Course Description

The goal of this course is to give you some insight into how markets work. The first part of the course starts with the study of decision making by consumers and firms and concludes with an important benchmark result in economics: a set of conditions under which markets function efficiently. In the second part of the course, we focus on situations when, for one reason or another, markets don’t work efficiently. We will emphasize the importance of strategic behavior, as modeled by game theory.

Microeconomics (as the topic of this course is frequently referred to) is an important component of an MBA program. First, microeconomics focuses on specific dimensions of optimal firm decision making, such as pricing and entry and exit. Second, the formal economics perspective on business plays an important role in other areas of MBA study, such as finance or marketing. Finally, by studying public policy towards market failures, microeconomics highlights important factors conditioning firm strategy.

Some of the key concepts we will introduce include economic incentives, marginal analysis, opportunity cost (which costs matter), market efficiency (what does it mean for a market to work), strategic behavior (how to predict and respond to your rivals’ decisions), and asymmetric information (what happens when others know something you do not). Our experience with students in prior years is that much of this is intuitive. But much is not, and our hope is that the combination of theoretical structure and practical examples will be useful in the years to come. It will not make you a success on its own, but it might give you an edge a few times when it matters.

Prerequisites

You are expected to be comfortable with basic algebra and calculus, including systems of equations, logarithms and NPV calculations, and derivatives.
Course Materials

- Lecture notes. They review the theory relevant to most classes. In a few pages, they outline and explain the conceptual issues for the day, define terms, give examples, and (where it makes sense) work through numerical problems.

- Textbook. There is no required textbook for this course. However, if you want to have a reference text, I recommend Michael Baye’s *Managerial Economics and Business Strategy* (McGraw-Hill, 5th edition), which is available in the bookstore.

- Slides. The slides are a forecast of where the class will head, but if the discussion moves in another interesting direction we will generally let it run its own course.

- Additional materials. On occasions, I will post additional materials on Blackboard, such as newspaper articles or research papers.

The notes, slides and assignments will be handed out on the first day of class and posted on the course management system (http://sternclasses.nyu.edu).

Deliverables

The various “deliverables” in the course are designed to develop different skills:

- Class participation. It is important to integrate what you learn and be able to express it effectively. Moreover, there is a great deal of collective insight and experience in the class and we all benefit from sharing it.

- Exams. There will be two in-class exams, one in the middle and the other at the end of the course (see course outline for dates). The format will consist of three or four problems, similar to the practice exams that I will distribute in due course.

- Problem sets. Problem sets emphasize quantitative applications of the principles and tools developed in class. They are due at the start of class. They will not be graded, but will be marked with a check (and possibly a plus or minus). You are expected to hand these in and make a reasonable attempt, failure to do so will be penalized.

- Group work, consisting of
  - Projects: Two generally more complex and realistic quantitative assignments that use and extend the principles and tools developed in class.
  - Presentations: Every group will make a presentation to the class on a topic selected from a list described in a separate document. The goals are
to apply economic principles to a real problem and to hone your communication skills. The content is generally more qualitative than assignments and projects.

Your grade for the course will be based on your contributions to all of these deliverables, weighted as follows:

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Class participation</td>
<td>10%</td>
</tr>
<tr>
<td>Individual problem sets</td>
<td>“check+/–”</td>
</tr>
<tr>
<td>Group projects (2)</td>
<td>20%</td>
</tr>
<tr>
<td>Group presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Mid-term exams (2)</td>
<td>50%</td>
</tr>
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Final grades will follow the School’s guideline for core courses: no more than 35% of the class will receive A or A–. This guideline was instituted in response to student concerns that different sections of a course might be graded by different standards.

Dates and deadlines for all assignments can be found in the detailed course outline.

**Exams and re-grading**

You are responsible for checking the midterm exam dates and avoid any conflict with other commitments. During the exams, you are not allowed to consult class notes, books, or any other material. However, you may consult one page of notes (a standard-size sheet of paper written on two sides). *Questions about grading must be made in writing and no more than a week after the exams are returned.* You should give me the exam with a written note describing the problem.

**Honor Code**

The Stern community believes that honesty and integrity are necessary for rewarding academic and professional experiences. These qualities form the basis for the strong trust among members of the academic community (students, faculty, and administrators) that is essential for excellence in education. The Honor Code requires that each student act with integrity in all academic activities and endeavor to hold his or her peers to the same standard.

In this course, you may discuss assignments with anyone, but any written work submitted for a grade should be your own. On exams, you may bring in and consult one piece of paper with anything on it you like, but your answers should be entirely your own work.

**Students with disabilities**

If you have a qualified disability and will require academic accommodation during this course, please contact the Moses Center for Students with Disabilities (CSD, 998-4980) and provide me with a letter from them verifying your registration and outlining the
accommodations they recommend. If you will need to take an exam at the CSD, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation.

**Help**

There are times when a little help can get you past an obstacle. If you are stuck, send me an email (hbar-isa@stern.nyu.edu) or stop by my office (KMC 7th floor, room 73). I try to respond quickly to email. My office hours are before class 5-6pm, and after class but I am happy to answer questions any time you find me. You can also contact the TA (tba)

**Contacting you**

All announcements regarding the course will be made on Blackboard. Besides administrative issues, I could also post clarifications on the class material (maybe arising out of our discussion in class or following from a fellow student’s questions). You are responsible for checking Blackboard for announcements on a regular basis (i.e. at least a couple of times a week).
List of topics

Supply and demand. Supply and demand curves, market forces, curves and shifts.


Economic cost analysis. Opportunity cost, sunk cost, marginal costs; economic costs and cash flows.

Market Equilibrium. Short run and long run competition.

Basic pricing. Profit maximization and the elasticity rule.


Price discrimination. Market segmentation.

Issues in Pricing. Versioning and Bundling.

Strategy and games. Strategies and payoffs, normal and extensive-form games (tables and trees), best responses, Nash equilibrium. The Prisoners’ Dilemma, the pricing game and other important games.

Hazards of price competition. Price setting in “commodity” markets: the “Bertrand trap” and how to avoid it.

Competition and cooperation. Cooperative situations and how to produce them, trigger strategies, factors that make cooperation easier.


Asymmetric information. What happens when the seller knows more than the buyer? When the manager knows more than the owner? The agency problem. The lemons problem. Signaling and reputation. Actions and beliefs.