

Econ 101a: Principles of Microeconomics
Spring 2001
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Readings

The required text for this class is

Silberberg, Eugene. *Principles of Microeconomics*, 2nd ed.: Prentice-Hall, 1995

which should be available in the bookstore. We will follow this text for the mostpart, though I will occasionally change the order of presentation, or add or omit some material. I expect you to read the book and work through as many of the end-of-chapter questions as possible. Doing more than just those problems mentioned in class or assigned on homework will *greatly* improve your understanding of the material, your satisfaction, and your performance in the class.

Silberberg's text comes with a **Study Guide** that is optional; some students find it a useful supplement to the text and lectures. It should also be available at the bookstore.

I will occasionally assign **additional readings** from newspapers, academic journals, or other publications. These materials will be either handed out in class, on library reserve, or available for download from the class web page. These materials are *required* and you will be responsible for them during class discussions and/or on homework problems or exams.

Some material and announcements will be distributed on the class **email list**. Homework assignments and solutions, articles, and other handouts will be distributed on the class **web page**, and you are expected to be able to access these materials. Please let me know as soon as possible about any problems with your email account or web access.

Prerequisites

There are no official course prerequisites for this class.

I assume a basic working knowledge of algebra and arithmetic (percentages, fractions, basic geometry, and solving a system of two linear equations). I also make extensive use of graphs, so you should be fairly comfortable representing things graphically and extracting information from graphs.

Calculus is *not* required, though I will occasionally explain something briefly using calculus for those who have this background, and I will gladly show calculus extensions to interested students outside of class time.

Class description, format, etc.

This class covers basic concepts in microeconomics, i.e. the study of markets and other means for allocating scarce resources between people and across time. We will study economics as a "scientific pursuit," learning concepts that are used to describe and predict the production, distribution, and consumption of goods and services at the individual, firm, and industry levels. The goal of the class is to encourage you to "think economically," and to explain some aspects of human behavior with diagrams and simple, *testable* models. We will address three main questions of microeconomics: (1) what gets produced? (2) who produces it? and (3) who gets it?

By the end of the course, you should be familiar with the tools of economics, and understand the field's strengths and limitations. We will use diagrams and simple models ("caricatures") of reality to explore the motivations and reactions of consumers, the objectives and behavior of producers (firms) indifferent settings, and the strategic interaction between economic agents, as well as the role of government and the pros and cons of government intervention in markets. After developing a basic language and methodology, we will proceed to analyze current events and issues such as income distribution, pollution, and the regulation of monopoly behavior.

The class will be largely lecture-based, but I will involve the class in discussion on a regular basis and may do some interactive experiments. Microeconomics deals with phenomena you all experience every day, so I will ask you to relate the course concepts to your own lives. This is more useful (and entertaining) if people get involved. You should feel free to ask questions mid-lecture.

I do not take attendance. *However*, class participation is accounted for and there is otherwise always a strong correlation between regular attendance and good performance in this class. Obviously, if you miss a class, make sure you get notes from someone and have them explain the basic concepts to you. Learning economics is a lot like learning a language, and the material builds on itself as we progress through the quarter. If you are having difficulty with basic concepts, make sure you come and talk to me, your peers, or the Q-Skills program *early* in the semester!

Tom Wright (twright@bowdoin.edu) has been assigned to the class as a Q-Skills mentor. He will be holding regular (weekly) help sessions at which you can ask questions about the more technical aspects of the class material.

The methodology we learn in this class boils down to a few basic concepts, though this may be easier to realize *ex post*. We will be applying similar logic and some basic tools in a variety of different settings. You will fare much better in the class if you try to keep the "big picture" in mind as we go.

Course objectives

If all goes well, by the end of the class you will:

- Understand what a “science” is and how economics fits into the scientific process
- Know what “models” are and why these simplifications of reality are useful; also why they are limited
- Be able to describe the behavior of economic agents as a process of maximizing personal net benefits (or “self-interest”); this is crucial to understanding almost all “economic” decision-making
- Be able to describe the role of markets as a mechanism for distributing goods and services across society, and as a means for determining which productive processes are carried out by whom
- Understand the notion of “efficiency,” or optimal allocation of resources, and be able to distinguish objectives of efficiency from questions of distribution (fairness and equity)
- Be able to converse thoughtfully about the economic role of government. You should understand the supposed role of government, when intervention in markets is potentially harmful, and when it can fix existent problems
- Be able to use a toolbox of graphical and mathematical techniques to apply economic models to both real-world and hypothetical situations

Class Requirements and Grading

Your grade will be calculated as follows:

- Class participation 10%
- Homework (4): 20%
- Midterm Exams (2): 40%
- Final Exam (cumulative): 30%

Homework

Homework is meant to be a painless way of making sure you are keeping up in the class, and also an opportunity for you to take the time to apply concepts from class using a variety of different sources (notes, the text, each other, etc.). Assignments will consist of practice problems from the book, problems that I make up, or the analysis of a newspaper or journal article. You are encouraged to work together on homework, but you are each expected to turn in your own answers. Homework problems are representative of the type of problem that will appear on the exams. Homework will be graded on a \checkmark , \checkmark , $\checkmark+$ basis.

