

Intermediate Price Theory – Winter 2012

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Office hours: M 12-2, TTh 3-5
(generally) by appointment

Course Description

The course is intended to familiarize you with the basic economic models of consumers, firms, and markets. We will discuss the determinants of the behavior of households and firms, the choices they face and the decisions they make, the effects of public policy on behavior, and several standard and not-so-standard real-world applications. We will use conceptual, graphical, and mathematical techniques throughout the course. You should be familiar with univariate calculus. In addition, you should master the basics of multivariate calculus within the first week of class.

Something important to keep in mind: In price theory, we tend to work in “model world.” Although people may not always appear to act rationally (except for your prof, of course!), we will assume that they do for purposes of this course. We will build models of behavior premised upon this assumption. Once you take econometrics, you can test these models empirically. For now, however, spend your time and energy trying to understand the theoretical models and concepts. These may appear simple. In fact, they are complex and subtle. All too often, unwary students will think they understand their notes and the texts but will not do well on exams. The best way to conquer this course – as is true for so many things -- is to practice. Attack lots of problems, figure out where you are confused, work through the confusion, repeat.

Suggestions for Success

- Read through the assignment at least twice.
- Carefully rewrite your notes soon after class.
- Carefully work through assigned problem sets.
- Work in study groups
- Ask questions during class and office hours.
- Go to review sessions.

Evaluation

I will evaluate you explicitly on the basis of two term exams and a final exam. Questions on exams may come directly from class without any supporting textual material; questions may also come from the text without any class discussion. PLEASE NOTE THAT THE EXAMS WILL BE GIVEN OUTSIDE OF CLASS ON THE DAYS INDICATED. IF YOU HAVE A CONFLICT WITH BOTH TIMES FOR THE EXAM, LET ME KNOW ASAP.

I will also assign several problem sets. You can choose whether to do them; however, you are an extreme risk-taker if you try the course without taking a serious stab at the problem sets. I will not correct your problem sets, but I will check to see if you have made substantial progress in trying to answer them. Although I will not offer answer keys, I will be glad to

discuss the problem sets in class or during office hours. By the same token, Tommy Keller (the excellent TA for the price theory course) will be available to help you work through concepts relating to problem sets during the review sessions, but he will not provide answers. Struggling through the problem sets (and the in-class exercises) and pondering how to craft logical solutions is one of the very best ways to prepare for the exams.

I will place problem sets in the course folder. Students who turn in written answers to all problem sets –good-faith attempts, only, please! – in class on the relevant due date (no exceptions) will be graded via the following formula:

$$\text{grade} = \max \left[\begin{array}{l} 0.3p_1 + 0.3p_2 + 0.4p_3 \\ 0.3p_1 + 0.7p_3 \\ 0.3p_2 + 0.7p_3 \end{array} \right]$$

where p_1 = points received on midterm 1
 p_2 = points received on midterm 2
 p_3 = points received on final exam.

Students who do not satisfy the above criteria will be graded via the alternative formula:

$$\text{grade} = .3p_1 + .3p_2 + .4p_3$$

In addition to the formal problem sets, I have put together a set of in-class exercises. I will bring these to class and we will work through them together.

NOTE: BE SURE TO CHECK EMAIL FREQUENTLY. I sometimes correspond with you electronically to clarify points raised in class, answer questions, or make announcements.

Readings

Required: Robert Frank, *Microeconomics and Behavior*, page numbers are for 8th ed., please see “errors in Frank” in the course folder for 5th, 6th and 7th ed. page differences – including for problem sets; other material in course folder

Recommended: Your microeconomics principles text; any calculus text

Other useful texts: McCloskey, *The Applied Theory of Price*, Mansfield, *Microeconomics*, Henderson and Quandt, *Microeconomic Theory*, Pindyck and Rubinfeld, *Microeconomics*, Stigler, *The Theory of Price*, listed articles in syllabus

Course Outline

Frank readings are in parentheses; course folder readings are indicated. Other readings are optional but might interest you; most are in the library but not on reserve (try JSTOR or ECONLIT for journal articles without exact citations).

PART 1: FUNDAMENTALS

Jan 5: Intro and course objectives, useful tools

Read this syllabus and bring questions to next class (or email me)

Basic math (FOLDER) – READ THIS. REALLY. IT IS INCREDIBLY USEFUL, ESPECIALLY IF YOU HAVE NOT HAD MULTIVARIATE CALC. IT GOES THROUGH VIRTUALLY ALL THE MATH YOU NEED TO KNOW FOR THIS CLASS.

