# Econ 103 Introduction to Econometrics

Instructor: Shuo Liu

**Lectures:** Session A - 6 weeks (June 26 - August 4)

Office Hours: TBA

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**Textbooks:** Principles of Econometrics. Hill, R. C., Griffiths, W. E. and G. C. Lim, 4th Edition, 2011. (required); Using Stata for Principles of Econometrics. Adkins, L. C. and R. C. Hill, 4th Edition, 2011 (recommended)

Prerequisite: Econ 41

**Course Description and Objectives:** Econ 103 is a course that gives undergraduate students a basic introduction to econometrics theory and applications. Students are expected to learn and master the basic quantitative tools and software (e.g. STATA) for future empirical research in economics. Intuitive understanding and empirical applications will be more emphasized. In both midterm and final exams, at least 80% of questions will be in the form of multiple choice. Questions requiring detailed arguments will be mainly based on basic estimation theory.

**Grading:** Your final grade will be whichever higher by the following two options. The two assignments will be graded on a P/NP basis. If you get P for one assignment, you will gain 10% of the full mark (100 pts). For missed exams or regrade appeal, please refer to "The Other Course Policies" below.

- Option 1: Assignment 1&2(10%+10%=20%) + Midterm (40\%) + Final (40\%)
- Option 2: Assignment 1&2(10%+10%=20%) + Midterm (20%) + Final (60%)

#### Course Time Table

Date	Due	Topics
Jun 26th,M		Introduction and Review of Probability and Statistics
Jun 28th, $W$		Simple Linear Regression Model: Assumptions and OLS Estimator
Jul 3rd,M		Simple Linear Regression Model: Sampling Properties of OLS Estimator
Jul 5th,W	Assignment 1	Interval Estimation and Single Hypothesis Testing
Jul 10th,M		Prediction, Goodness of Fit and Joint Hypothesis Testing
Jul 12nd,W		Nonlinear Simple Models and Applications
Jul 17th,M		Multiple Regression Model I: Estimation and Hypothesis Testing
Jul 19th,W	Midterm	Cover: Everything till (including) Jul 12nd
Jul 24th,M		Multiple Regression Model II: Collinearity, Specification and Other Issues
Jul 26th, $W$		Multiple Regression Model III: Examples and Applications
Jul 31st,M	Assignment 2	Indicator Variables and Treatment Effect
Aug 2nd,W		Heteroskedasticity, Generalized Least Square Estimation and Final Review
Aug 4th,F	Final	Cover: all contents this quarter

\*My lecture basically follows the required textbook: Principles of Econometrics. Hill, R. C., Griffiths, W. E. and G. C. Lim, 4th

## **Other Course Policies:**

#### Exams:

- There will be no makeup exams. If a student misses the midterm due to a documented reason (e.g. illness, emergency etc) and has a valid documentation from a doctor or related staff (the "valid" documentation should state that the student was incapacitated and was therefore unable to take the exam or faced a serious impediment that prevented attendance at the exam), then total weight of 80% will put on the final exam;
- A student who misses the midterm without a valid documentation will automatically be switched to Option 2 above and lose the 20% of the full mark (100 pts);
- A student who misses the final exam with a valid documentation will be required to take a makeup final exam administered by the department at the officially announced day and time;

- A student who misses the final exam without a valid documentation will not have chance to retake the final and receive 0 for the final exam part;
- A valid picture ID is required in both midterm and final exams;
- The use of electronic devices such as cellphones, ipads, laptops and any other devices that allow you to get online or communicate with others will be forbidden in the exams. A student will be reported for cheating if using those devices in the exams;
- Only non-graphing calculators are allowed in the exams.

### **Disabilities:**

- Any student with a pre-existing illness or condition who requests special arrangements must qualify under the Office of Students with Disabilities (OSD) rules for such special arrangements and must take the exam with OSD;
- The instructor must be informed of any such arrangement with OSD in the first week of classes and any such arrangements must be made in the first week of classes;
- For additional information please visit the OSD website http://www.osd.ucla.edu/Contact-Us

#### Academic Dishonesty:

• Any cases of cheating will be reported to the Office of the Dean of Students. For more information, please visit the website http://www.deanofstudents.ucla.edu/Academic-Integrity

#### **Regrade Appeals:**

- A student cannot apply for regrading once the student takes the graded exam home without submitting a written regrade appeal;
- A written regrade appeal must be submitted within one week from the day the exam is first available for review. The instructor will take pictures on both the pre-regrading and post-regrading exams;

• Not only the question about which a student is concerned, but also the whole exam will be regraded. That means, the new score after a regrade may increase as well as decrease.