

Contact Info: mwitte@northwestern.edu, Office: Kellogg Global Hub 3393
 Class meets: Kellogg Global Hub 1410, MW 6:15-9:15
 Office Hours: MW before & after class, Tuesdays 1:30-3:30 in Kellogg 3393, and at other times by appointment
 Materials Readings & notes: <https://sites.google.com/site/markwitteeconomics/>

Class Date	Lecture Topics	Partial list of readings
Mon. June 24	Introduction, Externalities, Public Goods	KO 1, 2, 5, Fullerton & Stavins Krugman “ Green Econ ”, Hardin
Wed. June 26	Measuring Costs & Benefits, Discount Rates	KO 2 pp. 31-34, KO 3 Kling et al , Carson , Taylor 1 , Hausman , Roberts 1 , Greenstone , Taylor 2 , Racial Gap , Giglio et al . Newell & Siikamäki
Mon. July 1	Market Based Policies versus Command & Control	KO 4, KO 8 pp. 139-158, 160-167, KO 9 pp. 168-184, 185, 190-198, Kiesling , Levinson , Coase
Wed. July 3	Climate	KO 10 pp. 200-207, 208-210, 217-220, 223-224. Hsiang & Kopp , Lomborg , Schelling Landsburg and Romm
Mon. July 8	Energy	Roberts 2 , Roberts 3 Wagner & Weitzman
Wed. July 10	Midterm (30% of class grade, coverage through July 3)	
Mon. July 15	Technology	Puffert , Rosling
Wed. July 17	International Agreements	Schelling Tip , Nordhaus Climate Club , Harstad
Mon. July 22	Conclusion	KO 12, Shorter Rich , Bakkensen & Barrage
Wed. July 24	Cumulative Final Exam (45% of class grade)	

<u>Grading</u>	<u>Share of Class Grade</u>
Midterm	30%
Final exam	45%
In-class quizzes	10%
Homework	15%

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

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 is the deal with these homeworks?

A: There will be a bunch of these over the course of the quarter and they will usually follow what we did in lecture, and have some predictive value for what will be on the exams. Your first homework will be to post an interesting article relating to environmental and natural resource economics in Piazza (in Canvas) Be sure to put your name in the header of the post so we know it's from you.

Q: What is the deal with these quizzes?

A: The quizzes aren't meant to torture you – rather, they are intended to encourage you to stay caught up in the reading so that you better understand the material when we talk about it in class. The quizzes will generally have two questions, one from the assigned reading for that day and one about what we did in lecture in the previous class. The aim is for these quizzes to be pretty low stress and easy, with the hope that they will make sure you stay up in the reading and study your notes. As such, the quizzes are not intended to be a significant test of your understanding (that is what the tests are supposed to do) but are just an attempt to give you credit and encouragement for getting the reading done in a timely way. With luck, this will allow me to do a better job of covering the material. There will be no make-up quizzes; if you miss it, you miss it. However, there is a maximum possible total score on the quizzes of (Perfect - 40), so in effect, you can miss two quizzes without suffering any harm to your grade if you're otherwise perfect.

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)** Silence your cellphone for the duration of the class and put it away where you won't be tempted to look at it.

Q: Is it OK if I surf the web and watch crazy videos whenever your lectures get too boring?

A: Sorry, no. No computers in class (exceptions: documented medical necessity or if you write on a tablet). However, there's evidence that taking notes on paper is a [better](#) way to [learn](#)! (And, again, put your phones away where you won't be tempted to look at them during lecture.) I understand that some of you like to take notes on your computer. However, I take a pretty decent salary with the expectation that in return I am to teach you economics. So, the temptation to look at distractions online during class is likely to diminish your learning in lecture, and worse still, people who are web surfing distract the people

around them, creating a negative externality. If this creates a great hardship for you, please come talk to me about it.

Q: What happens if I fall suddenly ill and am unable to make it to a test?

A: If you do not reach me or leave a message on my e-mail (mwitte@northwestern.edu), your misfortune will be doubled. You will get a zero on the test for a grade of F that cannot be made up. Any problem that causes you to be physically unable to take a test must be carefully documented by an independent source who can confirm that you were incapacitated.

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: The lecture is running a few minutes over, what should I do?

A: Stay put and observe a rare occurrence.

Q: In studying for the tests, should I stress studying the notes, the book, or the readings?

A: All of the above, but particularly the notes. I'll make sure that I don't inflict any math problems on the exams that I haven't already given you in the homework. Note however, that not everything that is important for the class, or that I cover in lecture or the readings will make it onto the test. Some material is important for you to learn, but does not lend itself to good test questions. I'm also inclined to have you do math on homework to build that level of understanding there, and then use graphs on exam questions so as to minimize the chance of algebra mistakes causing you to miss points on something where you had a good level of understanding.

Q: I can see that half of the people in this class are smarter and harder working than I am and the other half of the students are dumber and lazier than I am. What grade will I get in here?

A: B-. You are the median or middle student. Half the class will get grades of B- or better and the other half will get grades of B- or worse. However, this doesn't hold exactly in a small class. In smaller classes, I usually end up grading by the method of "significant differences." I compute weighted points for everyone in the class. Some of you will do really well, then there will be a bit of a gap in the scores, then there will be another bunch, and then a gap in the scores, then another bunch, then, a gap, etc. The top bunch will be the A's, the next bunch the B's, etc., with the minus/plus grades falling in between. The grades on the midterms give guidance toward where you are likely to be in this distribution (where midterm points matter, but grade breaks don't). The points from the homeworks and quizzes move you up or down in that distribution.

Q: Averaging my grades, I come out very close to a higher grade. How about if you give it to me?

A: No...unless you are deserving of special consideration.

Q: Am I deserving of special consideration?

A: That depends. I may feel you deserve a higher grade than you earn on the tests if I feel that your comments in class, Piazza, and office hours improve the education of your fellow students and show you are able to and have been thinking intelligently about the material.

Q: What will the tests be like?

A: Some problem solving, some graphing, some essays. On the homeworks I'll give you examples of the

sorts of problems I am apt to ask. Interesting fact: On the tests, *I will give you points for leaving a questions blank*. On any given problem or graded sub-problem, I will give you 20% of the points if you leave the question completely blank. This is intended to remove the incentive to pursue “pity points” on questions where you really don’t know what I’m asking, and instead allow you to devote your time to doing the best you can on the material you know best. Of course...you’ll probably just choose to write complete and perfect answers to every question on every test, but I wanted you to have the option.

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: Post your resume on Canvas at the Homework 1 question. (If you don’t have a resume, slap one together. You should have a resume!)

Q: Is there a Second Homework?

A: You bet! Go find it in CANVAS Assignments. More homework will be announced as the class goes along.

Q: When the class is over, what will I wish that I had known at its start?

A: Beyond the obvious things, in the past some students wrote on their course evaluation forms that they wish they had known my tests would be so hard. I agree that my tests tend to be a bit long and I try to make them hard. Also, I'll admit there's some reading so be careful not to fall too far behind. Now you've been warned.

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, 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.