This course provides an intensive overview of the economic analysis of firms, industries, and markets. The overriding general constraint is the scarcity of resources. We examine the rationales for decisions by individual buyers and sellers, as well as how these decisions are aggregated through markets. Among other things, we explore the forms that competition can take, the role of industry structure, and the influences of government policies.

The course is intended to provide the participants with tools and conceptual frameworks that they can use to better understand and analyze business decision-making and the market and government-policy environment within which businesses operate. In addition, the course develops analytical tools and logic that are useful in the study of finance, marketing and other business areas.

Some of the key concepts we will introduce include opportunity cost (which costs matter), economic incentives, optimizing within constraints imposed by scarcity, marginal analysis, strategic behavior (how to predict and respond to your rivals’ decisions), market efficiency (what does it mean for a market to work really well), asymmetric information (what happens when others know something you do not), and externalities (spillover cost or benefits, beyond direct market exchange).
Required Reading

Most of the required reading is in the textbook for the course:


Excerpts from several other books are also assigned. Students do not need to buy any of this other material. Hard copies of each excerpt will be distributed at the class session several weeks before the session for which the reading is assigned. (Note: These excerpts will only be available in hard copy—I will not post them on the Blackboard site.)

I strongly suggest that you read (perhaps quickly) the assigned reading before the class discussion of the topic. In the class discussion I will usually cover the concepts and issues that are most challenging, reinforcing and extending what is in the required reading. I suggest that after the class session you review the assigned reading to solidify your understanding.

It is highly recommended to keep up with current economic developments, both for class purposes and for your own benefit. You can do this by reading the relevant articles in a good newspaper (e.g., *Financial Times*, *Wall Street Journal*, *New York Times*) or weekly magazine (e.g., *Economist*). You are encouraged to bring up relevant current events and issues for discussion in class, as time permits.

Problem Sets and Slides Used in Class

It is important that you develop the ability to use and apply the concepts and tools developed in the course. The best way to do this is to practice actively outside of the class sessions.

- Several problem sets will be distributed, with suggested answers attached. The problem sets are for your use in your efforts to master the material; answers need not be turned in.
- I will post examples of quiz and exam questions along with suggested answers, on the Blackboard web site.
- Questions and problems in the textbook are another source of practice items. If an entire chapter is assigned as required reading, then all questions and problems at the end of this chapter are relevant. If only a part of a chapter is assigned as required reading, then the course outline indicates the relevant questions and problems.

One way to get active with this material is to work with a few other people in the class (as a study group) to discuss the problem sets, the text questions, and/or the sample exam questions.

Hard copies of the slides used in the class sessions will be distributed at the beginning of the discussion of each topic.
Course Requirements and Evaluation

Evaluation is based on the following items, with weights noted.

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz #1, session 4</td>
<td>13%</td>
</tr>
<tr>
<td>Mid-term exam, session 7</td>
<td>24%</td>
</tr>
<tr>
<td>Final examination, session 12</td>
<td>37%</td>
</tr>
<tr>
<td>In-class group presentation</td>
<td>16%</td>
</tr>
<tr>
<td>Contributions to class discussion</td>
<td>10%</td>
</tr>
</tbody>
</table>

Final grades will follow the School’s guidelines for core courses: no more than 35% of the class will receive an A or A-.

Quiz and Exams

The quiz covers material in Sessions 1, 2, and 3. The midterm exam covers material in Sessions 1, 2, 3, 4, and 5; it focuses on Sessions 4 and 5. The final exam covers all material in the course; it focuses on Sessions 6 through 11.

For the quiz, each participant is permitted to bring one sheet of paper (8½ by 11 inches) with notes on both sides, to refer to during the quiz. For the midterm exam, each participant is permitted to bring two sheets of paper (8½ by 11 inches) with notes on both sides, to refer to during the exam. For the final exam, each participant is permitted to bring three sheets of paper (8½ by 11 inches) with notes on both sides, to refer to during the exam.

For each quiz or exam, you may also use a calculator. But, you may not use any device that is capable of wireless transmission.

Otherwise, the quiz and exams are closed-book.

