Econ 611: Econometrics I

Singapore Management University

Instructor: Yichong Zhang*
Office location: SOE 5068

August 16, 2022

1 Course description

Econ 611 is the first course in the first year sequence in econometrics. The course is composed of two parts: statistics and econometrics. In the first part, statistics, we introduce the necessary tools and techniques that are essential in econometric analysis. In the second part, we discuss OLS, linear IV regression, and generalized method of moments.

2 Teaching Assistant

• Dennis LIM: dnnis.lim.2019@phdecons.smu.edu.sg.

3 Lecture

• Thursday, 8:15 - 11:30 with a 15-minute break from 9:45–10:00

4 Office hour

- Dennis: Monday 1:30–3:00pm. SOE SR 3-10 (except Oct 17, SOE SR 2-6; Nov 21, SOE interactive learning space)
- Yichong: Monday, 3:30 5:00 pm, SOE 5068

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5 Prerequisite

Intermediate level econometrics, multivariate calculus, linear algebra

6 Assessment

1. Problem sets: 25%

2. Midterm exam: 35%

3. Final exam: 40%

7 Textbook

There is no required textbook. Handouts and notes for each lecture will be made available before class. The materials in the handouts are based on Prof. Federico Bugni, Prof. Jia Li, and Prof. Liangjun Su's lecture notes for their Econometrics I and III courses. All errors are my own. The following books are useful references for the course.

- Casella, George, and Roger L. Berger. Statistical inference. Vol. 2. Pacific Grove, CA: Duxbury, 2002.
- Hayashi, F. (2000). Econometrics. Princeton University Press: Princeton.

8 Course schedule

- 1. Probability Theory
- 2. Statistics Theory
- 3. Linear Regression
- 4. Linear IV Regression
- 5. Generalized Method of Moments
- 6. Maximum Likelihood Estimation (if time permits)

9 Assignment and Exam

• Homework: weekly, discussion allowed, individual submission, submitted on elearn (assignment).

• Midterm exam: in class on September 29: 8:30–11:30, Open book.

• Final exam: TBA.

10 Academic integrity

All acts of academic dishonesty (including, but not limited to, plagiarism, cheating, fabrication, facilitation of acts of academic dishonesty by others, unauthorized possession of exam questions, or tampering with the academic work of other students) are serious offences.

All work presented in class must be the student's own work. Any student caught violating this policy may result in the student receiving zero marks for the component assessment or a fail grade for the course. This policy applies to all works (whether oral or written) submitted for purposes of assessment.

Where in doubt, students are encouraged to consult the instructors of the course. Details on the SMU Code of Academic Integrity may be accessed at http://www.smuscd.org/resources.html.

11 Accessibility

SMU strives to make learning experiences accessible for all. If students anticipate or experience physical or academic barriers due to disability, please let the instructor know immediately. Students are also welcome to contact the university's disability services team if they have questions or concerns about academic provisions: included@smu.edu.sg.

12 Emergency Preparedness for Teaching and Learning (EPTL)

Where there is an emergency that makes it infeasible to have classes on campus, classes will be conducted online via WebEx, with no disruption to the schedule. To familiarise students with the WebEx platform, part of this course may be conducted online. The instructor will inform students of which classes, if any, will be conducted as part of this EPTL initiative.