Syllabus Date: January 25, 2025

Instructor: Dr. Kevin Roth
Department of Ag and Applied Economics
319 Taylor Hall
E-mail: kevin.daniel.roth@gmail.com or kevinroth@wisc.edu
Note that I do not answer content questions over email, only logistical questions.
(content: "How do I solve problem 3?" logistical: dates, locations, exams times etc.)

Office Hours: Mon 1:15-2:15 at Taylor 319,

Wed 1:15-2:15 at Taylor 319

Fri 10:30-11 at https://uwmadison.zoom.us/my/kevindanielroth

TA: Sharan Seshachallam (Regular office 518 Taylor Hall, will not be office hour location)
E-mail: ganjamseshac@wisc.edu
Office Hours: Thursday 12-2 at Taylor Hall 314

Grading: Your final grade will be based on the following components and weights.

Homework Completion:	10%
In-class quizzes:	30%
Midterm:	30%
Final Exam:	30%

Schedule: Part 1: Course basics, Externalities, Public Goods, Water, Local Pollution
Midterm: March 17

Class canceled March 19.

Part 2: Valuation, Climate Change

Comprehensive Final Exam: May 9, 2024, 12:25 pm – 2:25 9m

McBurney Disability Students: please check in with me before the first exam if you need extra time or a smaller setting.

Please check to make sure these dates work for you and inform me immediately if there are serious conflicts. I will generally only accommodate make up exams under extraordinary circumstances. Booked flights home are not a valid excuse for a make-up exam.

NOTE: YOU MUST ATTEND THE FINAL. There is no make-up or alternative. Schedule your flights home etc. appropriately.

There are no make-ups for the midterm. Under dire circumstances where the midterm is missed, the points (for mid-terms excused in advance) are redistributed towards the final.

Homework: There are 8 homework assignments (5% of final grade)
The TA will not correct these but check them for completion (and effort).
Please see the schedule below for when things are assigned and due.
I will post a word document version of the homework for you to work on offline. You can turn that assignment in as a paper copy or electronically.

Homework is due at the start of lecture on the day it is due. Electronic submission must be timestamped for the start of lecture, not during or before.

In-class Quizzes: You will have 13 in-class quizzes. I do not do make-ups for these, but I will drop the lowest 3 scores which includes zeros incurred by absences. 10 of these quizzes are marked on the syllabus, the remaining three you will not have a warning for. I hate these. But since the pandemic I've struggled with irregular attendance and excessive online cheating, and this is the best way I've found to combat this issue.

The worst semester of my life: Most years at least one student in my class in a mess. And that's okay. I get it. But you have to take some responsibility for this. Writing me in week 15 about your depression and why you've missed months of class, homework, and exams is too late. I don't have specific rules around this but the sooner you tell me this is going on the more accommodating I can be. In week 15 there will be little flexibility left.

Is this on the exam?: Testable material comes from the lecture and homework ONLY.

Other Resources: The book, discussion section, any "additional help" videos listed etc. are supplemental. Supplemental means OPTIONAL. If a topic only shows up in those sources, I do not assume you have seen it. The book is really meant for those who benefit from that format. I'm generally not a big fan of most environmental textbooks targeted towards undergraduates. Some of this cannot be helped because they are usually out of date as soon as they are printed.

Book: Harris, J.M., & Roach, B. (2021). Environmental and Natural Resource Economics: A Contemporary Approach (5th ed.). Routledge. https://doi.org/10.4324/9781003080640

I try to give the relevant sections based on the 4th and 5th editions of the book with the 3rd edition in parentheses when it differs. Please contact me if you think the wrong section is referenced. I do this so you can buy whatever version of the textbook is cheapest. Feel free to use an alternative textbook if it gets you what you need. Or no textbook at all.

