

**MICROECONOMICS AND POLICY ANALYSIS I**  
**ENVP U8213.001**  
**SIPA – COLUMBIA UNIVERSITY**

**Teaching Team**

Instructor:

Prof. Suresh Naidu

Office Address: 1405 IAB

E-mail: [sn2430@columbia.edu](mailto:sn2430@columbia.edu)

Office Hours: Monday-Tuesday 11am-12pm and by appointment.

Online office hours: TBA

Tim Foreman (TA)

Email: [taf2109@columbia.edu](mailto:taf2109@columbia.edu)

Office Hours: TBA

(DRA)

Angel Vasquez

Email: [aiv2104@columbia.edu](mailto:aiv2104@columbia.edu)

Office Hours: TBA

**Teaching Schedule**

Lecture

Tu Thu 9:15 – 10:45PM, IAB 413

Recitations:

Monday 210-4pm IAB 405

Friday 9-10:50am IAB 410

**Course Description**

The objective of Microeconomics and Policy Analysis I is to ensure that students are able to use an economic framework to analyze environmental policy choices. Students will be expected to understand, apply and critique micro-economic models that inform environmental policy. By the end of the semester, students will be expected to use economic concepts fluently to advocate various public policy positions.

We will begin with the big picture. What is a capitalist economy and how do we think about it. But we will then focus on tools for understanding core institutions such markets, individual workers and consumers, and firms.

We describe simple supply-demand relationships and apply these to economic problems. We introduce the concepts of opportunity cost and choice, which are

fundamental to an economic framework for environmental policy. We then examine basic tools used by economists. We examine in detail the underlying theory of consumers and producers necessary to derive supply and demand relationships. This detailed analysis facilitates an intelligent application and critique of these basic economic tools.

We will incorporate environmental examples throughout the class, but this is not a class on environmental economics. It will introduce you to microeconomics more generally, and give you a view of the economy interacting with lots of other political, social, and yes, environmental factors.

## **Textbook**

1. CORE economics ebook. This is a prototype open-source textbook I've been involved in writing. We will use Units 1-10 + 18/19/20 from it throughout the course.
2. Pindyck and Rubinfeld, Microeconomics, Available at book culture.

This kind of microeconomics is very standardized, however, so a lot of the same material is covered in online textbooks:

<http://catalog.flatworldknowledge.com/catalog/editions/b5230>

[http://www.daviddfriedman.com/Academic/Price\\_Theory/PThy\\_ToC.html](http://www.daviddfriedman.com/Academic/Price_Theory/PThy_ToC.html)

There are also a number of online videos and explanations that are very well-developed.

3. (Optional) Nordhaus "The Climate Casino". Is an update and informal view on the economics of climate change.

In addition, the course will draw on texts, articles and other readings on reserve or on CourseWorks.

## **Requirements**

Pre-class reading, regular attendance at lectures and lab, intelligent class participation and diligent efforts to do the problem sets are each necessary to master the course. However, the emphasis will be on building strong economic intuition rather than technical skills.

## **Evaluation**

Regular attendance and active participation in class and in the bulletin board are required. Students are expected to have done the readings for each lecture before class. As in policy analysis, teamwork is an essential element of success in the class.

Participation will account for 15% of the final grade. Students will be expected to contribute to class discussions. Contributing to class discussions means enhancing the quality of the class experience for yourself and others. It involves making relevant, useful and non-obvious comments, or posing pertinent questions, in clear and succinct language. This can also be done on the online discussion sessions. Problem sets (one per fortnight) account for 20% of the final grade. Students are free to form teams of 4-5 to work together, however the problem sets must be submitted individually.

There are two midterm exams (20% each) and a comprehensive final exam (25%).

**Note:**

Academic dishonesty will not be tolerated. This includes failure to properly cite ideas in your papers that are not originally yours.

**Course Outline (subject to change)**

Sept 2

Lecture 1: What are we studying, anyway? Capitalist economies

Reading: Core Unit 1

Sept 4

Lecture 2: How did we get here? Malthusian predecessors.

Reading: Core Unit 2

Sept 9-11

Lecture 3 +4 : Basic idea of trade-offs: time vs things,

Reading: Core Unit 3

Also: P&R chapter 3: Budget constraints; utility maximization subject to constraints

Sept 16-18

Lecture 5 + 6: Cooperation and Strategic Interaction

Reading: Core Unit 4

Also: P&R chapter 13

TBA: Readings on Environmental Common Pool Problems.

Sept 23-25

Lecture 7: Contracts

Reading: Core Unit 5

Sept 30

Lecture 8: Firms and Employees,

Reading: Core Unit 6

Oct 2<sup>nd</sup>:Midterm 1

Oct 7-9

Lecture 9-10: Firms and Production,

P&R chapter 6 and chapter 7

Oct 14

Lecture 10: Firms and Customers

Reading: Core Unit 7

Oct 16

Lecture 11: Customers and their money

P&R chapter 4

Oct 21-23

Lecture 12-13: Firm price setting

P&R chapter 11 + 12

Oct 26-28

Lecture 14-16: Competitive Markets and Prices

Reading: Core Unit 8, 9, and 10

P&R chapter 9

Nov 4: election day holiday

November 6:

Midterm 2

Environmental and Policy Applications.

November 11+13

Lecture 17+18: Environment

Reading: Core Unit 17

Extra: Nordhaus "The Climate Casino" (2014).

Lecture 19: Inequality

Reading: Core Unit 18

Lecture 20: Innovation and Technology

Reading: Core Unit 20

Lecture 21+22: Policy and Politics

Reading: Core Unit 20 (and others TBA)

Final exam

### **Academic Integrity Statement**

The School of International & Public Affairs does not tolerate cheating and/or plagiarism in any form. Those students who violate the Code of Academic & Professional Conduct will be subject to the Dean's Disciplinary Procedures.

Click here to view the Code of Academic & Professional Conduct online:

[http://sipa.columbia.edu/resources\\_services/student\\_affairs/academic\\_policies/code\\_of\\_conduct.html](http://sipa.columbia.edu/resources_services/student_affairs/academic_policies/code_of_conduct.html)

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.

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