You may find the quiz and exams difficult. My goal in creating a quiz or exam is to provide you with a substantial challenge. I want to see how far you can go with the material. The best answers to quiz or exam questions often are based on the abilities:

- to apply concepts and tools
- to use judgment
- to develop new insights about problems that you have not seen before the exam
- to make connections to find the most relevant concepts and tools to use in your answers
- to answer the question that is asked, not some other question
In-Class Group Presentation

By the end of the second class session, each student in the class will be a member of a group (often based on existing study groups). Each group will make a presentation to the class from one of the topics in a list that will be distributed during the second class session. You should view your presentation as an opportunity to hone your research and presentation skills, to attack a real issue, and to show off your creativity.

Presentations will last no longer than about 14 minutes. In addition, you will have 2-3 minutes for questions from the class. Evaluation will be based on three criteria:

- Informativeness
- Analysis and Interpretation
- Style

Class Participation

Class participation will be evaluated on the basis of contributions to class discussions. In the evaluation, quality is more important than quantity. In addition, the evaluation of class participation could be affected adversely by lack of attendance or creating negative classroom externalities.

Responsibilities

We are all adults.

- As the teacher I have the responsibility to organize and present the material and to facilitate your learning.
- As a student you have responsibility for your own learning.
- You are responsible for complying with Stern’s Honor Code. The Honor Code requires each student to act with integrity in all academic activities and to hold his or her peers to the same standard. No lying, cheating, or plagiarism of published work, work posted on the web, or work done by other students will be tolerated. Any suspected case will be referred to the School’s student discipline committee.
- Actions that have negative effects on others will not be tolerated in the classroom. If you must arrive late or leave early, you must do so as quietly as possible. No cell phones should be audible during class sessions.
Blackboard Web Site

I will maintain a web site for the course using Blackboard. The web site will include announcements and downloadable files with nearly all class handouts, as well as sample quiz and exam questions and suggested answers.

Contacting Professor Pugel

My office hours at Purchase are Tuesdays and Thursdays, 4:00-5:30 PM. I will also usually be available for quick questions in the classroom during the several minutes before the class session begins and after it ends, as well as at the brief break in the middle of the class session.

My telephone is 212-998-0424. My fax is 212-995-4221. My e-mail is tpugel@stern.nyu.edu

I usually respond quickly to e-mail messages, so this is an excellent way to contact me.
SESSION 1: INTRODUCTION AND DEMAND ANALYSIS
May 15

Topical Outline

Introduction
Determinants of quantity demanded by an individual consumer [or user firm]
  Product price
  Buyer income [or quantity of user-firm output]
  Substitutes and complements
  Preferences and the role of advertising [or technologies available to user firm]
Market demand
Consumer surplus
Responsiveness: elasticities

Required Preparation

Baye, chapter 1.

Baye, pp. 36-45. [Relevant Problems on pp. 66-71 are 1, 4, and 5.]

Baye, pp. 73-95 and 107-108 (Answering the Headline). [Relevant Problems on pp. 109-116 are
  1, 2, 3, 4, 5, 6, 9, 11, 12, 13, 14, and 19.]

SESSION 2: CONSUMER DECISION-MAKING; COST ANALYSIS
May 17

Topical Outline

Behind individual buyer decisions
  Indifference curves
  Budget constraint
  Change in product price: substitution effect and income effect
Opportunity cost: explicit and implicit
Generic cost analysis: short-run
  Total, fixed, and variable costs
  Average and marginal costs
Generic cost analysis: long run
  Economies of scale
  Economies of scope
  Learning economies
SESSION 3: PROCURING INPUTS; PRINCIPAL-AGENT ISSUES
May 22

Topical Outline:

The firm: acquiring and using resource inputs
  Transaction costs
  Specialized investments
  Opportunism
  Spot exchange, long-term contract, vertical integration
Principal-agent problems
  Ideal resolution and why it is unlikely
  Partial resolution

Required preparation:

Baye, Chapter 6 (including Appendix).