Exams

All exams will consist of short essays and word problems. You will be asked to apply concepts to hypothetical scenarios using graphs and simple math, and also to provide verbal explanations of the relevant concepts. The format of the exams will be similar to that of the homework (though the questions shouldn't take as long). All material on the exams will have been covered in lecture, on the homework, or in assigned readings.

Course Schedule (chapter numbers refer to Silberberg's text)**Week 1 (1/23, 1/25):**

- Ch. 1: Introduction to science, modeling, and economics
 - Costs and benefits defined
 - Normative vs. positive statements; the importance of *refutable propositions*
- Ch. 2: Fundamental postulates and the theory of value

Week 2 (1/30, 2/1):

- Ch. 2: The Law of Diminishing Marginal Value and the Law of Demand
 - Demand curves and their anatomy; Why is the Demand Curve the Demand Curve??
 - The Diamond Water Paradox
 - Benefits and costs of price changes: Coupons and "illusory savings"
 - Consumption Smoothing and Risk Aversion

Week 3 (2/6, 2/8) Homework #1 due (Thursday, 2/8)

- Ch. 3: Relative Prices and the Consumer Price Index (CPI)
 - Shipping the good apples out (section 3.6)
 - The Expanded Feasible Set and Theory of Revealed Preference
 - The Topsham Fair Example
 - Cost-of-living adjustments and "mis-compensation" due to consumer response
 - Elasticity of Demand

Week 4 (2/13, 2/15)

- Ch. 3: Relationship between Price and Total Expenditure (TE), as a function of Elasticity
 - Elasticity and the response period; the Second Law of Demand
- Ch. 4: Simple ("Endowment-based") supply curves and their anatomy;
 - Why is the Supply Curve the Supply Curve?
 - The Gains From Trade and Efficiency defined
 - Transaction costs, middlemen, and intermediary trading goods

Week 5 (2/20, 2/22): Homework #2 due (Thursday, 2/22)

- Ch. 5: Price controls and their efficiency implications;
 - non-price competition in the face of price controls
 - Winners and losers due to minimum wage, rent control, etc.
 - Profitable "price disequilibria"
 - Supply and Demand combined: Shifts of curves vs. movements along them
 - Interrelated Markets: shifting curves to predict market outcomes
 - (This material *is* included on the midterm)

Week 6 (2/27, 3/1): Midterm Exam #1 (Thursday, 3/1)

- Ch. 5: Taxation and subsidies and their impact:
 - Who pays the tax? Tax burdens and elasticity
- Ch. 6: Comparative Advantage and the Gains from Specialization: introduction
 - Crusoe/Friday and some more interesting specialized economies

Week 7 (3/6, 3/8):

- Ch. 6: Specialized economies continued
 - Rising costs at the "extensive margin"; supplier's rents revisited
 - The benefits and pitfalls of trade globalization

Week 8 (3/13, 3/16):

- Ch. 7: Inputs to production and Marginal Product (MP); optimal use of a single variable input

Rising costs on the "intensive margin" (one variable input)
Optimal use of multiple inputs to production;
Applications (the "Slot Machine questions")
Property rights and the behavior of firms: Efficiency implications
(the "Fishery Problems")

***** SPRING BREAK, 3/17-4/1 *****

Week 9 (4/3, 4/5): Homework #3 due (Thursday, 4/5)

Ch. 8: Production decisions in perfectly competitive markets:
Variable, Fixed, and Marginal Costs and their relevance
Optimal production (Q^*) and the Shut-down decision, in the Short-run and Long-run
Ch. 11: Monopoly (non-competitive) behavior; efficiency implications

Week 10 (4/10, 4/12):

Ch. 11: Price Discrimination and "creative pricing" mechanisms:
Real-world examples, profit motives, and efficiency implications

Week 11 (4/17, 4/19): Midterm Exam #2 (Thursday, 4/19)

Ch. 12: Monopolistic Competition: Oligopoly, cartels and collusion, and product differentiation
Ch. 9: Externalities
Private vs. Social Values and Costs
Market Failure and the role of government
The Coase Theorem
The Highway problem (section 9.3)

Week 12 (4/24, 4/26):

Ch. 9: Natural Resource Exploitation
Public Goods
Strategic interactions between economic agents
The Prisoners' Dilemma
Insurance markets and job market signaling
Imperfect information and the "Market for Lemons"

Week 13 (5/1, 5/3): Homework #4 due (Thursday, 5/3)

Ch. 10: Capital Theory and the determination of interest rates
Present and future values and different types of payment streams
Stocks vs. flows, the return on investments
Stocks and bonds and a brief look at financial markets

Week 14 (5/8, 5/10):

Time permitting: Ch. 13: The labor market as a special case
Workplace discrimination under different market structures
Labor unions vs. big business; monopoly and monopsony in the labor market
Course wrap-up