis. **(2)** Use Canvas’s **Piazza** discussion forum (found in Canvas’s “Modules”) to post questions that would be of general use to your classmates. (Yes: “What does BAU stand for?” No: “I got 11 points on the midterm; does that mean I’m going to flunk the class?”) [Piazza is a discussion forum that allows anonymous posts. The story about its creation is pretty cool.] **(3)** Watch all the videos we record and get the work done. (The story of how Piazza was created is [sadly lovely](#).)

Q: Can I expect any leniency if I'm caught cheating or engaging in any unethical behavior?

A: No. Weinberg’s policy is that students who are suspected of cheating are reported *immediately*. In recent years, I've sent the names of students to the dean; some were expelled and those who were not did not enjoy the experience.

Q: What are the math requirements for this class?

A: You will need to be able to do really simple calculus, graphing, and algebra. I'll expect you to be able to use basic economic tools like present values, expected values, noncompetitive market structures, hypothesis testing, and regression analysis. I will do some more complicated math for the purposes of exposition but I will not ask you reproduce it on the exams although you should understand the underlying ideas. As a guide, I will try to preview any math or exposition you might need in the homework.

Q: This syllabus is pretty long; do you think that anyone is still reading?

A: We’re about to find out!

Q: What is the First Homework?

A: Your first Canvas Homework is to post an interesting article relating to economics in Piazza (in Canvas). When you post your article, don't send it to the whole class but rather only to me, and be sure to put your name in the header so I know it's from you. To get credit for this, you'll also have to put the article in as the answer to the first homework problem on Canvas. (See...you're getting practice with Piazza *and* the Canvas homework system!)

Q: What if I have concerns about accessibility for this class?

A: Any student with a documented disability needing accommodations is requested to speak directly to the AccessibleNU ([accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu), 847-467-5530) and to me, as early as possible in the quarter (preferably within the first two weeks of class). All discussions will remain confidential.

Q: What is the most important thing?

A: Most important, please be assured that I want students to learn and to receive the good grades they deserve. So please make an appointment with me should you have undue difficulty with your work in the course.