

Course Description

This is an intensive course in microeconomic theory and applications. The course concentrates on the role of market processes in determining the opportunities facing individuals and business firms, the policy issues facing public officials, and the patterns of resource allocation in the economic system. It is intended to be accessible to students with little or no prior exposure to economics. The mathematical prerequisite is competence in high school algebra and in the interpretation of graphs.

The approach taken is one that de-emphasizes the discipline's standard approach to analysis of the behavior of individual economic actors. For this reason, the course is not entirely appropriate as preparation for economic theory courses at advanced levels. It is, however, an effective background for courses focusing on economic policy.

The objective is to provide you with analytical tools to help you tackle economic problems. Economic problems arise whenever agents must make economic trade-offs or engage in trade. Thus, the techniques, concepts, and results we will develop here will be useful in a wide range of courses in the MBA curriculum, such as finance, accounting, marketing, production, public policy, and competitive strategy. While many of the applications and examples considered in the course involve issues in health care, we will also draw on examples from many other arenas: *e.g.*, telecommunications taxation, electricity deregulation, and consumer price index.

The emphasis of the course, however, is not the specific issues we will address. Rather the emphasis is on developing an approach to thinking about economic problems that will be useful to you in making managerial decisions. Like learning to ride a bicycle, learning to “think like an economist” takes practice. Seeing how problems are approached in lectures or readings will not enable you to solve similar problems yourself. The only way to become proficient at solving economic problems is to do them yourself. To help you to develop an active understanding, a number of problems will be assigned. In some cases even a group working on a problem may be unable to solve the problem fully. However, it is crucial that you try.

Because the course is nearly a semester’s worth of material condensed into two weeks, the pace will be reasonably fast and the workload fairly demanding. Nonetheless, you are all encouraged to ask questions at any point (whether during lecture or outside class) about material that you do not fully understand. If you have a question, the chances are good that several of your classmates are wondering the same thing and would appreciate hearing the answer.

An outline of the topics covered in the course follows:

- I. Introduction to market processes
 - Examples of market processes
 - Where prices come from
 - Organized markets
 - Price determination by the market
- II. Supply and demand analysis
 - Supply and demand curves
 - Determination of equilibrium price/quantity
 - Effect of supply and demand changes
 - Welfare analysis of government policies (*e.g.*, taxes and quotas)
- III. Utility analysis
 - Indifference curves
 - Income and substitution effects
- IV. Production and cost
 - Production techniques
 - Short-run output determination by the firm
 - Industry supply
 - Short and long run equilibrium
- V. Monopoly
 - Price and output under monopoly
 - Price discrimination
- VI. Oligopoly
 - Interaction and interdependence
 - Nash equilibrium
 - Price and output under oligopoly
- VII. The organization of the firm
 - Markets vs. hierarchies
 - The make or buy decision
- VIII. Competitive strategy
 - Environmental analysis
 - Strategy development
- IX. Asymmetric information and incentives
 - Moral hazard
 - Adverse selection

POLICIES AND PROCEDURES

Textbook, Cases, and Other Readings

The text book for this course is Pindyck and Rubinfeld, Microeconomics, 7th edition. It is supplemented by other readings, including a case study and newspaper and journal articles. They are on the class website: <https://classesv2.yale.edu/> and then MGT520. The readings are required and include conceptual material, illustrative examples, and materials that will be the basis for class discussion.

Problem Sets

There are two problem sets which you must turn in during the two-week course. Problem sets are to be handed in at the beginning of the class period on the day they are due. While you may work in groups to discuss alternative approaches to tackling a problem, the *final write-up must be your own*. (See the academic integrity section below for more detail.) Completion of the problem sets is required for the course and your performance on them will be considered in your final grade.

A point system will be used for problem-set feedback during the course and as a basis for the course grade. Problem sets will be graded on a point scale of 0-3, with 0 for missing or drastically inadequate answers, 1 for poor work, and 3 for excellent work. A grade of 1 on a problem set is not a penalty, but a signal that you should come and talk with the professor to make sure you understand where you got confused and what you need to work on.

Examinations

There will be one examination, at the end of the two-week course.

Grading

Course grades will be on the MGT scale of Distinction, Proficient, Pass and Fail.

ISSUES OF ACADEMIC INTEGRITY

Academic integrity is one of the most important values within an academic community. Violations of academic integrity, including cheating, plagiarism, and improper collaboration, are viewed very seriously by the faculty of SOM and the Discipline Committee. In light of this, the Discipline Committee has recently encouraged faculty to make clear to students what their expectations are for individual and collaborative work. You should not hesitate to contact your professor if you would like further clarification on the following issues.

Problem sets

Although you may work on problem sets with your classmates, the written answers which you hand in are expected to be your own effort. In general, you should use study groups to figure out how to solve a problem, to make sure you have made your calculations correctly, and to discuss the answers to questions that ask you to summarize or draw conclusions

from the exercise. On your own, you should write up your answers, making sure you understand yourself how to solve the problem step-by-step, and answering non-quantitative questions in your own words.

Solving the problem sets in this way is important not only for the sake of academic integrity, but because the primary value of the problem sets is not in counting toward your course grade, but in building your own understanding and ability to solve problems.

Examples of acceptable collaboration:

- Two students get together to work on a problem set. They work together on the calculations, correcting each other's mistakes, until they arrive at answers both think are correct. After their meeting, on their own, they write up the versions of their problem sets to be handed in, adding their own explanations, graphs, etc.
- In a group meeting to work on a problem set, one student knows how to set up or solve a problem or how to draw a graph that the other students are confused by. She does it on the board and the rest of the students in the group take notes which they use when writing up their own solutions to the problem set.

