University of California, Berkeley
Department of Economics

Professor Ken Chay
Fall Semester, 2005

ECONOMICS 142
APPLIED ECONOMETRICS AND PUBLIC POLICY

Course Time: Tuesday and Thursday, 9:30 - 11 am, 3 Evans

Course Home Page: TBA

Office Hours:
Tuesday and Friday, 4-5 pm
657 Evans Hall

Section Times:
Tuesday 8-9, Thursday 2-3, 55 Evans

Graduate Student Instructor:
Justin Falk
Office Hours: TBA

Course Overview and Objectives:
This course examines econometric identification issues in empirical microeconomics and public policy analysis. It supplements topics covered in Economics 140/141 with a focus on the sensible application of econometric methods to empirical problems. The course provides background on issues that arise when analyzing non-experimental social science data and a guide for tools that are useful for applied research and policy analysis. The course also emphasizes how a basic understanding of economic theory and institutions can help inform the analysis. By the end of the course, students should have a firm grasp of the types of research designs that can lead to convincing analysis and be comfortable working with large-scale data sets.

Required Background: Economics 140 or 141 (preferably 141)
Suggested Background: An applied microeconomics course (e.g., Economics 152, 131)
A working knowledge of STATA.

Course Requirements:
Students should read assigned readings and attend all classes, as some material will not be covered in the course readings. There will be 4-5 applied exercises, 2 semester exams, and a final exam.

Class handouts will be available at Janet Henry’s office in 643 Evans Hall and on the course home page.

Course Grading:
40% Two Exams during semester (In class, TBA)
40% Final Exam (8-11 am, Thursday December 15, location TBA)
20% 4-5 Problem Sets (Applied Exercises)
**Readings:** Required reading assignments will be announced in class. The textbook will be on reserve at Moffitt Library. It may be useful to also review the text you used in your Econ 140 or 141 classes.

**Required Text:**

**Reader:** Additional readings and materials (listed below); availability will be announced in class.

**Course Topics:**
1. Introduction and overview of data, simple econometric models, the scientific method, and “credible” inference.
4. Selection on observables and program evaluation. The method of matching and propensity score approaches to dimensionality reduction.
5. The regression discontinuity design.
8. Experimental design – the value of randomized trials in evaluating economic policy.
9. Quasi-experimental research designs.
10. Linear panel data models and program evaluation. Random effects, correlated random effects, and fixed effects models. Dynamic panel data models.
Additional Reading List


