

# **PUBP720: Managerial Economics and Policy Analysis**

## **Spring 2003**

ver. 11/7/2002

**Faculty:** Philip Auerswald

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*office hours:* W 5:30PM - 7:00PM; Th 5:30 PM - 7:00PM.

**course credit:** 3

**1st Day:** *January 23*

**room:** TBA

**meeting time:** Th 7:20 - 10:00PM

### **Description**

#### OBJECTIVES

This course is an advanced survey of microeconomic theory. Its purpose is to provide a firm microeconomic foundation for the analysis of public policies by examining the operation and imperfections of markets. The course is intended to provide the student with the capability to understand economic literature and theories.

#### COURSE OUTLINE

This course is divided into three parts. The first section focuses on the theory of the consumer, with an ultimate aim of understanding how preferences and utility maximization lead to consumer demand for goods and services. The second part of the course examines the theory of production, leading toward the development of supply curves. Supply and demand are brought together in an analysis of competitive markets and an evaluation of economic welfare. The third part of the course then focuses on sources of market failure, including monopoly power, externalities, public goods and imperfect information. While the course will emphasize microeconomic theory, a number of case discussions and policy issues will be used to motivate the material.

#### AUDIENCE

PUBP720 is a core MPP course. It is also a "bridge course" into Ph.D. level microeconomics courses for students with little prior background in economic analysis, but who are, at minimum, comfortable with algebra.

#### EXPECTATIONS

Course requirements include regular attendance and participation in lectures (not graded), completion of four problem sets (best three worth 20 percent of grade), a mid-term examination (30 percent), and a three-hour, cumulative final examination (50 percent).

Problem sets are an essential part of this course. Problem sets will require students to go above

and beyond the material presented in class, and to apply the economic concepts to situations we have not yet encountered in lectures. Students will also be assigned to study teams of 3-4 individuals. However, each student must independently submit problem set answers. Assignments to work teams will be based upon responses to a class survey administered in the first two weeks of the course to gauge approximate levels of prior coursework in calculus and microeconomics. Students are expected to devote no less than 1.5 hours to the efforts of the study team per problem set—either in person (preferable), or “virtually.” Each problem set will be assigned a due date when issued. Because solutions are handed out on the due date, late problem sets lose 50% of the possible points. Problem sets that are more than 24 hours late are not accepted.

#### COURSE MATERIALS

The assigned text for the course is Nicholson, *Microeconomic Theory: Basic Principles and Extensions*, 8th edition (2002). The text is available at the GMU bookstore. Supplementary readings and cases will be available from either in a course reading packet, or . Please note the "N" below refers to the Nicholson text.

### Syllabus

#### PART I: THEORY OF THE CONSUMER

1. *January 23: Overview of the course; consumer preferences*

N: Chapters 1 and 3

assignment #1 distributed

2. *January 30: Utility maximization and choice; Income & Substitution Effects*

N: Chapter 4

reading: Dasgupta (1995)

3. *February 6: Duality and Measures of Consumer Welfare*

N: Chapters 5 & 6 N: Chapter 5 & 6 for next 2 lectures [pp. 136-139 optional]

assignment #1 due; #2 distributed

reading: Hicks (1933, chapter 1)

4. *February 13: Information, property rights, contracts and bargaining*

N: Chapters 8-10, Chapter 13 (pp. 355-358) and Chapter 24 (pp. 659-669)

readings: Cutler and Reber (1996), Coase (1960) [two lectures]

#### PART II. THEORY OF PRODUCTION AND COMPETITIVE MARKETS

5. *February 20: Production and costs*

N: Chapter 11

readings: Chandler (1992), Barzel and Kochin (1992), Argote and Epple (1990)

6. *February 27: Market equilibrium and industry evolution*

assignment #2 due; #3 distributed

7. *March 6: MID-TERM EXAM (90 minutes, in class)*

*March 13: No class (Spring break)*

## PART III. MARKET FAILURE

8. March 20: *Efficiency, Social Welfare*

N: Chapter 17 (to p. 471), chapter 18, and chapter 25 (pp. 691-693)

readings: Friedman (1982, pp. 161-166), Sen (1999)

9. March 27: *Monopoly and Oligopoly, and Regulation*

N: Chapters 18 and 19

reading: U.S. vs. Microsoft, Findings of Fact (excerpts)

assignment #3 due, #4 distributed

10. April 3: *Externalities, Regulatory Approaches; Economic growth and the environment*

N: Chapter 24 (p. 659-669)

readings: Hahn and Stavins (1992), Arrow et al. (1995), Grossman and Krueger (1995)

11. April 10: *Public Goods*

N: Chapter 24 (pp. 669-678)

reading: Arrow (1962)

12. April 17: *Game Theory; Economic dynamics*

readings: Shubik (2000); Arthur (1990)

13. April 24: *Integrative topic--Global climate change*

readings: text of the U.N. Framework Convention on Climate Change (Kyoto Protocol); IPCC report "Climate Change 2001: Mitigation", Schelling (1992)

assignment #4 due; team evaluations due

14. May 1: *Review of the course*

May 8: *FINAL EXAM—2.5 HOURS, CUMULATIVE*

**References**

L. Argote and D. Epple. Learning curves in manufacturing. *Science*, 247:920-924, 1990.

K. J. Arrow. Economic welfare and the allocation of resources from invention. In R. R. Nelson, editor, *The Rate and Direction of Inventive Activity: Economic and Social Factors*. Princeton University Press, 1962.

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Y. Barzel and L. Kochin, 1992. "Ronald Coase on the Nature of Social Cost as a Key to the Problem of the Firm," *Scandinavian Journal of Economics*, 94:19-31.

A. D. Chandler, 1992. Organizational Capabilities and the Economic History of the Industrial Enterprise. *Journal of Economic Perspectives*, 6(3): 79-100, Summer 1992.

R. Coase. The problem of social cost. *Journal of Law and Economics*, 3:1-44, 1960.

D. Cutler and S. Reber. Paying for health insurance: The tradeoff between competition and

adverse selection. Working Paper 5796, NBER, October 1996.

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M. Friedman. *Capitalism and Freedom*. University of Chicago Press, 1982.

G. M. Grossman and A. B. Krueger. Economic Growth and the Environment. *Quarterly Journal of Economics*, 110(2):353-377, May 1995.

R. W. Hahn and R. N. Stavins. Economic incentives for environmental protection: Integrating theory and practice. *American Economic Review*, 82(2):464-468, May 1992.

Hicks, J. R. *Value and Capital*, Oxford University Press, 1933.

A. Metrick and M. Weitzman. Conflicts and choices in biodiversity preservation. *Journal of Economic Perspectives*, 12(3):21-34, 1998.

T. C. Schelling. Some economics of global warming. *American Economic Review*, 82(1):1-14, March 1992.

A. Sen. The Possibility of Social Choice. *American Economic Review*, 89(3): 349-378, June 1999.

M. Shubik. Game Theory: Some Observations. Yale School of Management Working Paper #132, 2000.