Examples of unacceptable collaboration:

- One student lends another student the problem set solution she intends to hand in. He either copies verbatim or rewrites the first student's problem set in his own words and hands it in.
- After working in a group to solve a problem set, one of the students emails his solution to his group members so they can check their own answers or give him feedback on his.
- A student usually works with a study group, but can't make it to the session where the group has worked on a particular problem set. One of the students in the group gives the missing student her notes from the group.

Exams

Exams are to be done without any outside help. This means that you may not use books, notes, laptops, or "cheat sheets." You may use calculators for doing numerical calculations. You should not bring scratch paper into exams. If you need scratch paper, use an extra blue book.

There should be no communication between students during exams, either one way (peeking at or copying someone else's work) or two way (sharing answers with or helping out another student.)

Course Schedule

Monday, August 3: Supply and Demand

- Lecture 1: Introduction
Reading: Robert Pindyck and Daniel Rubinfeld, Microeconomics, Chapter 1.
Reading: Stephen Happel and Marianne Jennings, "Herd Them Together and Scalp Them," Wall Street Journal, February 23, 1995.
- Lecture 2: Supply and Demand
Reading: Pindyck and Rubinfeld, Microeconomics, Chapters 2, 4.3-4.6.
Reading: Jacob Schlesinger and Yochi Dreazen "Counting the Cost: Firms Start to Raise Prices, Stirring Fear In Inflation Fighters," Wall Street Journal, May 16, 2000.

Tuesday, August 4: Elasticity and Market Outcomes

- Lecture 3: Elasticity, Efficiency and Deadweight loss
Reading: Pindyck and Rubinfeld, Microeconomics, Chapter 9.
- Lecture 4: Welfare Effects of Taxes: Telecommunications Application
Reading: Jerry Hausman, "Efficiency Effects on the U.S. Economy from Wireless Taxation," National Tax Journal, September 2000, 53(3): 733-742.

Wednesday, August 5: Market Interference and Consumer Theory

Problem Set 1 due at start of class

- Lecture 5: How far should markets be extended? The Case of Organ Donations
Reading: Roger Blair and David Kaserman, "The Economics and Ethics of Alternative Cadaveric Organ Procurement Policies," Yale Journal on Regulation, 1991, 8: 403-452.
Reading: David Howard, "Producing Organ Donors," Journal of Economic Perspectives, Summer 2007, 21(3): 25-36.
Reading (skim): Gary Becker and Julio Elias, "Introducing Incentives in the Market for Live and Cadaveric Organ Donations," Journal of Economic Perspectives, Summer 2007, 21(3): 3-24.

- Lecture 6: Utility Analysis
Reading: Pindyck and Rubinfeld, Microeconomics, Chapters 3, 4.1 – 4.2.
Reading: Roger Miller, Daniel Benjamin, and Douglass North, The Economics of Public Issues, Chapter 17.
Reading: Katharine Abraham, John Greenlees, Brent Moulton, “Working to Improve the Consumer Price Index,” Journal of Economic Perspectives, Winter 1998, 12(1): 27-36.

Thursday, August 6: Production and Supply Functions

- Lecture 7: Production with Linear Techniques, and Profit Maximization
Reading: Review Notes on Production, Chapter 4-6.
Reading: Pindyck and Rubinfeld, Microeconomics, Chapter 8
- Lecture 8: A Firm’s Supply Curve and *In-Class Exercise*: Trucking Problem

Friday, August 7: Opportunity Costs and General Cost Functions

- Lecture 9: Opportunity Costs and the Allocation of Fixed Resources, and *In-Class Exercise*: Allocating Time in the Operating Room
- Lecture 10: General Cost Functions and Returns to Scale
Reading: Pindyck and Rubinfeld, Microeconomics, Chapters 7.1-7.4.

Monday, August 10: Monopoly and Price Discrimination

Problem Set 2 due at start of class

- Lecture 11: Monopoly
Reading: Pindyck and Rubinfeld, Microeconomics, Chapter 10.
Reading: Severin Borenstein, “Understanding Competitive Pricing and Market Power in Wholesale Electricity Markets,” Electricity Journal, July 2000, 13(6): 49-57.
- Lecture 12: Pricing with Market Power: Price Discrimination
Reading: Pindyck and Rubinfeld, Microeconomics, Chapter 11.
Reading: Sushil Vachani and Craig Smith, “Socially Responsible Pricing Lessons from the Pricing of Aids Drugs in Developing Countries,” California Management Review, November 2004, 47(1): 117-144.

Tuesday, August 11: Oligopoly and Organization of the Firm

- Lecture 13: Oligopoly
Reading: Pindyck and Rubinfeld, Microeconomics, Chapter 12.
Reading: Hal Varian, "Economic Scene: In Europe, G.E. and Honeywell Ran Afoul of 19th-Century Thinking," New York Times, June 28, 2001, p. C2.
- Lecture 14: Organization of the Firm
Reading: Sharon Oster, Modern Competitive Analysis, Chapter 11, "Vertical Linkages."

Wednesday, August 12: Competitive Strategy

- Lecture 15: Introduction to Competitive Strategy
Reading: Sharon Oster, Modern Competitive Analysis, Chapter 3, "Industry Analysis."
- Lecture 16: The Case of Cardiothoracic Systems
Reading: "Cardiothoracic Systems" Harvard Business School Case, no. 9-899-281.

Thursday, August 13: Asymmetric Information and Wrap-Up

- Lecture 17: Adverse Selection and Moral Hazard
Reading: Pindyck and Rubinfeld, Microeconomics, Chapter 17.
Reading: David Cutler, "Health Care and the Public Sector," NBER Working Paper 8802, February 2002.
- Lecture 18: Wrap-Up and Final Review

Friday, August 14: Final Exam

- Final Exam (12:30 – 3:30 PM)