

Syllabus for HPM 203a: Applied Microeconomics,  
Department of Health Policy and Management,  
UCLA

### Time and Location

Lecture: Tuesday and Thursday, 9:30-10:45; Room tba.

### Instructor

William S. Comanor

e-mail: [comanor@ucla.edu](mailto:comanor@ucla.edu)

office telephone: 310-206-1641

office hours: tba, CHS 31-245A.

### Prerequisite

The course employs differential calculus so some familiarity with that subject is essential.

### Overview and Objectives

This course develops the essential tools for the application of microeconomics to policy issues. It derives these methods from the basic axioms of utility maximization, and emphasizes their application to the evaluation of policy alternatives. As such, it provides a critical foundation for those seeking to apply economic analysis to issues in public policy. This course

emphasizes the basic concepts of microeconomics and illustrates them with numerous applications. Its learning objective is to provide a foundation for those seeking to apply economic methods to the analysis of public policy issues.

The best way to learn microeconomics is by applying it to examples, and we will do so extensively in class and through homework problems. This course emphasizes applications of the theory of rational choice.

The foundation of the course is the problem sets which are assigned each week to be returned the following week. The underlying premise is that economics is best learned by doing economic problems so they play an essential role. For this reason, all exams are given on an "open-book, open-notes" basis where the questions posed are new economic problems to be solved.

### Grading

There will be weekly homework assignments (20%), a mid-term exam (40%), and a final exam (40%).

### Textbook

Walter Nicholson & Christopher Snyder, *Microeconomic Theory*, 11<sup>th</sup> ed., 2012. The course is taught at the level of that text.

## Lecture Plan

Topic 1: Introduction to economic methodology and the construction and manipulation of economic models.

Topic 2: Optimization under constraints.

- emphasis on deriving marginal conditions for optimization
- further emphasis on deriving shadow prices of the constraints
- introduction to the distinction between binding and non-binding constraints

Topic 3: Derivation of consumer demand curves: both normal and compensated demands.

- derivation of income and substitution effects
- extension to the consumer's supply curve of labor
- discussion of labor – leisure choices

Topic 4: Derivation of Consumer Surplus from optimization methods

- relation to normal and compensated demand curves

- relation to compensating and equivalent variations
- errors involved in customary usage
- applications for both price and quantity changes

Topic 5: Policy analysis

- role of consumer and producer surplus
- qualifications and limitations
- applications

Topic 6: Revealed Preference analysis

- weak axiom of revealed preference
- derivation of consumer preferences
- applications

Topic 7: Mid-term Exam

- review session
- return and discussion of exam

Topic 8: General Equilibrium methods

- theory of exchange using box diagrams
- derivation of contract curve and definition of Pareto optimality
- distinction between efficiency and distributive objectives

- implications of monopoly and the Coase Theorem
- derivation of competitive price ratios via intersection of offer curves

Topic 9: Decisions under Uncertainty

- expected utility maximization
- theory of risk aversion and relation to declining marginal utilities
- derivation of risk-based utility functions
- applications

Topic 10: Review of all material

- prepare for final exam

## Research Competencies

1. Foundational knowledge - Acquiring knowledge of economic methodology, and how economic principles are applied.
2. Theoretical knowledge - Applying or developing theoretical and conceptual economic models.
3. Relevant and important policy question development - Posing relevant and important research questions, evaluating them, and formulating solutions to policy problems.
4. Conceptual models and operational methods - Using or developing conceptual models to specify study constructs for research questions and developing variables that reliably and validly measure these constructs.