

**ECO 39556/GEOG 38324 – Environmental Economics**  
**Fall 2017**  
**Hunter College**  
**Department of Economics**

**Lecturer:** Bipasha Chatterjee  
**Time:** Tuesday and Friday from 2:10 - 3:25PM  
**Office Hours:** Friday 11:00 AM – 12:00 PM ; Room: 1536HW

**Learning Objectives**

This course is an introduction to the use of economic principles and tools for the analysis of environmental problems and natural resource management and for designing appropriate policy responses. The aim of this course is to develop a set of useful economic toolbox that will allow students to address critically a wide variety of current environmental and climate problems and their proposed solutions rather than just building their knowledge of environmental issues.

The learning objectives are to understand:

1. Concepts and theories in environmental economics
2. Tools and techniques for environmental valuation
3. Institutions and instruments for designing and implementing environmental regulations and policies
4. Current debates on specific environmental issues

At the end of the course the students will be equipped to answer questions such as:

- Why and how to place an economic value on environmental goods? For example, why should people pay and how much are they willing to pay for regular supply of clean water?
- How to measure the impact of economic activities on environmental resources? For example, what is the process of conducting Environmental Impact Assessment (EIS)?
- Can market instruments such as emissions trading reduce emissions more cost effectively and efficiently than carbon taxes? What are the main international negotiation issues in the Paris Agreement?
- What is the economics of climate change ‘mitigation’ and how much is the estimated cost of ‘adaptation’ through path breaking innovation?
- How to make renewable energy more cost effective for the consumers and more profitable for the investors?
- What are the current debates around electric cars?
- What is the economics behind garbage disposal and keeping cities clean?

**Course Materials**

The textbooks for the course is 1) *Environmental and Natural Resource Economics* by T. Tietenberg & Lynn Lewis, 9th edition & 2) *Environmental Economics* (2nd edition) by Charles Kolstad. These are available online so no need to buy. Since environmental economics is an evolving and a relatively new area of study, some parts of the book may not be relevant for the current policy topics covered in the class.

**Therefore, lectures will frequently diverge from the book in terms of order and depth of coverage.**

The web links to the additional readings to support each lecture will be provided in the class.

**Examinations:**

There will be two examinations, a midterm and a final, both of which will be held in our classroom. The dates and times are given below:

Mid-term examination: **TBD**

Final examination: **TBD**

**The two examinations and the group project will share equal weight.**

There will be **no make up exams** except in the case of a **serious and documented** emergency. In this case, I will need to be notified within 24 hours of the exam. Examinations will all be closed book. No books, notes or electronic devices will be allowed into the examination. **The final exam is not cumulative**, i.e. it will only cover material **not** covered in the mid term.

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

**Attendance**

You are expected to attend every class. I will not take attendance but in my experience, students who do not attend class regularly or skip homework assignments do not succeed in this class. If you have a job or any other responsibilities, which prevent you from attending classes regularly, I strongly advise you not to take this course. Also, please be considerate of your classmates and arrive on time. **Cell phones, pagers or other electronic devices must be turned off before the class begins.**

**ADA POLICY**

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY, located in Room E1214B, to secure necessary academic accommodations.

**Hunter College Policy on Sexual Misconduct**

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College affirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationship. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College.

- a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, on contacting the College's Public Safety Office (212-772-4444)
- b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose ([jtrose@hunter.cuny.edu](mailto:jtrose@hunter.cuny.edu) or 212-650-3262) or Colleen Barry ([colleen.barry@hunter.cuny.edu](mailto:colleen.barry@hunter.cuny.edu) or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East 1123.

CUNY Policy on Sexual Misconduct Link: <http://www.cuny.edu/about/administration/offices/la/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf>

### Hunter College statement on Academic Integrity

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### Course Schedule

Time	Topics	Readings
<b>Module A.</b>	<b>Environmental Economics: Concepts and Theories</b>	
Week 1- 2	Topic: <i>Examine the main concepts in environmental economics:</i> History of environmental thinking in economics, property rights, market failure, externalities, public goods, environmental tax, net present value and discounting, sustainability.	Ch. 1 – 2, 5
Week 3- 4	Topic: <i>Discuss the main theories in environmental economics:</i> The Tragedy of the Commons, The Limits to Growth debate; strong vs. weak sustainability, Ecological Economics.	Policy Readings TBD
<b>Module B.</b>	<b>Environmental Valuation: Tools and Techniques</b>	
Week 5-7	Topics: <ul style="list-style-type: none"><li>• Cost-benefit analysis (CBA)</li><li>• Environmental impact assessment (EIA)</li><li>• Marginal abatement cost curves (MACC)</li><li>• Ecological footprints (&amp; carbon footprints)</li></ul>	Ch. 3 - 4
<b>Module C.</b>	<b>Environmental Regulation</b>	
Week 8-10	Topics: <ul style="list-style-type: none"><li>• Command and Control;</li><li>• Market based instruments for controlling pollution (Tax, Subsidies, &amp; Permit Trading);</li><li>• Voluntary Regulation/ Voluntary Agreements;</li></ul>	Ch. 15 – 17  Policy Readings TBD
<b>Module D.</b>	<b>Group discussions on specific issues</b>	
Week 11- 13	<ul style="list-style-type: none"><li>• Cost of climate-change mitigation and adaptation</li><li>• Financing renewable energy</li><li>• Brief history of US environmental movement</li></ul>	Ch 5,7,13, 14,18,22, 23 Policy Readings TBD
<b>Module E.</b>	<b>Group project: Topics to be distributed after midterm examination</b>	
Week 14-15	Group presentations (2-3 in one group)	