

GSBA 511 MSF

Fall 2023

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Textbook:

I have written a book for this course which is provided in pdf form online. You can download the entire manuscript complete with a mathematical appendix from my web page.

On my web page, you will find links to each of the separate chapters of my book in the list of topics. If you prefer, you can download the separate chapters as we progress through the course.

If you prefer to look at an outside text, the following book is good.

Pindyck, Rubinfeld; Microeconomics 9/e, Pearson Prentice-Hall, 2018: ISBN: 978-0-13-418424-1.

This alternative text is expensive, so that those who would like to use an outside text and save money might consider buying an older edition of Pindyck and Rubinfeld online.

Grading Scheme, Contact Information, and Web Page Address:

1. Your grade will be based on the following scheme:

- Two section exams each worth 50 course points.
- A final exam worth = 60 course points.
- Total possible course points = 160.
- Each student will be given the following option: If your percentage performance on the final exam is greater than the lowest percentage performance of your two section exams, then the final exam will be weighted with 110 course points and the lowest section exam score will be dropped. Let me provide an example of this grading scheme. Suppose that your 3 section exams and the final exam are as follows:

SE1 = 50, SE2 = 44, FE = 58. Sum of the 3 scores is 152.

For this case, the sum of your 3 scores is 152. If we drop the lowest of the two section exams and weigh the final at 110 (= 50 + 60) points, your score is

$$50 + (58/60) 110 = 50 + 106.33 = 156.33$$

Because $156.33 > 152$, your point total for the course is 156.33, which rounds to 156.

2. Office Hours: MW 2-3:30

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web page: <http://faculty.marshall.usc.edu/Anthony-Marino/> or

<http://faculty.marshall.usc.edu/Anthony-Marino/main.html> (the second version has no frames)

Examination Policy

University policy requires the final exam to be given at the time indicated by the University's or Marshall's final exam schedule. Instructors do not have discretion to grant exceptions to this policy. No student is allowed to take the final exam earlier or to skip the final exam. Marshall's MSF Program will announce the day and time for the final exam at a later date.

There will be no make-up tests. By enrolling in the course you are committing to take the section exams on the scheduled dates. If a test is missed, it receives an automatic zero, and its course weight is added to the final exam.

Each section exam will cover only the material since the last section exam. The final exam is cumulative, but I will list the set of topics covered in advance of the final date.

Topics and Readings

Lecture 1. Introduction: Principles of Business Economics [CH 1](#).

1.1 Economic models

1.2 The Market System

1.3 Supply and Demand Analysis: The Firm and Markets

Lecture 2. A Mathematics Review: Marginal Functions, Average Functions, Elasticity, and Notes on Optimization [CH 2](#). (Covered in Summer Mathematics Review.)

2.1 Introduction

2.2 The Basic Problem

2.3 The Marginal or Derivative Function and Optimization

2.4 The Average Function

2.5 Elasticity

Lecture 3. Consumer Behavior Theory: The Foundation for Demand, the Firm's Revenue and Marketing [CH 3](#).

3.1 Choice and Utility

3.2 The Budget Constraint

3.3 The Consumer's Equilibrium and Derivation of Individual Demand with Applications to (i) Subsidizing Employee Housing, (ii) Nonlinear pricing and Business Revenue Enhancement, and (iii) The Effects of Business Taxes on Consumers

3.4 Market Demand for Goods and Services

3.5 Price and Income Elasticities of Demand and Implications for the Firm's Revenue

3.6 The Law of Demand

3.7 Intertemporal Consumption Choice: Saving, Borrowing and Financing

Lecture 4. Two topics in Consumer Theory as Applied to Business [CH 4](#)

4.1 Consumer Surplus: A Proxy for Consumer Utility

4.2 Forecasting Demand for a Firm's Product

4.3 Using Regression Estimates to Make Predictions for the Firm

Lecture 5. Choice under Uncertainty [CH 5](#).

5.1 Introduction

5.2 A Model of Choice with Uncertainty: The Notion of Risk Aversion in Finance

5.3 Reducing Risk in Business

Lecture 6. Production and the Link to the Firm's Cost Function: An Operations Management Problem [CH 6](#).

6.1 Introduction

6.2 The Production Function

6.3 Average Product, Marginal Product and Input Elasticity

6.4 Isoquants and the MRTS

6.5 The Link between Production and Cost

Appendix on Labor Productivity

Lecture 7. Short-run and Long-run Costs for the Firm [CH 7](#).

7.1 Introduction

7.2 Short-run Cost

7.3 Average and Marginal Costs

7.4 Long-run Costs

7.5 Real World Examples from the Business World

Lecture 8. Perfect Competition and the Firm's Decision Making [CH 8](#).

8.1 Introduction

8.2 Short-run Profit Maximization

8.3 Long-run Profit Maximization

8.4 Competitive Input Demand

8.5 Social Welfare with Perfect Competition and the Effects of Government Controls on a Competitive Market

Lecture 9. Pure Monopoly and the Firm's Decision Making [CH 9](#)

9.1 Introduction

9.2 The Monopolist's Profit Maximizing Equilibrium

9.3 The Deadweight Loss of Monopoly and Price Regulation

9.4 Monopsony, Labor Unions and Government Regulation in Monopsony

Lecture 10. A Business Firm's Pricing Strategy with Monopoly Power [CH 10](#).

