Syllabus—Intermediate Microeconomic Theory

Course Summary and Objectives: This course covers the central topic in Economics, price determination, by examining the demand and supply responses of consumers and firms, each of whom treat prices as parameters in their decision making. Of affordable “baskets” of goods, consumers choose the one which maximizes their utility or well being, from which we derive the demand curve. Firms choose the combination of inputs and outputs that maximizes their profits, subject to the constraints imposed by their technology, from which we derive the supply curve. Using Calculus allows a more rigorous approach, which I will attempt to supplement with newspaper articles and other materials.

Office Hours (440 Arps Hall): Mondays and Wednesdays, 11:00 - 12:00.


Requirements: The course grade consists of

- homeworks 15%
- midterm exam 35%
- final exam 50%

Homeworks will be graded by the TA. There will be approximately 4 assignments. Each student is entitled to one extra credit project. The score will replace the lowest homework score. Extra credit involves either leading the class discussion on one of the articles I plan to cover, or a 2-3 page written analysis of a newspaper article that I pre-approve. Late homeworks will not be accepted without a valid excuse.

I will grade all exams. There will be no make up exam for the midterm. Students who have a valid, pre-approved excuse for missing the midterm will have the final exam count for 85% of the grade.
Course Outline:

1. Mathematical Background (approx. ½ class)

Partial derivatives, first-order and second-order conditions for unconstrained optimization. (Constrained optimization and the Lagrangean approach will be covered when we need it.)

Binger and Hoffman, ch. 1-3.

2. Introduction to Economic Theory and the Market Economy (approx. ½ class)

Models and assumptions, the model of supply and demand, scarcity and resource allocation, the market economy and perfect competition.

Binger and Hoffman, ch. 4.

3. Consumer Theory (approx. 5 classes)

Preferences and utility functions, utility maximization subject to a budget constraint (Lagrangean approach), derivation of the demand function, elasticity, income and substitution effects.

Binger and Hoffman, ch. 5, 6, 7, and 8 (just 8.1-8.3).

4. Efficiency and Trade (approx. 1.5 classes)

Pareto optimum, Edgeworth Box, the “auctioneer” and equilibrium, first and second fundamental theorems of welfare economics.

Binger and Hoffman, ch. 9.

5. Theory of the Firm (approx. 5 classes)

5A. (2 classes) The production function, isoquants isocosts and optimal input choice.

Binger and Hoffman, ch. 10.
Midterm Exam, Tuesday, February 12 (in class).

5B. (3 classes) Derivation of the cost function, long run vs. short run, profit maximization and the firm’s supply curve.

Binger and Hoffman, ch. 11 and 12.

6. Market Equilibrium (approx. 2 classes)


Binger and Hoffman, ch. 13.

7. General Equilibrium (approx. 1.5 classes)

The efficient production set, production possibilities frontier, marginal rate of transformation. Conditions for efficiency and the “invisible hand.” Comparative statics and spillovers.


8. Imperfect Competition (approx. 3 classes)

Monopoly pricing, price discrimination, regulating natural monopoly. Oligopoly and game theory, Cournot competition, Bertrand competition, repeated games.

Binger and Hoffman, ch. 15, 16 (skip 16.4-16.8).

* This material is available in alternative formats upon request. Please contact Ms. Michelle Wilgenburg (410 Arps Hall, Phone: 292-6701) for further information. Students with disabilities are responsible for making their needs known to the instructor, and seeking available assistance, in a timely manner.