Economics 507  
Applied Microeconomic Theory and  
Policy Analysis  
Fall Semester 1987  
Professor Howe

General Note: This course assumes that you have taken (and understood) Economics 407 and 480 or their equivalents. Two books that may be helpful to you in review or in getting another view of the materials are:

Chiang, Alpha C.  
Fundamental Methods of Math. Econ. (Third Edition)  
especially Chapters 6, 7, 9, 10, 11, 12.

Baumol, William J.  
Economic Theory and Operations Analysis (Fourth Edition)  
especially Chapters 3, 9, 10, 11, 14.

Chiang is primarily for math review, Baumol for economics. Both books have been used recently and should be available second-hand or from friends. The text for this course is:

Friedman, Lee S.  

The course will follow two tracks in the lectures and reading: (1) policy-oriented discussion and problems, following the text; and (2) more technical, analytical material given by lecture and additional readings. The book relies primarily on graphical and algebraic presentation with an occasional mathematical appendix, but its discussions of applied policy issues are excellent and cover matters of vital importance (such as the structure of reward systems, design of institutions, etc.) that cannot really be treated mathematically. We will supplement the book by lecture and by a set of readings available at Kinko's on the Hill.

Numerical problems will be assigned from time to time. It is important that you work these. They will not be graded but can be discussed in class following the assignment if desired. Three tests will be given (not expressly cumulative, but all work builds on preceding concepts and skills to some extent), hopefully during evening periods so more time will be available. My office hours (initially, at least) will be:

11:00 - 12:00: Tuesday, Thursday, in my Econ. Bldg. Office
1:00 - 2:00: Wednesday in Building I.B.S. #5.
OUTLINE

I. Overview. Text, Ch. 1.

II. Demand Theory, Estimation, and Applications.
   A. Basic concepts, Ch. 2.
   B. Individual demand functions.
   C. Predicting consumer behavior, Ch. 3, 4 and readings 1, 2, 3.
   D. Duality in consumer behavior, Ch. 5.
   E. Non-market measures of value: contingent valuation methods, option values, existence values, etc.
   F. Aggregation of demand, Tables 1 and 12.
   G. Applications.
   H. Uncertainty and risk in individual and collective decision-making, Ch. 6.
   I. The identification problem in estimating demand functions, Graph 1.

III. Production and Cost Analysis with Applications.
   A. Production functions, Ch. 7 and reading 5.
   B. Production duality and the cost function, readings 6, 7.

IV. Organizational Structures, Objectives, and Behavior.
   A. Profit-making organizations in different market environments, Ch. 8.
   B. Public enterprises and non-profit organizations, Ch. 9.

V. Market Structure and Performance.
   A. Competitive market structures, Ch. 10.
   B. Causes and effects of imperfect market structures, Ch. 11.
   D. Regional impact measurement and input-output models (handouts).

VI. Allocation of Resources Over Time.
   A. Individual consumption and saving behavior, Ch. 14.
   B. Role of capital markets and discounting.
   C. Optimal use of exhaustible resources.
   D. Decisions under uncertainty: quasi-option value.

VII. The Design of Economic Organizations.

Chapter 15.