



ECON 351x – Microeconomics for Business

Syllabus – Fall 2016

Professor: João Ramos

Office: HOH-205 (Hoffman Hall)

Office Hours: Wednesdays, 12:30pm to 2:30pm

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Course Description

Economics is the study of production and allocation of scarce resources, and how agents make decisions under conditions of scarcity and uncertainty. 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 to demand, supply and market equilibrium. We will analyze competitive markets, market failures, and the role of Government. The course also introduces basic principles of game theory and competitive strategy.

More generally, this course provides a rigorous foundation for the study of decision making problems. The tools that you will be acquainted with in this class are fundamental for most upper-division courses of the Economics major, as well as classes in Finance, Accounting and Marketing. The student who successfully completes this course should be able to apply microeconomic analysis to issues of real world interest both within and beyond the area of business.

Course Learning Objectives

Upon completion of this course you will be able to:

1. Apply graphical and algebraic analytical techniques 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.

Alignment with Marshall School of Business Program Learning Goals

Learning Goals: In this class, emphasis will be placed on the USC Marshall School of Business learning goals as follows:

Goal	Description	Course Emphasis
1	Our graduates will understand types of markets and key business areas and their interaction <i>to effectively manage different types of enterprises</i>	High
2	Our graduates will develop a global business perspective. They will understand how local, regional, and international markets, and economic, social and cultural issues impact business decisions <i>so as to anticipate new opportunities in any marketplace</i>	Moderate
3	Our graduates will demonstrate critical thinking skills <i>so as to become future-oriented decision makers, problem solvers and innovators</i>	High
4	Our graduates will develop people and leadership skills to promote their effectiveness as <i>business managers and leaders</i> .	Low
5	Our graduates will demonstrate ethical reasoning skills, understand social, civic, and professional responsibilities and aspire to add value to society	Low
6	Our graduates will be effective communicators <i>to facilitate information flow in organizational, social, and intercultural contexts</i> .	Low

Required Materials, Course Notes, and Recommended Preparation

The recommended textbook for our class is Microeconomics for Business (Third Custom Edition for USC). This book was custom made for our class. It contains 15 chapters from the book Microeconomics by Pindyck and Rubinfeld, 8th edition, and 3 chapters from the book Microeconomics by Hubbard and O'Brien, 5th edition. Some books come with a complimentary subscription to MyEconLab. However, I will only use the textbook; the Study Guide and MyEconLab will not be used in our class.

This is an expensive book, so some students may prefer to look for a used textbook. There are only minor differences in Chapters 1-3 (including the exercises) between the Third Custom Edition for USC and the Second Edition. Also, the major difference between our custom book and the book, Microeconomics by Pindyck and Rubinfeld (7th and 8th editions) is the addition of three chapters from Hubbard and O'Brien, and the exclusion of chapters that we will not cover in our class. Any of these alternatives should suffice.

Course Notes

Additional required material will be available on Blackboard (<http://blackboard.usc.edu>) as pdf documents. They will not be handed out in class. You are responsible for timely download of the material. During the semester I will upload pdf files with practice questions, and I will call them "homework". The homework will not be graded/you will not receive credit, but I will provide the answer key. Although the homework will not be graded, these practice questions are a very important part of our class – students who carefully study the homework obtain significantly better grades on the exams.

It is always beneficial to do the required reading before class (see the last page of this syllabus). Also, the slides posted on Blackboard are **not** a complete record of what I say in class, so attending lectures, taking notes, and asking questions will be required to successfully complete the course.

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 fundamental 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. MATH 118 is a prerequisite for ECON 351x. Therefore, I expect students to have a good understanding of the material covered in that class.

Grading Policies:

Grades will be assigned according to the following weights:

Quizzes (2 out of 3)	30%
Midterm	30%
Final Exam	40%

There will be 3 quizzes. Your lowest quiz grade will be ignored, so that each remaining quiz corresponds to 15% of your final grade.

I do not assign letter grades to individual exams. For each exam, you will receive a score from zero to 100 points. At the end of the semester, I will compute your weighted average semester score (also from zero to 100 points) as follows:

$$\text{Semester Score} = 0.15 * \text{Best Quiz} + 0.15 * \text{Second Best Quiz} + 0.3 * \text{Midterm} + 0.4 * \text{Final}.$$

There will be no “curve” or hard target for the distribution of grades. Letter grades represent how you perform in the class at an absolute level and relative to other students. Your grade will not be based on a mandated target, but on your performance. Three items are considered when assigning final grades:

1. Your average weighted score on the exams (as specified previously).
2. The overall average weighted score within the class.
3. Your ranking among all students in the class.

