

**BSE3703 Econometrics for Business I**

Instructor: Dr. Jiyeon Lee (jiyeon@nus.edu.sg)

Class time and venue: Tue 18:30 - 21:30, BIZ1 02-01

Office hours: Consultation will be conducted on zoom based on signing up via LumiNUS.

**Course Description**

This module introduces regression and related methods for analysing data in economics, business, and associated disciplines. Topics include linear regression, ordinary least squares estimator, multiple regression, instrumental variables regression, random experiment, and difference-in-difference estimation. The mathematical part of the econometric theory will be introduced only as needed and will not be a central focus of this course.

**Reference**

Woolridge J.M. (2019) Introductory Econometrics: A Modern Approach, 7<sup>th</sup> edition, South-Western.

Angrist, J. D., & Pischke, J. S. (2008). Mostly harmless econometrics: An empiricist's companion. Princeton university press.

Gujarati D. & Porter D. (2009) Basic Econometrics, 5th edition, N.Y.: McGraw-Hill.

William H. Greene (2018) Econometric Analysis, 8<sup>th</sup> edition, Pearson.

A.H. Studenmund (2017) Using Econometrics: A Practical Guide, 7<sup>th</sup> edition, Pearson.

**Hybrid Teaching**

In-person lectures are held in BIZ1 02-01. Note that physical attendance is not compulsory. Please come to the class only if you are healthy. Live webcast of the lecture will be available on Zoom and the link can be found on LumiNUS under "Conferencing". Recording of the lecture will be uploaded on the following weekend.

**Evaluation**

Problem Set (20%), Midterm (30%), Final Exam (50%) \*Midterm or Final can be replaced by Project

Deliverables must be typed and submitted as a single PDF file on LumiNUS. Please name the PDF file with the following convention: "PS#\_your name.pdf, where # is the problem set number. Write your name as in your student card with your matric number in the first line of your submission.

Problem set is due on the day before the class by 23:59. In case of late submission, 25% of the point you earn will be deducted for that submission.

There will be no make-up exams.

## **Communication**

All course materials and announcements will be posted on LumiNUS. Other than that, our primary mean of communication outside the classroom will be email. Please use your NUS email address and start the subject title with “[BSE3707]”, followed by a brief phrase summarizing the topic of discussion.

## **Class Schedule (Tentative)**

Week	Class Date	Topic
1	10 Aug	Class Outline and Logistics, Introduction to Econometrics
2	17 Aug	Review of Probability and Statistics I
3	24 Aug	Review of Probability and Statistics II
4	31 Aug	Ordinary Least Square
5	7 Sep	Linear Regression
6	14 Sep	Multivariate Linear Regression
Recess Week		
7	28 Sep	Midterm (No in-person class)
8	5 Oct	Randomized Trial and Experimental Data
9	12 Oct	Difference-in-Differences Estimation
10	19 Oct	Instrumental Variable Regression
11	26 Oct	Regression Discontinuity
12	2 Nov	Review for Final
13	9 Nov	Final Exam (No in-person Class)
Recess Week		
Exam Week		

## **Academic Honour Code**

Academic integrity and honesty are essential for the pursuit and acquisition of knowledge. The University and School expect every student to always uphold academic integrity and honesty. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at problem sets or exams, or inappropriate use of resources.