ECO 301 - Intermediate Microeconomics

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Office Hours: Tuesday 2-4pm and Thursday 4-5:30pm, or by appointment

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Text: Browning E. K. and Zupan, M. A., 2009, *Microeconomics: Theory and Applications*, 10th ed. (John Wiley & Sons, New York).

Course Description: The course has two basic objectives. First, we will study consumer choice, production, cost, and the effect of market structure using the basic analytical methods in microeconomics. To learn these basic analytical methods, we will rely primarily on the textbook. Second, we will analyze some of the most important ideas in microeconomics in the last 30 years. Unfortunately, textbooks at this level fail to cover much of the interesting research in economics. This is a shame because it makes the course needlessly dull. Worse yet, students get a skewed version of microeconomics. To remedy the problem, I've selected some of the most influential papers in microeconomics. We will read, analyze and discuss them to gain an understanding of the important ideas in microeconomics. There is an emphasis on understanding the way that data is collected and analyzed to test the predictions of the theoretical models. We will rely on peer-reviewed papers from the economics journals for both theoretical development and empirical tests. As a consequence, there is much less reliance on a textbook than the principles course.

Exams and Grading: Grades are based on your performance on midterm exams, a final and a series of problem sets. The final is cumulative. Exams are aimed at assessing the degree to which students have met the learning objectives. As such, the questions will cover both explanations of economic theory as well as applications of the theory to specific cases.

Because I distribute the answers on the date that the problem sets are due, I do not accept late problem sets. The final is cumulative. Weights for each requirement and the grading scale are as follows:

Problem Sets	15%
Midterms	50%
Final	35%

92 -100	A	72 - 76	C
90 - 91	A-	70 - 71	C-
87 - 89	B+	67 - 69	D+
82 - 86	B	62 - 66	D
80 - 81	B-	0 – 62	F
77 - 79	C+		

OUTLINE OF THE COURSE

PART 1. Consumer Choice

I. Introduction

a. The Nature of Economic Models, Browning and Zupan, (p. 1 - 9)

b. Review of Supply and Demand, Browning and Zupan, (p. 15-44) *

II. Consumer Choice

a. Budget Constraints, Browning and Zupan, (p. 58-63)

b. Indifference Curves, Browning and Zupan, (p. 47-58)

c. Equilibrium, Browning and Zupan, (p. 63-77 & 80-82)

d. Demand Curves, Browning and Zupan, (p. 86-109 & 113-119)

Yorozu, I. and Zhou, Y., 2002, "The Demand for Cigarettes in Japan: Impact of Information Dissemination on Cigarette Consumption," *Contemporary Economic Policy*, 20, 72-82.

Santerre, R. E. and Vernon, J. A., 2006, "Assessing Consumer Gains from a Drug Price Control Policy in the US," *Southern Economic Journal*, 73, 233-245.

Jensen, R. T. and Miller, N. H., 2008, "Giffen Behavior and Subsistence Consumption," *American Economic Review*, 98, 1553-1577.

 An asterisk (*) indicates material that reviews ideas from Principles of Microeconomics. You will be responsible for this material but I will not devote any class time to it.

III. Applications of Consumer Choice Theory

a. Excise v. Lump Sum Subsidies, Browning and Zupan, (p. 123-128)

b. Intertemporal Consumer Choice, Browning and Zupan, (p. 135-142)

c. Risk and Insurance, Browning and Zupan, (p. 142-150)

IV. Cognitive Limitations and Consumer Behavior

Frank, R., 1994, "Cognitive Limitations and Consumer Behavior," in *Microeconomics and Behavior*, 2nd ed. (McGraw-Hill, New York).

Tversky, A. and Kahneman, D., 1991, "Loss Aversion and Riskless Choice: A Reference Dependent Model," *Quarterly Journal of Economics*, 106, 1039-1061.

Kahneman, D., 2003, "Maps of Bounded Rationality: Psychology for Behavioral Economics," *American Economic Review*, 93, 1449-1475.

Genesove, D. and Mayer, C., 2001, "Loss Aversion and Seller Behavior: Evidence from the Housing Market," *Quarterly Journal of Economics*, 116, 1233-1260.