Your grade will reflect my best judgment of your class performance, as indicated by your performance on the exams. However, I will attempt to follow the School’s recommended **mean** GPA target: 3.0 (B).

Tentative Exam Dates:

Quizzes	(1) Monday Sept 26, (2) Monday Nov 02, (3) Monday Nov 28
Midterm	Monday Oct 10
Final Exam Schedule	(http://classes.usc.edu/term-20163/finals/)

In **rare** occasions, the dates of the exams might need to be changed. In that case, I will notify students through Blackboard as soon as possible. University policy requires the final exam to be given at the time indicated by the University’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.

There will be no make-up tests. By enrolling in the course you are committing to take the tests on the scheduled dates. If a quiz is missed, it receives an automatic zero. If the **midterm** is missed for an approved reason, the weight of quizzes and final exam are increased to compensate for the missed midterm. Approval for a missed midterm will be **rare**, and only with appropriate written documentation from an authoritative source indicating why the student was unable to appear for the midterm. Normally, only a doctor's certification of a severe medical problem will suffice.

Each quiz will address the subject matter that precedes it. The midterm covers the first part of the course. The final exam is cumulative.

Regrades must be requested within one week of the day the exam was returned to the class. The student must submit a written and precise explanation of why he/she thinks the grade should be modified. The entire exam will be regraded and the final mark may go up or down.

Returned paperwork, unclaimed by a student, will be discarded after 4 weeks and hence, will not be available should a grade appeal be pursued by a student following receipt of his/her course grade.

In some selected classes, some class time will be used having students solve problems about previous lectures material in small groups. You may be asked to the board to present your answer.

MARSHALL GUIDELINES

Statement for Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. For more information visit www.usc.edu/disability.

Students requesting test-related accommodations will need to share and discuss their DSP recommended accommodation letter/s with their faculty *at least three weeks before* the date the accommodations will be needed. Additional time may be needed for final exams. Please note that a reasonable period of time is still required for DSP to review documentation and to make a determination whether a requested accommodation will be appropriate.

Academic Conduct

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* <https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct/>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://capsnet.usc.edu/departments/departments-public-safety/online-forms/contact-us>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *The Center for Women and Men* <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage <https://sarc.usc.edu/reporting-options/> describes reporting options and other resources.

Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *SCampus*, the Student Guidebook, (www.usc.edu/scampus or <http://scampus.usc.edu>) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu/> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Marshall Tutoring Program:

The Marshall Office of Undergraduate Advising offers Peer Tutoring as a supplement to classroom instruction. Marshall Peer Tutors are able to assist students in understanding and clarifying difficult concepts, but tutoring sessions are effective only if students regularly attend class and actively engage in the process of thinking critically about the course content.

Marshall Peer Tutoring services are available for core courses that are traditionally challenging, including ECON 351x. Students can choose to participate in group tutoring sessions or drop-in tutoring sessions. Most students will benefit from group tutoring in particular, as the purpose of group tutoring sessions is to review and discuss content covered in the previous and current week.

For more information please go to <http://students.marshall.usc.edu/undergrad/marshall-peer-tutoring-program/>.

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.

It is your responsibility to regularly access Blackboard (<http://blackboard.usc.edu>) to receive any additional material and important announcements related to this class.

Laptop and Internet usage is not permitted during lectures. Use of other personal communication devices, such as cell phones, is considered unprofessional and is also not permitted. ANY e-devices (cell phones, PDAs, I-Phones, Blackberries, other texting devices, laptops, I-pods) must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a

designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted but please ask for permission. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

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.

COURSE CALENDAR/READINGS/CLASS SESSIONS

This is our tentative schedule. When necessary, changes will be announced on Blackboard.

Week 1:

Monday, August 22: **Introduction and Preliminaries: What is economics?** The study of how a society uses its limited resources to produce, trade and consume goods and services.

Wednesday, August 24: **The Basics of Supply and Demand.** The demand curve describes consumer choice, while the supply curve describes how much firms will produce. Equilibrium of supply and demand through price.

Chapter 4. The Basics of Supply and Demand

Week 2:

Monday, August 29: **Consumer Behavior (1):** preferences and their representation by a utility function. How do consumers make a decision given the alternatives that are available?

Wednesday, August 31: **Consumer Behavior (2):** Budget Constraints.

Week 3:

Monday, Sept 5: **No class.**

Wednesday, Sept 7: **Consumer Behavior (3):** utility maximization. How do consumers maximize their utility given the budget constraint? The use of utility maximization to derive Marshallian demand curves.