10.1 Introduction

10.2 General Price Discrimination: Perfect Price Discrimination, Second Degree Price Discrimination, Third Degree Price Discrimination, Intertemporal Price Discrimination, Two Part Tariffs, Bundling and Tying

Lecture 11. Monopolistic Competition, Oligopoly and the Firm's Decision Making
[CH 11.](#)

11.1 Introduction

11.2 Monopolistic Competition

11.3 Oligopoly

Lecture 12. Business Applications of Game Theory [CH 12.](#)

12.1 Introduction

12.2 Dominant Strategy Equilibrium

12.3 Nash Equilibrium

12.4 Strategic Moves

12.5 Auctions

Lecture 13. Asymmetric Information in Markets for Commodities and Within Firms [CH 13.](#)

13.1 Introduction

13.2 Asymmetric Information in Markets

13.3 The Principal-Agent Problem within Organizations: An Introduction to Human Resource Decisions

13.4 Remarks on Information Economics

Lecture 14. Externalities, Public Goods and Government's Interface with Business
[CH 14.](#)

14.1 Introduction

14.2 Externalities

14.3 Pollution Abatement

14.4 Externalities and Property Rights

14.5 Private versus Public Provision of Public Goods

Tentative Schedule

Session	Date	Topic	Marino Chapters
1 M	8/21	Methodology, The Market System, Supply and Demand	CH1
2 W	8/23	Supply and Demand	CH1
3 M	8/28	(Math Review) Consumer Theory	(CH2) CH3
4 W	8/30	Consumer Theory	CH3
5 W	9/6	Demand	CH3
6 M	9/11	Consumer Theory Topics, Uncertainty	CH4,CH5
7 W	9/13	Uncertainty	
8 M	9/18	Uncertainty****	CH5
9 W	9/20	Section Exam 1*****	
10 M	9/25	Production, Cost	CH6, CH7
11 W	9/27	Cost	CH7
12 M	10/2	Perfect Competition	CH8
13 W	10/4	Perfect Competition	CH8
14 M	10/9	Perfect Competition	CH8
15 W	10/11	Monopoly	CH9
16 M	10/16	Monopoly, Monopsony	CH9
17 W	10/18	Monopoly Pricing	CH9,CH10
18 M	10/23	Section Exam 2*****	
19 W	10/25	Oligopoly	CH11
20 M	10/30	Oligopoly	CH11
21 W	11/1	Games and Competitive Strategy	CH12
22 M	11/6	Games and Competitive Strategy	CH12
23 W	11/8	Games and Competitive Strategy	CH12
24 M	11/13	Auctions, Asymmetric Information	CH12,CH13
25 W	11/15	Asymmetric Information	CH13,CH14
26 M	11/20	Externalities and Public Goods	CH14
27 M	11/27	Externalities and Public Goods	CH14
28 W	11/29	Review	

Course Description

The main goal of this course is to show how microeconomic models can be used to guide business decisions. We will study the behavior of consumers and firms, and their implications for demand, supply and market equilibrium. We will analyze competitive markets, market failures, and the role of government. To reflect rising concentration in markets we will spend some time on the implications of market power on firm pricing decisions and profits. The course also introduces basic principles of game theory and competitive strategy.

This course is designed to prepare students for future business courses. The models, methods, and mini case studies have been selected with a focus on business relevant applications. For example, the economics of consumer choice underlies much of modern marketing strategy, including pricing, segmentation and advertising. The theory of the firm contributes to a sound understanding of cost accounting as well as production decisions. Economic analysis of intertemporal decisions and behavior in a risky environment form the foundation of finance. Finally, the study of market failure and industrial structure is necessary for an understanding of government's role in a market economy and the political environment for business.

More generally, this course provides a rigorous foundation for the study of decision making problems within firms. The student who successfully completes this course should be able to apply microeconomic analysis to issues of real world interest within the firm.

Prerequisites

Although our focus will be on the intuition behind the microeconomic models and their real world consequences, the use of mathematics (in particular, algebra and calculus) will be necessary to analyze and understand such models. For example, you may be asked to draw and interpret graphs representing demand and supply, to solve a system of equations describing a competitive market, or to compute the derivative of a profit function.

Learning Objectives

Upon completion of this course you will be able to:

1. Apply graphical and algebraic analytical technics to the analysis of resource allocation through an understanding of economic theories and models.
2. Apply the basic demand-supply market model to goods markets and factor markets by identifying and analyzing the values of equilibrium prices and quantities as determined by market forces.
3. Differentiate and apply different aspects of neoclassical economic theory by examining the dynamics of consumer, firm, and market forces and calculating their impacts.

4. Apply the model of behavior in risky circumstances by calculating expected utility, expected income, and certainty equivalents.
5. Explain the role of game theory in economic models by representing various game-theoretic interactions.
6. Explore market power by examining the impact of monopoly, monopsony, and oligopoly on resource allocation.
7. Analyze the impact of various forms of government interference in markets by calculating the changes in consumer and producer surplus, and deadweight loss.
8. Analyze the impact of asymmetric information on market efficiency by explaining examples of adverse selection, moral hazard, and the principal-agent problem.

ADDITIONAL INFORMATION

Statement on Academic Conduct and Support Systems

Academic Integrity:

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, compromises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services \(OSAS\)](#) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

[*Counseling and Mental Health*](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[*988 Suicide and Crisis Lifeline*](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[*Relationship and Sexual Violence Prevention Services \(RSVP\)*](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[*Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)*](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[*Reporting Incidents of Bias or Harassment*](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

Other Policies

Please turn off your cellular phones before entering the classroom. They may not be used during classes. Since your phone should be turned off, texting during class is not only disrespectful, but it is also a serious violation of class policy.

Students are strongly encouraged to ask questions during class and during office hours. Most times it is not feasible to give a comprehensive answer to questions sent to me by e-mail. If you send me a question by e-mail and I believe that it is not feasible to give a satisfactory answer to that question by e-mail, I will ask you to come to my office hours.

If you believe that AI will help you to understand the concepts presented in this course, feel free to use it.