

# Econ 220C, Spring 2004

Instructor: Yixiao Sun

Department of  
Economics, UCSD

## Course Description

The primary goal of Econ 220C is to introduce tools necessary to understand and implement empirical studies in economics focusing on issues other than time-series analysis. This course contains two parts. The first part deals with panel data models: (1) static panel data models (2) dynamic panel data models and (3) other misc. panel topics. Multiple Equation GMM and Minimum Distance Estimator will be introduced and used to estimate some panel data models. The second part of the course deals with limited-dependent-variable models: (1) discrete choice models; (2) censored and truncated regression models, (3) sample selection models; and (4) evaluation of treatment effects. While the second part focuses mainly on cross sectional data, it also covers panel Probit/Logit, panel Tobit and panel attrition models.

We will study different issues in the specification, estimation and testing of these models with cross-sectional data and with panel data. The emphasis of the course is on both econometric ideas and econometric techniques. For some of the problem sets you will have to deal with actual data or perform simulation experiments. You should become familiar as soon as possible with some general features of the econometric package that you choose. MATLAB and GAUSS are widely used by econometricians. It seems that more and more people starts using MATLAB. STATA seems to have gained increasing popularity in recent years among applied micro economists. SAS is another option.

## Text Book

Wooldridge, Jeffrey (2002): Econometric Analysis of Cross Section and Panel Data, MIT press.

This is the main text for the course

## Grading Policy

Grades for Econ 220C will be determined as follows:

- 40%: Four problem sets, each carrying a weight of 10%. You may form a group with no more than three people and work together on the problem sets, but must hand in your own write-up of the answers.
- 20%: Midterm, No books or notes are allowed. Will cover Panel data topics
- 40%: Final Exam. No books or notes are allowed. This will be on Wed, June 9, from 8 a.m. to 11:00 a.m.

## General References: Panel Data

Arellano, M. (2003) Panel Data Econometrics. Oxford University Press



Baltagi, Badi H. (2001), Econometric Analysis of Panel Data, Second Edition, John  
Heckman, J. and Singer, Handbook of Econometrics; Ch. 29, Econometric Analysis  
University Press

Greene, W. H., (2003), Econometric Analysis, Ch 22.

Kenneth Train, (2002), Discrete Choice Methods with Simulation, Cambridge  
University Press.

A zip archive is available for download (1.8M) , containing all the chapters.

Maddala, G.S., (1987), Limited Dependent and Qualitative Variables in Econometrics.