

**Economic Analysis for International and Public Affairs I**  
**SIPA U6400 (sections 1-4). Fall 2010**  
**Columbia University**

---

Emanuele Gerratana  
Office: IAB 1309A  
Telephone: 212-854 8506  
eg198@columbia.edu

Office Hours  
M-T 1:00pm-2:00pm  
F 8:00am-10:00am

---

### **Objectives**

The objective of this course is to provide you with the analytical tools used in economics. This course is the first part of a one-year sequence and focuses on microeconomic theory. At the end of the semester you will be able to understand the basic conceptual foundation of microeconomics and how microeconomic analysis can be used to examine public policy issues. The approach of the course is analytical, but you will also be required to discuss concrete applications. Finally, the course is intended to serve as an introduction for more advanced or specialized economic classes.

### **Outline of the course**

- Topic 1. Demand and Supply. Welfare Analysis of Competitive Markets.  
Demand and consumer surplus; supply and profit; market demand, market supply and equilibrium; elasticity; changes in demand and supply; welfare properties of equilibrium; welfare implications of policies; applications
- Topic 2. Consumer Theory.  
Budget constraint; preferences and utility; optimal choice and comparative statics; effects of policies on consumer choice; applications and extensions: labor supply, uncertainty and choice over time
- Topic 3. Producer Theory.  
Production functions; isoquants and isocosts; cost minimizing choice; cost function; profit maximizing quantity; supply function
- Topic 4. General Equilibrium and Welfare Theorems.  
Difference between partial and general equilibrium; exchange economies; welfare theorems; economies with production; the production possibility frontier
- Topic 5. Non Competitive Markets.  
Market power; introduction to game theory; monopoly; oligopoly; monopoly pricing
- Topic 6. Asymmetric Information  
Introduction to economics of information; adverse selection and moral hazard; applications

- Topic 7. Externalities and Public goods. (PR chapter 18)

Positive and negative externalities; implications for public policies; property rights and Coase theorem; common property resources and public goods; applications

### The teaching team<sup>1</sup>

| Name     |               | Contact              | Office Hours                |
|----------|---------------|----------------------|-----------------------------|
| Emanuele |               | eg198@columbia.edu   | M-T 1:00-2:00, F 8:00-10:00 |
| Jack     | TA section 1  | jyt2105@columbia.edu | TBA                         |
| Nelly    | TA section 2  | nla2110@columbia.edu | TBA                         |
| Mark     | TA section 3  | mwv2103@columbia.edu | TBA                         |
| Ronghua  | TA section 4  | rw2368@columbia.edu  | TBA                         |
| Laetitia | DRA section 1 | lb2651@columbia.edu  | TBA                         |
| Kevin    | DRA section 2 | kch2115@columbia.edu | TBA                         |
| Carole   | DRA section 3 | cb2724@columbia.edu  | TBA                         |
| Azra     | DRA section 4 | ap2815@columbia.edu  | TBA                         |
| Lauren   | Tutor         | lq2125@columbia.edu  | By Appointment              |
| Miriam   | Tutor         | mll2153@columbia.edu | By Appointment              |
| Muneeb   | Tutor         | ma2907@columbia.edu  | By Appointment              |

### Course requirements, learning material and grading

You must attend two classes and one recitation weekly, take online quizzes, participate actively in class, work on weekly problem sets, and take the midterm and final exam.

Lecture notes will be posted on the course website. Make sure you read them before you come to class. Other readings and learning material will be made available online.

There is no required textbook for the class; however, you may refer to the following textbooks as general reference, both of which are available in the library:

Pyndick and Rubinfeld, *Microeconomics*

Besanko and Braeutigam, *Microeconomics*

You are required to purchase an i>clicker remote (available at the Columbia bookstore) for in-class participation.

#### Grading

| Test   | Points      |
|--|-------------|
| Midterm exam                                 | 300 points  |
| Final exam                                   | 300 points  |
| Highest score between midterm and final exam | 100 points  |
| Problem sets                                 | 100 points  |
| i>clickers                                   | 100 points  |
| Online quizzes                               | 50 points   |
| Class participation                          | 50 points   |
| Total  | 1000 points |

<sup>1</sup>The TAs and DRAs will post their office hours on course website as soon as possible

## Problem sets

Starting from the second week, you will be assigned a weekly problem set, available on the course website. You are encouraged to work in groups (composed of not more than 4 students). If you work in a group, submit only one problem set for each group. If you need help forming a group, please send an e-mail to Jack Tang (jyt2105@columbia.edu) and he will assist you in this process. The problem sets will be graded by a score of 1, 2 or 3. A score of 2 corresponds to an honest and full effort even if there are some mistakes. A score of 3 corresponds to a perfect or near perfect set of answers. An average of 2 will get you 90 points (out of 100) for the problem sets. The problem sets are due on Wednesday at 12:00pm, in the mailboxes 45 or 52 on the 6th floor (near the Student Affairs office).

## i>clicker

i>clicker is a response system that allows you to respond to questions I pose during class. You will get points on the accuracy of your response and on your participation. 2/3 of the points in 2/3 of the classes will get you 100 points (out of 100).

Each clicker has a unique serial number on the back of the remote. Place a piece of scotch tape over the bar code and ID to preserve it. In order to receive credit for your votes, you will need to register your i>clicker remote online before September 19. You must have come to class at least once and voted on at least one question in order to complete the registration. Once you have voted on a question in my class go to [www.iclicker.com/registration](http://www.iclicker.com/registration). Complete the fields with your first name, last name, student ID, and remote ID. Your student ID should be your UNI. The remote ID is the series of numbers and sometimes letters found on the bottom of the back of your i>clicker remote. The i>clicker response system will be used in every class and you are responsible for bringing your remote.

## On-line quizzes

Starting from the second topic, you will be required to answer online quizzes on some of the learning material (readings, podcasts etc.). The quizzes will be available on the course website. 2/3 of the points in 2/3 of the quizzes will get you 50 points (out of 50).

## Recitations

| Section    | Time              | Place   |
|------------|-------------------|---------|
| Section 1a | R 6:10pm-7:40pm   | 405 IAB |
| Section 1b | F 9:00am-10:30am  | 404 IAB |
| Section 2a | F 10:00am-11:30am | 410 IAB |
| Section 2b | F 1:30pm-3:00pm   | 407 IAB |
| Section 3a | F 9:00pm-10:30am  | 413 IAB |
| Section 3b | F 12:30pm-2:00pm  | 410 IAB |
| Section 4a | R 9:00am-10:30am  | 410 IAB |
| Section 4b | F 2:10pm-3:40pm   | 410 IAB |

The recitations will start the second week of classes (September 17-18).

**Exam dates**

The midterm will take place on Friday, October 22nd 3:30pm-7:00pm.

The final will take place on Friday December 17th 3:30pm-7:00pm (to be confirmed by the registrar).

**Differences between U6400 and U4200**

The level of the two courses is similar. However, U6400 is more calculus based, the pace of the course is faster and the workload is heavier. If you are not comfortable with calculus and rigorous logical reasoning you might find this course painful and not learn much. Conversely, if you are comfortable with math, you might find U6400 easier and more instructive, because many economic arguments are easier to understand with the use of some math. The math background required for U6400 was covered in the math camp (see also the online math tutorial, U4623). I will present in class any further mathematical concepts used in the course.