Fundamental of Stat/Econometrics (E570)

Fall 2010 Syllabus

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Class meeting: T 6:00-8:40 pm at NU 217
Office Hours: T 2:00-4:00 pm and by appointment.

Course goals:
1. Use basic econometric skills to answer an economic question.
2. Learn to program in STATA.
3. Use data to conduct an econometric analysis of an economic question.
4. Write a clear description of your econometric analysis.


Software: STATA

Recommended texts: The following text and software will help you learn a lot more:


Also useful is:

Stata/SE 10 Availability:
1. Social Science Computing Classroom (SSCC) - 4th floor Cavanaugh Hall (CA 436).
2. UITS-maintained Student Technology Labs - BS3000, BS3003, BS3005, IT131, SL070.

Small Stata for Windows (plus Getting Started manual); this is the least expensive possibility; there are more powerful (but also more expensive) options if interested. Purchase through IU’s Stat/Math Sales (smsale@indiana.edu). This is a version of STATA for your PC.

Grading:
Your final grade in the class will be determined by the following grading scale.

- Homework (30 percent)
- Midterm (30 percent)
- Final (40 percent)
**Homework:**
Homework will be assigned on a regular schedule. Students are welcome to discuss the homework with classmates. However, each student has to write his/her own answers. Do not just copy others. Not mentioning it is not just a misconduct, it is not worth doing because eventually you will have to solve the midterm and final exams on your own. No late homework will be accepted.

**Exams:**
There will be one midterm exam and one final exam. No excuse other than extreme emergency will be accepted for missing a midterm exam. If an emergency does arise, please email me before the midterm exam to inform me of the problem. In the midterm exams, you will be permitted to bring in a single sheet (two-sided, 8x11) of notes and a calculator; no textbooks, computers, cell phones, iPAQs, iPODs, etc. The final exam is scheduled at 6:00-8:00pm on Dec. 15 by the University.

**Feedback:**
I highly encourage you to provide me with feedback as we progress through the semester. Good communication is essential to make sure the course runs as smoothly as possible. You can come to my office hour, send emails to me, and leave feedback on my mailbox anonymously.

**Academic Integrity:**
Indiana University-Purdue University Indianapolis has a Code of Student Conduct, administered by the office of the Dean of Students. This Code sets standards for academic integrity at IUPUI for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism.
Fall 2010    Tentative Schedule:

Week  1:  Wool. 1. 2.   Review of probability and statistics, simple regression model
Week  2:  Wool. 2   Continued from previous week
Week  3:  Lab     Introduction to STATA
Week  4:  Wool. 3   Multiple Regression Analysis: Estimation
Week  5:  Wool. 4, 5  Multiple Regression Analysis: Inference
                  Hypothesis tests
                  Consistency, asymptotic normality, asymptotic efficiency
Week  6:   Functional form, goodness-of-fit, prediction.
Week  7:   Midterm (Covers Wooldridge through Week 5.)
Week  8:  Wool. 6   Confidence intervals for predictions.
Week  9:  Wool. 7   Multiple Regression with Qualitative Information
Week 10:  Wool. 8   Errors that are heteroskedastic
Week 11:  Wool. 9   Functional form specification, RESET. Missing data,
                   Outliers. Omitted variables-proxy variables.
Week 12:  Wool. 15  Instrumental variables estimation
Week 13:  Wool. 17  Limited Dependent Variable Models and Sample Selection
                   Correction.
Week 14:  Wool. 17  Continued from previous week.
Week 15:  Reading Week

“Wool.” refers to the Wooldridge text