Exams: Midterm is in class.
Exams tend to be hard and curved up as needed at the end of the course.
I do not do study guides although I usually do a short review discussing what I expect you to know and not know. I'm also very happy to answer questions in lecture and office hours.
I do not allow make-up exams or early finals for any reason other than extreme medical emergencies. If you cannot make the midterm for any reason other than a medical issue, your grade for that exam will be redistributed towards the final.
Medical emergencies, including COVID will be dealt with on a case-by-case basis but typically require proof.

Section 1: Course basics, Open Access Resources, Public Goods, Water, Local Pollution, MCB-MCR

	Date	Lecture Topic	Homework		Quiz	Optional additional resources
			Assigned	Turn in	3 are not inidcated	
Week 1						
	22-Jan	Intro				
Week 2	27-Jan	Supply Demand and Welfare	1			Harris and Roach Ch. 3, including Appendix
	29-Jan	Externality/ Pigou / Coase				
Week 3	3-Feb	Open Access Resources	2	1	x	Harris and Roach Sections 4.1 and 17.1 to 17.3 (11.1 to 11.3 in 3rd ed)
	5-Feb	Solutions: ITQs and Property				
Week 4	10-Feb	Regression	3	2	x	Harris and Roach Sections 4.2
	12-Feb	Public Goods / Solutions to Public Goods				
Week 5	17-Feb	Three Applied Public Goods Examples			x	
	19-Feb	Water		3		
Week 6	24-Feb	Local Pollution 1	4		x	
	26-Feb	Local Pollution				
Week 7	3-Mar	MCB MCR framework		4	x	
	5-Mar	MCB MCR framework	5			Harris and Roach Chapter 8 but skip 8.4 (16 but skip 16.4 in 3rd edition)
Week 8	10-Mar	Taxes and Cap and Trade				
	12-Mar	Cont. & Review		5		Harris and Roach Chapter 20 (15 in 3rd edition)
Week 9	17-Mar	Midterm				
	19-Mar	Canceled				
Week 10	24-Mar	Spring Break				
	26-Mar					

Additional (very optional) help with Supply and Demand basics

Decreasing marginal utility	https://www.youtube.com/watch?v=f7mTb3mOwyw
Increasing marginal cost	https://www.youtube.com/watch?v=fzgBWol_S4Q
Supply	https://www.youtube.com/watch?v=ZSvEfSvRIus
Demand	https://www.youtube.com/watch?v=v023I-Iq3HE
CS	https://www.youtube.com/watch?v=Q8u4xXMGQX0
PS	https://www.youtube.com/watch?v=vVUKQAIZafM
External Costs	https://www.youtube.com/watch?v=CpVf11f09Pk

Section 2: Valuation, Climate Change, Innovation

	Date	Lecture Topic	Homework		Quiz	Optional additional resources
			Assigned	Turn in	3 are not inidcated	
Week 11	31-Mar	Second Best Policies			x	
	2-Apr	Valuation 1	6			
Week 12	7-Apr	Valuation 2			x	Harris and Roach Sections 6.1-6.4 and the VSL discussion 7.3
	9-Apr	Climate Change Overview				
Week 13	14-Apr	Cost of Carbon	7	6	x	Harris and Roach Chapter 12 (18 in 3rd) and Appendix 7.1 (section 6.5 in 3rd), https://www.rff.org/publications/explainers/social-cost-carbon-101/ https://www.rff.org/publications/explainers/discounting-101/
	16-Apr	Violence				
Week 14	21-Apr	First Best Carbon Instruments	8	7	x	https://www.rff.org/publications/explainers/renewables-101-integrating-renewables/
	23-Apr	Sectoral Policy 1: Power and Transport				
Week 15	28-Apr	Sectoral Policy 2: Carbon Offset		8	x	
	30-Apr	Innovation				
Final	9-May	12:25 PM; Cumulative				

Additional (very optional) help with economic concepts

Discounting	https://www.youtube.com/watch?v=Mol1yT7tczY
Expected Value	https://www.youtube.com/watch?v=q-FAmfkOkYU