Economics 475—Environmental Economics
Georgetown University Department of Economics
Fall 2020 Tu-Th 9:30 - 10:45 am EST
Meetings on Zoom via Canvas

Professor: Arik Levinson   **Teaching Assistant: TBA**
Office Hrs: See Canvas website   Office Hrs: TBA
arik.levinson@georgetown.edu
www.ariklevinson.com

Environmental economics studies the market failure known as externalities—when consumers or producers don't account for the full social costs of their actions. Examples: when a commuter drives to work in a car that emits carbon monoxide, or when a coal-fired power plant emits sulfur dioxide that causes downwind lakes to become acidic. The field has two parts: (1) placing a monetary value on those intangible, non-traded, environmental amenities like clean air and water, and (2) designing efficient and cost effective public policies to correct those market failures.

This is designed to be a serious economics course for Georgetown economics majors familiar with calculus, intermediate microeconomics, and econometrics. Requirements include a masters-level textbook, articles published in academic economics journals, and policy-school-style case studies.

Adaptations to COVID-19:

1. Synchronicity (*Police* 1983). We will meet via Zoom at the scheduled class time, but much of the class will be accessible asynchronously. I will record all scheduled class meetings (unless anybody objects). I will prerecord and post online some lectures and use the class time for Q&A, group presentations, and to go over the most difficult parts of material.
2. Interactions. Classes in real life are dull when professors lecture uninterrupted. On Zoom it's worse. My goal will be to make classes interactive, including breakout groups, interactions, and quizzes. Come prepared and willing to participate.
3. Office hours and one-on-one meetings. I will schedule multiple office hours at different times of day, depending on the set of time zones spanned by students. Student attendance will be required and scheduled at least once during the semester, perhaps more.
4. Case studies. You will be assigned to groups for the case studies. I will set up meetings with groups before at least the first case study, perhaps more.

Resources:

1. There are two textbooks.
    a. The first is required. *Environmental Economics*, 2nd Edition by Charles Kolstad (Oxford U. Press, 2011). This is a serious, challenging book. It presumes knowledge of intermediate micro and econometrics.
    b. The second is optional. *Markets and the Environment* by Nat Keohane and Sheila Olmstead. This is a nice readable guide, written by two key players in environmental policy. It presumes no prior knowledge. You can access the electronic version of this for free via the Georgetown Library, and I will distribute some chapters via Canvas.
2. Various academic articles and case studies, distributed via Canvas.

Requirements:

1. **Prerequisites**. ECON-101 and ECON-122.
2. **Occasional problem sets**. Students are encouraged to work together on problem sets but must submit them individually via Canvas.
3. **Case studies.** These are group projects, where group membership is assigned by the instructor. Each group must prepare a 1 or 2-page "talking point" memo summarizing key features of the cases under analysis, and answering the decision question. Each group must elect a spokesperson to present their case to the class on the day of the case discussion.
4. **Midterm exam**.
5. **Final exam**.

Important dates:

Tues 9/22	Case #1
Tues 9/29	Midterm Exam #1
Tues 10/20	Case #2
Thurs 10/29	Midterm Exam #2
Tues 11/10	Case #3
Tues 12/8	Case #4
Fri 12/11	Final Exam

Grading: There will be two grading schemes. I will use whichever yields the highest class score.

      (a) Problem sets 10%; case studies 20%; midterms 30%; final 40%.
      (b) Problem sets 10%; case studies 20%; best midterm 35%; final 35%. (Lowest midterm dropped.)

Other class policies:

1. Successful completion of the course requires adherence to the standards of conduct outlined by the Georgetown Honor Code (https://honorcouncil.georgetown.edu).
2. No late assignments will be accepted, and there will be no makeup midterms. If the midterm exam is missed, grading scheme (b) will be invoked automatically.

Brief outline of topics:

1. Part I: Measuring Environmental Benefits
   Travel costs; Hedonics; Contingent valuation; Averting expenditures; Happiness
2. Part II: Regulating Pollution
   Pollution taxes and tradable permits; Space and time; Prices vs quantities; Voluntary environmental policy; Efficiency standards; Renewable portfolio standards
3. Part III: Topics.
   Environmental justice; Growth and the environment; Exhaustible and renewable natural resources; Fracking; Electricity pricing.

That's all the logistics. The rest is environmental economics—an essential tool for understanding the most critical issues facing humanity and planet Earth.