Jan 10: Cost-benefit approach, supply and demand (Ch. 1, 2; Ch. 4, pp. 109-111)

Exercise 1

Frankmistake 1 (FOLDER)

Frankmistake 2 (FOLDER)

Friedman, Milton, "The Methodology of Positive Economics" (FOLDER)

Becker, Gary, "The Economic Approach to Human Behavior" (FOLDER)

Problem Set 1 assigned (due Jan 12)

PART 2: CONSUMER THEORY

Jan 12: Budget constraints, indifference curves (Ch. 3)

Exercise 2

Problem Set 2 assigned (due Jan 17)

Jan 17: Utility maximization, Lagrangeans (Ch. 3 appendix)

Exercise 3

Problem Set 3 assigned (due Jan 19)

Jan 19: Comparative statics, Engel curves, income and substitution effects (Ch. 4 to p. 109)

Exercise 4

Sub.income.effects 1 (FOLDER)

Sub.income.effects 2 (FOLDER)

Slutsky (FOLDER)

Problem Set 4 assigned (due Jan 24)

Jan 24: Elasticities, index number problem, consumer surplus (Ch. 4, pp. 111ff; Ch. 5 to p. 154)

Exercise 5

Elasticities (FOLDER)

Consumer surplus (FOLDER)

EV and CV, D curves (FOLDER)

Friedman, "The Marshallian Demand Curve," *J. Pol. Econ.*, Dec. 1949

Conrad and Meyer, "The Economics of Slavery in the Antebellum South," *J. Pol. Econ.*, Apr. 1958.

Problem Set 5 assigned (due Jan 26)

Jan 26: Intertemporal choice, risk, uncertainty, expected utility (*Ch. 5, pp. 154ff; Ch. 6*)
Exercise 6

Finance.model (FOLDER)

Alchian, "The Meaning of Utility Measurement," *Amer. Econ. Rev.*, Mar. 1953

Friedman and Savage, "The Utility Analysis of Choices Involving Risk," *JPE* Aug. 1948

Ehrlich and Becker, "Market Insurance, Self Insurance, and Self Protection," *JPE* 1972

McCloskey, "English Open Fields as Behavior toward Risk," *Res Ec Hist*, Fall 1976

Akerlof, "The Market for Lemons," *Quar. J. Econ.*, 1970

Problem Set 6 assigned (due Jan 31)

Jan 31: Revealed preference, limitations of standard theory (*skim Ch. 7, 8*)

Liebenstein, "Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand," *Quar. J. Econ.*, May 1950

Lancaster, "A New Approach to Consumer Theory," *J. Pol. Econ.*, 1966

Becker, "Irrational Behavior and Economic Theory," *J. Pol. Econ.*, Feb. 1962

Midterm Exam 1 (old exams in FOLDER)—Jan 31 (3:30-7, 7-10:30)

PART 3: THEORY OF THE FIRM

Feb 2: Production functions (*Ch. 9*)

Exercise 7

Coase, "The Nature of the Firm," *Economica* 1937

Alchian and Demsetz "Production, Information Costs, and Economic Organization,"
Amer. Econ. Rev., 1972

Problem Set 7 assigned (due Feb 9)

Feb 7: Cost curves and cost minimization (*Ch. 10*)

Exercise 8

Problem Set 8 assigned (due Feb 14)

Feb 9-14: Perfect competition (*Ch. 11*)

Exercise 9

Baumol, "Contestable Markets," *Amer. Econ. Rev.*, Mar. 1982

Problem Set 9 assigned (due Feb 16)

Feb 16-21: Monopoly (*Ch. 12*)

Exercise 10

Harberger, "Monopoly and Resource Allocation," *Amer. Econ. Rev.*, 1954

Oi, "A Disneyland Dilemma," *Quar. J. Econ.*, vol. 85

Swan, "Alcoa: The Influence of Recycling on Monopoly Power," *JPE.*, Feb. 1980

Problem set 10 assigned (due Feb 21)

Midterm Exam 2 – Feb 21 (3:30-7, 7-10:30)

Feb 23: Monopolistic competition, oligopoly, game theory (Ch. 13)

Exercise 11

Circle problem (FOLDER)

Stigler, "A Theory of Oligopoly," *J. Pol. Econ.*, 1964

Rothschild, "Models of Market Organization with Imperfect Information," *JPE* 1973

Scott Bierman's Game Theory text

Problem Set 11 (due Mar 1)

Feb 28: Factor markets (Ch. 14, 15)

Exercise 12

Rottenberg, "The Baseball Players' Labor Market," *J. Pol. Econ.*, June 1956

Problem Set 12 (due Mar 6)

PART 4: GENERAL EQUILIBRIUM AND SPECIAL TOPICS

Mar 1-6: Pure exchange, Edgeworth box, general equilibrium (Ch. 18W– online, also in FOLDER)

Exercise 13

Edgeworth box diagram (FOLDER)

Production E box (FOLDER)

Optimal product mix (FOLDER)

Problem Set 13 assigned (due Mar 8)

Mar 6-8: Public goods, externalities (Ch. 16, 17)

Exercise 14

Coase, "The Problem of Social Cost," *J. Law Econ.*, Oct. 1960

Harberger, "Three Basic Postulates for Applied Welfare Economics," *J. Ec. Lit.*, 1971

Hotelling, "The General Welfare on Relation to Problems and Taxation," *Econometrica*, July 1938

Lancaster and Lipsey, "The General Theory of Second Best," *Rev. Econ. Stat*, 1956.

Final Exam during regular exam time (Mar 12, 8:30-11); no self-scheduling

Exam Rules and Honorable Behavior

- All books and notes relevant for the exam are to be out of eyesight during the entire exam.
- Do NOT talk with ANY student about ANY ASPECT of the exam until after I hand your corrected exams back.

I take these rules very seriously. If I have evidence of a rule violation, I will pursue it aggressively with the Academic Standing Committee and will argue for the strongest punishment the rules allow. That said, I have no reason to believe that anyone will behave in an untrustworthy manner.