

Duke University
Department of Economics

Econ 142/242
Spring 2009

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Office hours: Tuesday 9:30-11:00AM

Applied Economics

Course description: This course reviews topics in empirical research in micro-economics. Three main sub-fields of micro-economics are touched: Labor Economics, Public Economics and Industrial Organization.

After a short introduction to empirical research in micro-economics, we will devote a couple of weeks to topics in Public Economics. We do that through reading papers on a method called ‘contingent valuation’. The next few weeks cover other topics in Labor and Public economics. For this part we use the textbook listed below (Manski) as well as research papers. The third part covers topics in industrial organization and is based on handouts and papers that we will read.

During the course we will use STATA to conduct empirical work.

Prerequisites: Econ 139/ 239.

Book:

Charles F. Manski “Identification Problems in the Social Sciences”, Harvard Press, 1999.

Grading: The grade is based on course assignments (20%), a midterm (30%) and a final exam (50%). Final exam is on May 1st, 9-noon.

Introduction

- I. The scope of economic research, applied work in micro-economics
- II. Probability overview
(papers and handouts)

Part I – Contingent valuation method

- I. Welfare analysis from survey data
- II. Contingent valuation method in environmental studies
(papers)

Part II – Labor and Public Economics

- I. **Identification**
 - a. What can and cannot be learned from the data
 - b. The difference between statistical inference and identification
 - c. Ambiguity
(Introduction chapter in Manski's book)
- II. **Nonparametric Regression and Extrapolation**
(Manski – Chapter 1)
- III. **Treatment Effects (1)**
 - a. Bounds on treatment effects – worst case scenario
 - b. Bounds on treatment effects – adding assumptions
(Manski – Chapter 2)
- IV. **Treatment Effects (2)**
 - a. STATA overview
 - b. Difference in differences approach
 - c. Minimum wages
- V. **Average Treatment effect**
 - a. Average treatment effect
 - b. Matching estimators
(papers)
- VI. **Alternative approaches to Endogeneity**
 - a. Instrumental variables
 - b. Heckman two step estimator
(handouts)

Part III – Industrial Organization

I. Game Theory and IO

- a.** The influence of Game Theory on empirical microeconomics
- b.** Incorporating strategic behavior into IO models
- c.** Entry and Exit from markets
(papers)

II. Simultaneity

- a.** The identification problem
- b.** Equilibrium in games
(Manski – Chapter 6)

III. Pricing

- a.** Price dispersion
- b.** Advertising
(papers)