Sunstein, C. R. and Thaler, R., 2007, "The Survival of the Fattest," *The New Republic*, March 19, 2007, p. 59-63.

Important Ideas:
1. Economic method as based on purposeful choice equilibrium and efficiency.
2. Economic models are a method to capture the logic of an economic process.
3. Income and price changes and their impact on the budget constraint.
4. Characteristics of indifference curves (downward sloping, non-intersecting, convex) and how they follow from the basic assumptions.
5. Adjustment to equilibrium in the basic consumer model and the marginal rate of substitution.
6. Mathematical representation of the basic consumer model: the Lagrangian multiplier
7. Derivation of demand: income and substitution effects (normal, inferior and Giffen goods).
8. Estimation of demand: link between theory and empirical specification (cigarette demand example).
9. Excise subsidies and overconsumption: marginal rate of substitution and the true cost of the resources.
10. Intertemporal consumption: equilibrium condition, the effect of expectations, and the effect of interest rate changes.
11. Expected utility, risk, and the market for insurance

12. Systematic violations of the rationality assumption and the ability to improve models of consumer choice.
13. The asymmetric value function: reference dependence, loss aversion, and diminishing sensitivity.
14. Framing effects and consumer choice.
15. Experimental evidence on choice – the relation to neoclassical theory and the asymmetric value function.
16. Loss aversion and housing markets.
17. Biases and heuristics: availability, representativeness, and anchoring.

Problem Set #1 Due (Monday, Feb. 22)

Midterm #1 (Thursday, Feb. 25)

PART 2. Producer Theory

I. The Costs of Production

a. Short-Run Production and Costs, Browning and Zupan, (p. 175-183 & 202-212)

b. Long-Run Production and Costs, Browning and Zupan, (p. 183-196 & 212-229)

c. Using Cost Curves (p. 229-236)

de Groot, H., McMahon, W., and Volkwein, J., 1991, "The Cost Structure of American Research Universities," *Review of Economics and Statistics*, 73, 424-431.

Vandegrift, D. and Bisti, J., 2001, "The Economic Effects of New Jersey's Self-Serve Operations Ban on Retail Gasoline Markets," *Journal of Consumer Policy*, 24, 63-81.

II. Perfect Competition

a. The Perfectly Competitive Firm, Browning and Zupan, (p. 241-257)

b. The Perfectly Competitive Industry, Browning and Zupan, (p. 257-271)

c. A Broader View of Competition

Schumpeter, J. A., 1942, "Capitalism and the Process of Creative Destruction," in *Capitalism, Socialism and Democracy* (New York, Harper & Row).

Hayek, F. A., 1946, "The Meaning of Competition," in *Individualism and Economic Order* (Chicago, University of Chicago Press).

Smith, V. L., 1982, "Markets as Economizers of Information: Experimental Examination of the Hayek Hypothesis," *Economic Inquiry*, 20, 165-179.

Smith, V. L., 2005, "Behavioral Economics Research and the Foundations of Economics," *Journal of Socio-Economics*, 34, 135-150.

III. Monopoly and Rent-Seeking

a. Monopoly, Browning and Zupan, (p. 313-341)

b. Rent-Seeking

Tullock, Gordon, 1967, "The Welfare Costs of Tariffs, Monopolies and Theft," *Western Economic Journal*, 5, 224-232.

Important ideas:

1. Neoclassical theory of production as a technological relation linking inputs to outputs.
2. Expenditure and input price changes and their impact on the budget constraint.
3. Characteristics of isoquants (downward sloping, non-intersecting, convex) and how they follow from the basic assumptions.
4. Adjustment to equilibrium in the basic producer model and the marginal rate of technical substitution.
5. Mathematical representation of the producer (isoquant-isocost) model: the Lagrangian multiplier.
6. Deriving the short-run production function from the isoquant-isocost model.
7. Deriving the expansion path and long run cost curves from the isoquant-isocost model.
8. Changes in input prices, input substitution and changes in cost curves.
9. Empirical evidence on the isoquant-isocost model: gas stations in New Jersey
10. Applying cost curves to pollution abatement: tradeable vouchers
11. Empirical evidence on vouchers: the market for sulfur dioxide emissions
12. Long-run competitive equilibrium assumptions and outcomes.
13. Implications of the long-run supply curve (increasing, decreasing and constant costs).
14. Competition as a process versus competition as a state: the failure of the perfect competition model to link costs with competition.
15. Economic progress and market structure (monopoly profits as an engine of progress).
16. Prices as information: dispersed knowledge and the perfect information assumption.
17. "Imperfect competition" models and their absurd implications.
18. Prices as information: application to experimental double auction markets.
19. Complete knowledge and the price taking hypotheses.

