Princeton University
Department Of Economics
Econometrics 312
Fall 2012

Lectures: MW 1:30-2:50pm (Robertson Hall 100)

Precepts: Mon, Tue 7:30-8:20pm, Tue 9-9:50am

Professor: Andriy Norets, 313 Fisher Hall

Office hours: Mon 3-4pm

Preceptors: first part of the course - Matthieu Gomez (gomez.matthieu@gmail.com)
second part - Gabriele la Spada (gla@princeton.edu)

Webpage: http://blackboard.princeton.edu

Course description

This course is an introduction to econometrics. Econometrics is a sub-discipline of statistics that provides methods for inferring economic structure from data. This course has two goals. The first goal is to give you means to evaluate an econometric analysis critically and logically. Second, you should be able to analyze a dataset methodically and comprehensively using the tools of econometrics.

Prerequisites:

ECO 202 (or ORF 245) and MAT 200 (or MAT 202).

Readings:

Required text: Stock and Watson, Introduction to Econometrics. Pearson Addison Wesley; 3d edition.
Supplementary text: Wooldridge, Introductory Econometrics.

Requirements/Grading:

Final Exam: 50%

- There will be a three-hour final exam (to be scheduled by the registrar's office).

Midterm: 25%

- The midterm will take place in-class on Wednesday October 24.

Problem Set(s): 25%

- There will be a number of problem sets (approximately one per week), which will count toward 25% of your final grade. You may work with other students on the problem sets, but the answers you submit must represent your own understanding of the solutions. Direct copying is not permitted and will be treated as cheating. **We will not accept late problem sets, but we will ignore the two lowest problem sets grades.**

Computer Work:

Computer work is an integral part of econometrics and the problems that will be assigned assume general computer literacy. You will be given brief introduction to STATA in the first precept. STATA is available at the McCosh computer clusters. You should be able to access STATA on university servers remotely from a laptop (this will be demonstrated in precepts). You can also purchase personal copies of STATA at a reduced (although still substantial) price.

Timing of Events:

1. Problem sets will be distributed on Wednesday and will be due in the preceptor mailbox in Fisher 100 by 5pm the following Wednesday.
2. Precepts will start from Monday, September 24. The first precept will be used to review STATA.
3. The midterm will take place in class on Wednesday October 24. Make-ups for the midterm can be scheduled only if you have a written request from your College Dean or a note from McCosh Health Center.
4. The final exam will be scheduled by the Office of the Registrar.

Other information:

Email communications should be used for administrative issues. Questions of substance should be raised in oral communications.

Course Outline:

1. Review of Probability and Statistics (Stock and Watson, Chapters 2, 3, 17.2)
2. Linear Regression Model
    - Regression with one regressor (Stock and Watson, Chapters 4, 5, 17)
    - Regression with multiple regressors (Stock and Watson, Chapters 6-9, 18)
3. Panel Data (Stock and Watson, Chapter 10)
4. Instrumental Variables (Stock and Watson, Chapter 12, 18.7)
5. Maximum likelihood and Bayesian methods (Stock and Watson, Chapter 11 and lecture notes)
6. Binary Choice (Stock and Watson, Chapter 11)
7. Introduction to Time Series (Stock and Watson, Chapters 14 and 15)