1. Description of the course: this course will explore the decision making of economic agents (consumers and firms). It will also examine how different market mechanisms operate to allocate resources. We will begin by studying the theories of the consumer and the producer. Next we will combine both in the study of individual markets, including perfect competition, monopoly, oligopoly, etc. Following this study of individual markets, we will discuss how all markets interact in the economy and emphasize the good efficiency properties of the competitive system. The course will end with the analysis of some of the circumstances in which competitive markets fail to produce efficient allocations. The topics are identical to those in ECON 1110, but their treatment is slightly more mathematical.

2. Prerequisites: ECON 0110 or equivalent, MATH 0100 or equivalent (univariate and ideally, multivariate calculus). Your willingness to work hard is by far the most important prerequisite.


4. Grading policy: the grade of the course will be divided into 20% for problem sets assigned each Tuesday of weeks with no midterm and due in the TA section the week after (ten assignments at 2% each), 20% for each of the two midterm exams in class (On Thursday February 25 and Thursday March 24), and 40% for the final exam (on Wednesday May 18, 2-5 p.m.).

5. Other administrative matters: no late problem sets will be allowed for credit. Compensating for this hard-line policy, I will drop your worst problem set from the final average. No make-up midterm exams: if you have to miss one of the midterms due to an emergency, I will require an excused absence from a Dean and will reweight your grade in the other exams appropriately. The final exam is cumulative and must be passed in order to pass the course.

6. Academic integrity: I expect you to uphold the highest standards in terms of academic integrity. I take cheating on assignments or exams very seriously.

I hope you enjoy working hard in the course and learn a lot of microeconomics. Don’t forget: learning as much as you can should be your goal here, and I will make sure this happens if you help me by contributing your hard work.
Introduction

Part I. The Theory of the Consumer
Lecture 3. The budget set and the budget constraint. The consumer’s optimal choice: graphic, analytical, and Lagrange function methods. (From Chapter 3).
Lecture 4. The individual demand function. The income demand curve or Engel curve. Normal and inferior goods. The demand curve. Ordinary and Giffen goods. The inverse demand curve. The cross demand curve. Substitutes and complements. (From Chapter 4).

First midterm exam: February 25

Part II. The Theory of the Firm
Part III. Market Structures: Partial Equilibrium

Lecture 11. Factor markets: the behavior of a competitive firm focusing on inputs. The features of perfect competition. Industry supply. The industry supply in the short run. The industry supply in the long run in a competitive market with free entry and exit. (From Chapter 11).


Second midterm exam: March 24

Lecture 15. Oligopoly. Strategic interaction and game theory. Simultaneous choice of output (Cournot). Collusion. Comparison of the different models. (From Chapter 13).

Lecture 16. Sequential choice of output (Stackelberg). Simultaneous choice of price (Bertrand). (From Chapter 13).

Part IV. General Equilibrium


Lecture 18. The two fundamental theorems of welfare economics. Implications of the fundamental theorems of welfare economics. (From Chapter 15).


Part V. Failures of the Competitive Market

Lecture 20. Externalities. Solutions to the problem of externalities. (From Chapter 17).


Cumulative final exam: May 18