20. Monopoly assumptions and outcomes: unexploited gains from trade.
21. Mathematical representation of the monopoly model: marginal revenue as a function of price elasticity of demand.
22. Price discrimination definition and supporting conditions.
23. The rise of intellectual property and the increased incidence of price discrimination.
24. The inverse elasticity rule: mathematical derivation and application.
25. The welfare costs of tariffs and theft: application to monopoly

Problem Set #2 Due (Thursday, April 1)

Midterm #2 (Monday, April 5)

Part 3. Input Prices, Path Dependence, and the Economics of Information

I. Employment and Pricing of Inputs

a. Input Demand, Browning and Zupan, (p.457-466)

b. Input Supply, Browning and Zupan, (p.466-478)

c. The Income Leisure Choice of the Worker (p. 483-491)

II. The Economics of Information

a. Asymmetric Information, Browning and Zupan, (p. 419-428)

Akerlof, George A., 1970, "The Market for 'Lemons': Quality, Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84, 488-500.

III. Path Dependence

David, Paul A., 1985, "Clio and the Economics of QWERTY," *American Economic Review*, 75, 332-337.

Leibowitz, S. and Margolis, S., 1995, "Policy and Path Dependence: From QWERTY to Windows 95," *Regulation*, 18, 9-18.

Audretsch, David and Feldman, Maryann, 1996, "R&D Spillovers and the Geography of Innovation and Production," *American Economic Review*, 86, 630-640.

Puffert, D., 2000, "The Standardization of Track Gauge on North American Railways, 1830-1890," *The Journal of Economic History*, 60, 933-960.

Important Ideas:

1. The factors that influence the demand for an input by an individual competitive firm.
2. Market input demand curves as an aggregation of input demands of individual firms.
3. Input price determination in a multi-industry market.
4. Input demand and employment for an output-market monopolist.
5. Path dependence as the interaction among technical interrelatedness, Demand-side economies of scale, and quasi-irreversibility.
6. Path dependence versus convergence to efficient outcomes via markets.
7. Critique of path dependence (QWERTY): disputes about the facts and theoretical objections (restrictive assumptions, mismatch between theory and empirical observations).
8. Path dependence application: the standardization of track gauge on North American railways
9. Asymmetric information and the adverse selection problem.
10. Demand as a function of price and average quality, supply as a function of price and average quality as a function of price.
11. Using the uniform probability distribution: equilibrium outcome.

Problem Set #3 Due (Thursday, April 29)

Final

Course objectives:

By the completion of the course, the student will be able to:

A. Use the theory of consumer choice to consider the impact of various public policies on consumer welfare.

B. Use the theory of consumer choice to derive demand and explain the connection between theoretical formulations and empirical specifications of demand.

C. Describe experimental results and methods in the study of consumer choice and explain their implications for the standard neoclassical theory of choice.

D. Understand the neoclassical theory of the production function and the link between the production function and the cost curves.

E. Compare and contrast competition as both a process and a state of affairs.

F. Derive the inverse elasticity rule and identify markets in which it is applied.

G. Define asymmetric information and explain in detail the conditions under which asymmetric information causes market failures.

F. Define rent seeking and explain the welfare costs of rent seeking.

G. Define path dependence, explain its causes, and describe the policy implications of path dependence.

H. Understand the theory of input markets including input demand functions at the firm and industry level under both competitive and monopolistic conditions.

 I. Understand the role of economic theory and explain the critical elements of sound statistical tests of economic theory.