Econ 233 Introduction to Econometrics

Summer, 2009

Syllabus

1. Course Particulars

Instructor: ZHANG, Jin
Office: Room4381 (Lift 13-15)
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Office hour: By appointment

Teaching Assistant: SUN, Teng
E-mail: sunteng2007@gmail.com

Time:
Lecture: Monday, Wednesday, Friday 10:00 a.m. - 11:50 a.m.
Tutorial: Friday 12:00 p.m.-1:50 p.m.
Duration: June 8 to July 24, 2009

Venue: Rm4505 (Lift 25-26)

Course website: http://lmes2.ust.hk
Students should be able to access the website for Econ233 in the LMES using their ITSC accounts.

2. Course Description

This course is designed to introduce students to basic econometric concepts and techniques with an emphasis on applications in economic analysis rather than derivations using matrix algebra. It begins with a review of basic mathematical tools, basic probability and statistics concepts that are used in econometric analysis. Then it covers linear regression with one regressor, linear regression with multiple regressors and some further issues with multiple regression analysis. We focus on practical issues in econometric issues of cross-sectional data.
STATA will be used extensively in the course to carry out the computer-based regressions. Several tutorial sessions will be used to introduce the fundamentals of this econometrics package.

Prerequisite: one semester of introductory probability and statistics course, one semester undergraduate algebra course.

Textbook:

- *Introduction to Econometrics, Brief Edition*, James H. Stock and Mark W. Watson, Addison-Wesley 2007

  Website: http://www.aw-bc.com/stock_watson/

The following books may be useful for better understanding of the course materials and for

students who are interested in advanced topics:

- *Introductory Econometrics: A Modern Approach,* 4th Edition, Jeffrey Wooldridge
- *Econometric Analysis of Cross Section and Panel Data,* Jeffrey Wooldridge

3. Grading

Homework (20%): There will be 4 problem sets. Each problem set contains one mathematical reasoning problem and one computer exercise. The due date will be specified in each problem set. Late submission will NOT be accepted. Students should submit her/his own solution by paper to the TA during the tutorials.

Midterm (30%): Open book, open notes.

Tentative schedule:

Coverage: Stock and Watson Chapter 1-5

Time: July 6, 10:00 a.m. -12:00 a.m.

Venue: Rm. 4505

Final Exam (50%): Open book, open notes.

Coverage: Stock and Watson Chapter 1-9. Note that the materials after the midterm can not be understood without good understanding of the materials covered in the midterm.

Time and venue: TBA

4. Topics

Chapter 1 Economic Questions and Data
Chapter 2 Review of Probability
Chapter 3 Review of Statistics
Chapter 4 Linear Regression with One Regressor
Chapter 5 Regression with a Single Regressor: Hypothesis Tests and Confidence Intervals
Chapter 6 Linear Regression with Multiple Regressors
Chapter 7 Hypothesis Tests and Confidence Intervals in Multiple Regression
Chapter 8 Nonlinear Regression Functions
Chapter 9 Assessing Studies Based on Multiple Regression
Chapter 10 Conducting a Regression Study Using Economic Data