Course Description

This 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 but also to provide new, more managerial material for students with more background.

The aim of the course 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 prove useful later in the first year curriculum as well as in a wide range of courses in finances, accounting, marketing, operations, public policy, and competitive strategy.

While we will cover a range of topics in microeconomics, the emphasis throughout the course will be on learning how to approach and tackle economic problems – a skill 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. Hence the problem sets, which are designed to help develop an active understanding of economics. 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.
Course Outline

I   Supply and Demand
    • Supply and demand curves
    • Determination of equilibrium price/quantity
    • Effect of supply and demand changes
    • Producer and consumer surplus
    • Elasticity as a measurement of price sensitivity
    • Taxes, price floors/ceilings
    • Application to trade policy

II  Optimal Behavior: Consumers and Firms
    • Utility analysis
    • Cost Minimization
    • Production techniques
    • Input substitution
    • Profit maximization and short-run output determination by the firm

III Equilibrium
    • Industry supply
    • Firm entry and exit decisions
    • Short and long run equilibrium

IV  Imperfect competition
    • Price and output under monopoly
    • Pricing strategies

V   Introduction to Competitive Strategy

Policies and Procedures

Textbook, Cases, and Other Readings

The primary reference for the course is Microeconomics by Robert S. Pindyck and Daniel L. Rubinfeld. It is available both new and used at the Yale Book Store, and both the current (the 8th) and older editions are also sold many places online. You may use any recent edition, we have specified the readings in terms of sections (not pages) to facilitate this. If you already own another high quality intermediate level microeconomics text, it is likely that you could use that as an alternative.
Review Sessions

The weekly review sessions, led by teaching assistants, are an important element of the course; you are urged to arrange your schedule to make regular attendance at a review session possible. The primary purpose of the sessions is to help you with any difficulties you have in understanding material introduced in lectures, and to provide an occasion for discussing and preparing for the problem sets and the final exam. New conceptual and analytical material will not be introduced in the review session, but new applications and illustrations of concepts from the lectures will sometimes be presented. An effort will be made to indicate in the appropriate class meeting how the review session of that week will be used.

Problem Sets

There are three required problem sets, due at two-week intervals. The maximum length for a problem set answer is five pages (double-spaced, typewritten), plus diagrams. 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. Problem sets are challenging and intended to move you beyond class material.

Problem sets will be graded on a 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 a signal that you should talk with one of the TAs or with Professor Levinsohn or Chen.

Problems sets must be handed in on the second floor of 55 Hillhouse (Horchow Hall) by 12:00 noon on the date due. Do not submit electronic copies. Late problem sets will receive a deduction of 1 point (a 3 becomes a 2, etc.). Problem sets received after the next review session will not be graded.

Examinations

There will be a single examination, to be held after the conclusion of the class during the exam period in October.

Grading

Grading is based on the problem sets (30%), the final exam (60%), and class participation (10%). Course grades will be on the MGT scale of Distinction, Proficient, Pass and Fail.

Issue 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 SOM faculty and by the Discipline Committee. Please do not hesitate to contact Professors Levinsohn or Chen for further clarification on the following issues.
Problem Sets

The final problem sets you hand in must be your own work. Although you are encouraged to discuss problem sets with your classmates, you must provide your own answers to the problem sets, in their entirety. In general, you should use study groups to figure out how to solve a problem, to check your calculations, and to discuss in general terms how to approach questions. On your own, you should write up your answers, making sure you understand how to solve the problem step by step.

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 group take notes that 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.

Exam

The exam will be a “closed book” exam, to be completed without any outside help. This means that you may not use any books, notes, laptops, or “cheat sheets.” You may use calculators for doing numerical calculations. Students for whom English is a second language may also bring a general-purpose dictionary. 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

I  SUPPLY AND DEMAND

1. Monday, August 20 [Chen]: *SUPPLY AND DEMAND: AN INTRODUCTION*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 1.1-1.4, 2.1-2.3, 4.3-4.4.

2. Wednesday, August 22 [Chen]: *DEMAND CURVES*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 4.5-4.6.

3. Friday, August 24 [Levinsohn]: *ELASTICITIES*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 2.4-2.7
     [Note: There is not much reading for this class but I’m going to expect everyone to have done the reading before class.]

4. Monday, August 27 [Levinsohn]: *TAXES, PRICE FLOORS/ceilings*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 9.3, 9.4, 9.6

5. Wednesday, August 29 [Levinsohn]: *INTERNATIONAL TRADE*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 9.5.

*Problem set #1 (Supply and Demand) due at noon on Friday, August 31.*
II **OPTIMAL BEHAVIOR: CONSUMERS AND FIRMS**

6. Wednesday, September 5 [Chen]: *Utility Maximization and Cost Minimization*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter 3
   - In-class exercise: Smooth Production

7. Monday, September 10 [Chen]: *Linear Production and Profit Maximization*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapters 6 and 7
   - In-class exercise: Linear Production

8. Wednesday, September 12 [Chen]: *Applications of Production*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 8.1-8.5
   - In-class exercise: Glass Factory

III **COMPETITIVE EQUILIBRIUM**

9. Monday, September 17 [Levinsohn]: *Market Supply and Competitive Equilibrium*
   - Pindyck and Rubinfeld, *Microeconomics*, Chapter Sec: 8.6-8.8.

10. Wednesday, September 19 [Levinsohn]: *Case: Supply and Demand in the Aluminum Industry*
    
    Prepare Discussion Questions for Aluminum Case for Class
    - “The Aluminum Industry in 1994 (HBS)
    - “Aluminum Smelting in South Africa: Alusaf’s Hillside Project (HBS)

*Problem set #2 (Production and Competitive Equilibrium) due at noon on Friday, Sept. 21.*
IV  IMPERFECT COMPETITION

11. Monday, September 24 [Levinsohn]:  *Imperfect Competition: Monopoly*
   - Pindyck and Rubinfeld, Microeconomics, Chapter Sec: 10.1-10.4, 10.7.
   - For Google’s discussion of why it is not a monopoly see: http://www.businessinsider.com/googles-were-not-a-monopoly-powerpoint-presentation-2009-5.

12. Wednesday, September 26 [Chen]:  *Pricing Strategies*
   - Pindyck and Rubinfeld, Chapter 11

*Problem set #3 (Imperfect Competition) due at noon on Monday, October 1st.*

V  THE LIMITS OF MARKETS AND COURSE WRAP-UP

13. Monday, October 1 [Chen]:  *Asymmetric Information, Extern & Inter-nalities*
   - Pindyck and Rubinfeld, Microeconomics, Chapter Sec: 17.1-17.3, 18.1-18.6

14. Wednesday, October 3 [Levinsohn]:  *Wrap-Up and Course Review*