Chapter 5. Consumer Behavior

Week 4:

Monday, Sept 12: **Individual and Market Demand:** Study how utility maximizing choice of a good varies as income Changes (Engel Curve), and as the price of the good itself changes (Demand Curve). Add up individual demands to get market demand. Discuss elasticity of demand, the responsiveness of demand to price.

Chapter 6. Individual and Market Demand

Wednesday, Sept 14: **Choice under Uncertainty.** Expected Utility and Risk Preferences. How do we make choices when certain variables such as income and prices are uncertain (making choices with risk)?

Chapter 7. Uncertainty and Consumer Behavior

Week 5:

Monday, Sept 19: **Production (1):** We introduce firms and how they decide to produce. A firm is described by how it can transform inputs such as labor and capital into outputs, which is called a production function. We also discuss marginal versus average product of labor and capital.

Wednesday, Sept 21: **Production (2):** Production with two inputs. The trade-off between using more labor or capital is called the marginal rate of technical substitution. We also discuss returns to scale, i.e. are larger plants more productive?

Chapter 8. Production

Week 6:

Monday, Sept 26: **Quiz 1** - (Chapters 4, 5, 6, 7, and 8)

Wednesday, Sept 28: **The Cost of Production:** We discuss the difference between sunk costs and fixed costs and costs in the short run versus the long run.

Chapter 9. The Cost of Production

Week 7:

Monday, Oct 3: **Profit Maximization and Competitive Supply.** We look at the firm's decision to produce in a perfectly competitive market. If a firm is maximizing profits, then it sets marginal costs equal to marginal revenue.

Chapter 10. Profit Maximization and Competitive Supply

Wednesday, Oct 5: **The Analysis of Competitive Markets.** We use the tools of consumer and producer surplus to analyze the effect of a tax or rent control on the efficiency of a market.

Chapter 11. The Analysis of Competitive Markets

Week 8:

Monday, Oct 10: **Midterm** (Chapters 4, 5, 6, 7, 8, 9, 10, 11)

Wednesday, Oct 12: **Externalities and Public Goods.** In many situations, your actions affect others indirectly. Does this affect market efficiency? We will talk about the failure of several fisheries due to the externality problem.

Chapter 18. Externalities and Public Goods

Week 9:

Monday, Oct 17: **Market Power: Monopoly.** We analyze firms with market power that do not take the market price as given, but can choose the price of their products

Wednesday, Oct 19: **Market Power and Antitrust.** The social cost of monopoly and laws against monopoly: the antitrust laws.

Chapter 12. Market Power: Monopoly and Monopsony

Week 10:

Monday, Oct 24: **Pricing with Market Power.** We look at price discrimination, the practice of setting different prices for different types of consumers (such as student discounts or quantity discounts).

Chapter 13. Pricing with Market Power

Wednesday, Oct 26: **Comparative Advantage**. We look at what generates gains of trade and possible specialization among different firms and agents.

Chapter 2. Trade-offs, Comparative Advantage, and the Market System.

Week 11:

Monday, Oct 31: **Quiz 2** - (Chapters 9, 10, 11, 12, 13, and 18)

Wednesday, Nov 2: **Game Theory (I)**: Simultaneous moves. We examine strategic decision- making, when you are interacting with a competitor. We look at dominant strategies and a solution concept called Nash Equilibrium.

Week 12:

Monday, Nov 7: **Game Theory (II)**: Games Trees, Commitment & Threats. We look at sequential games in this lecture and the strategic role of commitment and threats.

Chapter 15. Game Theory and Competitive Strategy

Wednesday, Nov 9: **Oligopoly (I)**: We examine how firms set price or quantity when they have a single competitor (Bertrand, Cournot, and Stackelberg Competition)

Week 13:

Monday, Nov 14: **Oligopoly (II)**: We examine how firms set price or quantity when they have a single competitor (Bertrand, Cournot, and Stackelberg Competition).

Chapter 14. Monopolistic Competition and Oligopoly

Wednesday, Nov 16: **Asymmetric Information (I)**: Adverse Selection & Signaling. How does asymmetric information affect economic outcomes?

Week 14:

Monday, Nov 21: **Asymmetric Information (II)**: Moral Hazard and the Principal-Agent Problem. How does asymmetric information affect economic outcomes?

Chapter 17. Markets with Asymmetric Information

Wednesday, Nov 23: No Class - Thanksgiving.

Week 15:

Monday, Nov 28: **Quiz 3** - (Chapters 14, 15, 17)

Wednesday, Nov 30: Review for Final Exam

Week 16:

Final Exam