

PLCY 789 / PLAN 789
Advanced Microeconomic Theory for Public Policy II (Graduate)
University of North Carolina – Chapel Hill
Spring 2008

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Office hours: Tuesday 2:00 – 3:00

Class Schedule: Tuesday/Thursday 9:30 – 10:45

Class Location: MU 117

Objective

This course will teach you how to use advanced microeconomic theory to address practical problems in the policy world. In this course, we will use traditional economic tools to analyze problems in welfare and tax policy as well as inter-governmental transfers. We will review the main results in general equilibrium and welfare economics. We will also critically assess the market mechanism and identify the circumstances under which it leads to inefficient outcomes. We will explore more recent developments in microeconomic theory, including information economics, choice under uncertainty, and game theory. Finally, we will spend some time on strategic behavior and game theory. These techniques and concepts will be applied to an array of economics problems including health insurance, investment in schooling, wage contracts, collective bargaining, and many others.

Prerequisites

The course presumes a working knowledge of advanced microeconomics and multivariate calculus.

Course Readings & Textbooks

There are three required textbooks which are listed below. Most, if not all, of you should already have a copy of Binger & Hoffman, *Microeconomics with Calculus*. If not, order one. This text was used in the first half of this class (PLCY 788) and will continue to be used for some applications. The other two texts are probably new books to you, but we will use them both throughout the course:

Texts

Binger & Hoffman, *Microeconomics with Calculus* (second edition), Addison-Wesley. **[BH]**
(required)

Lee Friedman, *The Microeconomics of Public Policy Analysis*, Princeton University Press, 2002.
[F] (required)

Robert Gibbons, *Game Theory for Applied Economists*, Princeton University Press, 1992. **[G]**
(required)

Aside from the required textbooks, journal articles have been listed under certain sections of the syllabus, and others will be assigned as the class progresses. Finally, the Journal of Economic Perspectives often publishes a ‘Policy Watch’ article—a short paper that brings economic

analysis to bear on current policy issues in the US economy. Recent topics have included Health Insurance, the Alternative Minimum Tax, the Inheritance Tax, and Disability Insurance. These articles should become part of your regular dose of professional reading and are accessible through the UNC Libraries.

Evaluation Scheme

Exams: There will be two exams during the course of the semester, a midterm that will be given during the regularly scheduled class period, and a final (not cumulative) that will be given during the final exam period. Together, these exams account for 60% of your final grade.

Student Presentations: Each student will lead an in-class 30 minute discussion of an economic journal article to be followed by a class discussion (20 minutes of presentation and 10 minutes of class discussion). The purpose will be to understand how economic theory is used in applied settings to address public policy issues. The article will be chosen by the student, but approved by the instructor. Your performance on this assignment will be partly determined by participation in the discussion of your classmates’ article presentations. All together, this accounts for 30% of your grade.

Problem Sets: Problem sets will be distributed periodically during the semester and will be collected. You may work together in solving these problems but you may not turn in joint assignments or copy assignments verbatim. You must turn in your own individually-worked assignment. Problem set assignments account for 10% of your final grade.

Key Dates

First Day of Class	Thursday, January 10 th
EXAM 1	Thursday, March 6th during class
Spring Break – No Classes	Tuesday, March 11 th & Thursday, March 13 th
Last Day of Class	Thursday, April 24 th
Student Presentations	Tuesday, April 15 th , Thursday, April 17 th , Tuesday, April 22 nd , and Thursday, April 24 th
EXAM 2	Tuesday, April 29th at 8:00 am Final Exam Scheduled Time

General Topic Outline

The course outline below is tentative and is therefore subject to changes, deletions, and/or additions. I will announce changes to assigned readings in class and occasionally by email.

1. Monopoly and Price Discrimination

a. Price Discrimination (First, Second, and Third Degree)

BH: Ch. 15, pages 402-408

b. Natural Monopoly

BH: Ch. 15, pages 410-413

2. Information Economics

a. Choices Under Uncertainty and Expected Utility Theory

BH: Ch. 19

F: Ch. 7, pages 220-243

b. Moral Hazard, Adverse Selection, and the Insurance Problem

BH: Ch. 20, pages 538-548, 553-554

F: Ch.7 pages 254-266

Journal Article: G. Akerlof (1974) "The market for lemons," *Quarterly Journal of Economics*, 84: 448-500.

Journal Article: Michael Spence (1973) "Job market signaling," *Quarterly Journal of Economics*, 87: 355-374.

c. The Principal-Agent Problem

BH: Ch. 20, 548-551

Journal Article: Dixit (2002) "Incentives and organizations in the public sector," *Journal of Human Resources* 37: 696-727.

Handout: J. Tirole, *The Theory of Industrial Organization*, MIT Press, 1990, pages 34-60.

3. Market Equilibrium, Market Failure, and Government Intervention

a. General Equilibrium and Welfare

BH: Ch. 9, 14

F: Ch. 12

b. Market Failure

BH: Ch. 21

F: Ch. 15

c. Applications

F: Ch. 16-19

4. Introduction to Game Theory

a. Games of Complete Information

G: Ch. 1-2

BH: Ch. 16

b. Games of Incomplete Information

G: Ch. 3