Course Title: Microeconomics and Policy Analysis II – Spring 2020
Course Number: ENVP U8216
Meeting Date/s Times: Wednesdays, 6:10pm-8:00pm
Location: IAB 404
Instructor: Selcuk Eren

Course Objective
This is a core economics course for the MPA in Environmental Science and Policy. The course explores the use of economic analysis tools in the discussion and evaluation of environmental policies. It builds on the microeconomic framework developed in Microeconomics and Policy Analysis I and extends it in a few directions. First, we deepen the discussion of theoretical issues particularly relevant for the analysis of environmental policies, such as externalities and public goods. Second, we explore how the theoretical concepts covered can be measured and used in actual environmental policy, and discuss real world examples of such applications. And finally, we discuss some aggregate implications related to – and the available evidence on – the two-way relationship between natural resources and economic growth. By the end of the semester, students will gain experience in using a range of economic concepts to recommend or critique actual environmental decisions.

Course Overview
This is a semester-long course and has two broad sections. The first section begins by introducing economic efficiency and cost-effectiveness criteria commonly used to evaluate public policy decisions related to environment issues. We examine practical steps for evaluating policies by studying environmental valuation techniques, cost-benefit approaches and cost-effectiveness analysis. We then apply some of these techniques to analyze the appropriateness of various pollution regulation options. This section ends with a discussion of more sophisticated public policy options that take into account information, risk, and uncertainty problems.

In the second section, the focus moves from applying an economic framework to analyze environmental issues within a single market to thinking about the impacts across an entire economy and across countries. We begin by introducing how to measure a country's economic performance in the short run and then turn to long-run economic growth theory and how these concepts relate to the environment. This section also examines the role of natural resource management in sustainable development. The semester ends by examining some current environmental policy debates.

Method of Instruction
Pre-class reading, regular attendance at lectures, thoughtful class participation and diligent efforts to do the problem sets are each necessary to master the course. The course will use some basic tools from calculus, econometrics, and linear algebra when convenient. The emphasis will be on building economic intuition and critical interpretation of economic research and technical research skills.

Textbook and Reading
The Kolstad textbook is required. The course will also draw on the three recommended books, as well as additional articles and readings listed on CourseWorks.

Required Textbook
Kolstad, Charles D. Environmental Economics. Second Edition. New York: Oxford University Press, 2010.

Recommended Textbooks
Jones, Charles. Macroeconomics. Third Edition. New York: W.W. Norton & Company Inc., 2013.

Keohane, Nathaniel, and Sheila Olmstead. Markets and the Environment. Washington: Island Press, 2007.

Stavins, Robert N., ed. Economics of the Environment: Selected Readings, Sixth Edition. New York, New York: W. W. Norton & Company, 2012.

Method of Evaluation
Regular attendance and active class participation are expected. Students should have done the readings for each lecture before class. Grades for the course will be based on:

1. *Midterm Examination (25%)*

The examination will be given in class. Each student is required to take the examination.

2. *Group Project and Presentation (35%)*

Students are expected to form groups of four and write policy report accompanied by a class presentation.

3. *Problem Sets (20%)*

There are 4 problem sets. Problem sets are always due at the beginning of class and no late problem sets will be accepted. You can form groups of up to 2 people to work on the problem sets.

4. *Lab Assignments (20%)*

There are two laboratory assignments that require performing statistical analyses that could be completed using a statistical software. You can form groups of up to 4 people to work on lab assignments.

Re-Grading Policy
If you feel your solution has been overlooked or graded it incorrectly, please hand in a written note explaining why the particular item should be regarded within two weeks after the problem set/exam was made available for pick-up. Once the two weeks have passed, you forfeit the right for a re-grade.

Course Outline

The following is a preliminary course outline. The lecture schedule and other material are subject to change to accommodate the flow of the course. Additional readings will be posted on CourseWorks before each lecture.

Date	Topic	Reading
Week 1 01/22/2020	Course logistics, review of efficiency in competitive markets	
Week 2 01/29/2020	Issues in Environmental Economics	Kolstad, Ch. 1, 2, and 3
Week 3 02/05/2020	Externalities and public goods	Kolstad, Ch 4 and 5
Week 4 02/12/2020	Decision making in environmental policy, Demand for Environmental Goods	Kolstad Ch 6, 7
Week 5 02/19/2020	Benefit Estimation Methods: Hedonic Pricing	Kolstad, Ch. 8
Week 6 02/26/2020	Benefit Estimation Methods: Travel Cost and Contingent Valuation	Kolstad, Ch. 9 and 10
Week 7 03/04/2020	Regulation, Taxes and Subsidies	Kolstad Ch. 11 and 12
Week 8 03/11/2020	Midterm Exam	
Week 9 03/18/2020	*Spring Recess*	
Week 10 03/25/2020	Property Rights, Unknown Costs and Enforcement	Kolstad, Ch. 13, 15, and 16
Week 11 04/01/2020	Macroeconomics and Environment	
Week 12 04/08/2020	Long Run Economic Growth Model and the Environment	Kolstad Ch. 20

Week 13 04/15/2020	Sustainable Development and Resource Management
Week 14 04/22/2020	Group Presentations
Week 15 04/29/2020	Group Presentations
Week 16 05/13/2020	*Final Project Due*

Academic Integrity

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http://bulletin.columbia.edu/sipa/academic-policies/Links to an external site.

Academic dishonesty includes failure to properly cite ideas in your work that are not originally yours. Please familiarize yourself with the proper methods of citation and attribution. The School provides some useful resources online; we strongly encourage you to familiarize yourself with these various styles before conducting your research:
http://bulletin.columbia.edu/sipa/academic-policies/Links to an external site.

Violations of the Code of Academic and Professional Conduct will be reported to the Associate Dean for Student Affairs.