Economics 303-102: Intermediate Microeconomics
Fall 2018

Instructor: Zhiyun (Frances) Lee
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Office Phone: 312-915-6561
Office Hours: Mon, Wed, 9am -- 11am at Schreiber Center 715.

Lecture Hours and location:
• Regular lectures: Aug 27 to Nov 16, and Dec 7, Mon, Wed, Fri, 1:40pm -- 2:30pm, Corboy 521
• Added lectures: Sep 15 (Sat) and Oct 13 (sat): 1pm – 3pm, Corboy 322
• No class dates: Nov 19 to Dec 5 (which includes Thanksgiving holiday)

Course Description:
This course applies the modeling methods of economic theory to the study of consumer and producer behavior. The interactions of these economic agents are explored within a variety of market structures, with a goal to evaluate decisions and policies. Course Prerequisites: Sophomore standing, minimum grade of C- in ECON 201 and 202; Math 131 is extremely recommended.

Course Overview:
We will start with modeling consumer’s demand decisions from the most basic element -- consumer preferences. We then move on to suppliers’ supply decisions based on their cost structures. We put them together to examine how free market outcomes emerge. We then study how government interventions change these free market outcomes and why the interventions can be bad or good. We will then learn about the tools of game theory and see how it helps us to predict outcomes when multiple “players” are strategic. We apply it to study markets where multiple firms are competing with each other. Throughout the course, we will also dip into a few advanced topics such as how firms can collude in a market and how information affects strategies if time permits. The teaching method is quantitative and requires extensive graphic understanding and basic knowledge of derivatives.

Course Objectives and Learning Outcomes
This course utilizes the tools of microeconomic theory to examine how economic agents: consumers, producers and regulators achieve their objectives. An important goal of this course is to provide a logical and rational perspective for analyzing decisions. The students will develop analytical skills to understand and predict market outcomes and to evaluate firm strategies and government policies.
Course Materials
- Lectures.

Course Requirements and Grading Criteria
This course will include the following types of assessments:

- Four Homeworks: 30% (each 7.5%)
- Midterm I and II: 34% (each 17%)
- Final Exam: 30%
- Attendance: 6%

HW due dates and midterm schedules are shown below in the course outlines.

HWs will be posted under “Resources” on SaKai one week before the due dates. HWs are to be handed in in paper form at the beginning of the lecture on the due dates. Please staple your HWs. No late HWs will be accepted. No emailed HW will be accepted. You can always plan ahead and hand in your HWs early by sliding under my office door (Schreiber 715) if you are not able to show up on the due date. You are encouraged to prepare the HWs in groups with other students, but each one has to hand in one individual HW. Graded HW are returned in class and answers will be discussed in class.

Exams are closed book and close notes. One one-sided cheat sheet is allowed for midterm and one two-sided cheat sheet is allowed for final exam. Final exam covers the entire semester’s lecture material. No phone or computer allowed in lectures or exams (unless there is a medical reason for it).

There are no makeup exams for any exam. If you miss it without legitimate reasons (defined below), your grade for the exam is 0. If you miss either the midterm or the final for a legitimate reason, then the weight of the missed exam is shifted to the other. Legitimate reasons for missing an exam are only truly unavoidable circumstances (illness verified by a signed physician’s note, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, or religious observance). I require one month notice for participation in intercollegiate athletic events, subpoenas, jury duty, military service and religious observance.

I will select 6 times (unannounced) throughout the semester to take attendance.

Grading Scale
The grades will be curved.

Academic Integrity
All members of the Quinlan School shall refrain from academic dishonesty and misconduct in all forms, including plagiarism, cheating, misrepresentation, fabrication, and falsehood. Plagiarism or cheating on the part of the student in individual or group academic work or in examination behavior will result minimally in the instructor assigning the grade of “F” for the assignment or examination. In addition, all instances of academic dishonesty must be reported to the chairperson of the department involved. For further information about expectations for academic integrity and sanctions for violations, consult the
complete Quinlan School of Business Honor Code and Statement of Academic Integrity on the Quinlan website:
In particular, for this course, the students are not allowed to discuss the content of the exams with
students in the other sections. If such communications are discovered, the involved students will get
grade “F”. By continuing to take this course beyond the add-and-drop period, you have agreed to follow
the rules set out in this syllabus.

Math background needed for ECON303:
Algebra: solving a system of two linear equations with two unknowns and understanding its
 corresponding graph

Calculus: (1) A function of a single argument/variable and its first order derivative and its graphing. (2) A
multivariate function and its first order partial derivative.

Recommended source: Khan Academy online mini courses
“Introduction to system of equations”
“Introduction to differential calculus” → “Derivative as slope of curve”, “Derivative Notation Review”.

Course Outline:
(Chapters correspond to the Varian reference book. The outline is subject to changes.)

I. Introduction

II. Consumer Theory
Preferences (Ch3)
Utility (Ch4)
Budget (Ch2)
Individual demand (Ch6)
HW 1 is due on Sep 19
Market demand and elasticity (Ch15)

III. The Theory of the Firm
Cost curves (Ch22)
Firm supply under perfect competition (Ch23)
Industry supply under perfect competition (Ch24)
HW2 is due on Sep 26
Midterm I is on Sep 28 in class.

IV. Welfare and Policies
Consumer Surplus (Ch14)
Equilibrium and government intervention (Ch 16)
HW3 is due on Oct 24
Midterm II is on Oct 26 in class.
Externality (Ch 35)

V. Market Power
Monopoly (Ch25)
Introduction to game theory (Ch29, 30)
Oligopoly competition (Ch28)
HW4 is due on Dec 7
Final Exam Dec 13, 1-3pm
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