SESSION 4: MONOPOLY: USING SELLER’S MARKET POWER
May 24

First 40 minutes: Quiz (covers material in Sessions 1, 2, and 3)

Topical Outline

Industry analysis
Monopoly: structural conditions
Pricing for profit maximization
  Uniform price to all buyers
  Perfect (or first-degree) price discrimination
  Group or segment (or third-degree) discrimination
  Indirect segment discrimination
Two-part pricing
Block pricing
Advertising

Required Preparation

Baye, Chapter 7.

Baye, pp. 280-294 and 302-304. [Relevant Problems on pp. 306-312 are 4, 8, 12, 13, 16, 17, and 19.]

Baye, pp. 397-401, 404-421, and 426 (Answering the Headline). [Relevant Problems on pp. 427-432 are 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 18.]

SESSION 5: COMPETITIVE INDUSTRY: NO MARKET POWER
May 29

Topical Outline

Perfect competition: structural conditions
Firm profit maximization
Individual firm supply curve
Short run market supply curve
Responsiveness: price elasticity of supply
Producer surplus
Demand and supply
  Competitive market equilibrium: short run
  Long-run competitive market equilibrium
  Dynamics: supply shift, demand shift; short run and long run

Required Preparation

Baye, pp. 267-280. [Relevant Problems on pp. 306-312 are 1, 2, 9, 10, and 18.]

Baye, pp. 35 (Headline), 45-54, and 59-64. [Relevant Problems on pp. 66-71 are 3, 9, 10, 11, 12, 13, 15, 17, and 18.]
SESSION 6: OLIGOPOLY AND STRATEGY: COMPETITION AMONG A SMALL NUMBER OF FIRMS

May 31

Topical Outline

Firm decision-making: strategy
Game theory
Product differentiation and monopolistic competition
Defending sellers’ market power: barriers to entry
  Scale economies
  Absolute cost advantages
  Aspects of product differentiation

Required Preparation


Baye, pp. 266 (Headline), 296-302, and 304-305 (Answering Headline). [Relevant Problems on pp. 306-312 are 3, 5, 7, 11, and 14.]

Baye, pp. 316-318.

Baye, chapter 10.

SESSION 7: OLIGOPOLY (continued)

June 5

First 65 minutes: Midterm exam (covers material in Sessions 1, 2, 3, 4, and 5; focuses on Sessions 4 and 5) [brief break will be a little earlier than usual, right after the exam]

Topical Outline

Oligopoly pricing
  Rivalry: prisoners’ dilemma
  Coordination and repetition
  Limit-pricing, predatory pricing, penetration pricing
Oligopoly: Non-price decisions
  Rivalry: First-mover advantage
SESSION 8: ECONOMIC EFFICIENCY; GOVERNMENT POLICIES CAN DESTROY EFFICIENCY
June 7

Topical Outline

Economic efficiency
The effects of taxation: excise tax
Price floor
Price support
Price ceiling
International trade: Gains from trade, winners and losers
Government policies that limit imports: Effects of a tariff

SESSION 9: MARKETS MAY FAIL: MONOPOLY AND EXTERNALITIES
June 12

Topical Outline

Monopoly, competition laws, and regulation
Externalities
Resolving externalities
Internalize by expansion, acquisition, or merger
Joint private action
Government policies
SESSION 10: MARKETS MAY FAIL: PUBLIC GOODS AND ASYMMETRIC INFORMATION
June 14

Topical Outline

Public goods
Asymmetric information, adverse selection, and moral hazard
Signaling, screening, and regulation

One or two in-class group presentations

Required Preparation

Baye, pp. 449-455. [Relevant Problems on pp. 467-472 are 5, 8, 11, 13, 15, and 16.]

Baye, pp. 522-532. [Relevant Problems on pp. 538-543 are 4, 5, 12, 14, 15, and 19.]

SESSION 11: GROUP PRESENTATIONS
June 19

Much of this session will be devoted to in-class group presentations.
SESSION 12: FINAL EXAM
June 21

The exact format of this final session is still to be determined.

For certain, there will be a final exam that will occur for about 95 minutes of the session. The final exam covers all material in the course; it focuses on Sessions 6 through 11.

I may hold a short, optional “review and last-minute questions session” at 6:00 PM, before the final exam begins.

It is also possible that there will be one or two in-class group presentations after the final exam is completed.