Course Outline

Course Code	: BSE3703
Course Title	: Econometrics for Business 1
Semester	: 1, Academic Year 2025/2026
Faculty	: Geunyong Park
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Overview

Applying econometric methods is an essential skill for quantitative business analysis. This course introduces common issues and related econometric techniques relevant to the empirical evaluation and analysis of data pertinent to management and economics. The lectures will focus on the theoretical understanding of modern econometrics and practical guidance of econometric techniques for business analysis.

Course Objectives

This course aims to equip business students to: (i) understand and appreciate econometric analysis in economic and business reports; and (ii) carry out data analysis using least squares regression to support business analysis.

General Guide & Reading

Prerequisite: This course requires a foundational understanding on introductory statistics (concepts of random variables, distributions, sampling, hypothesis testing, etc.) and calculus (concepts of limit, convergence, differentiation, etc.).

Lecture Notes: Lecture slides will be posted on Canvas online before each lecture. Students are expected to read the relevant textbook chapters and preview the slides before lectures.

Textbooks:

1. Main: Stock, J.H. and Watson, M.W., Introduction to Econometrics, Pearson.
2. Supplementary: Studenmund, A. H., Using Econometrics - A Practical Guide, Pearson.
3. Supplementary: Angrist, J.D. and Pischke, J.S., Mastering 'Metrics: The Path from Cause to Effect, Princeton University Press.

Assessment

Assessment Components	Weightage
Class Participation	10%
Assignments	30%
Group Project	30%
Final Test	30%

Tentative Schedule and Outline

Week	Topic	Textbook chapters	Activity
1	Course Overview and Introduction	Ch1	
2	Review of Statistics I	Ch2	
3	Review of Statistics II	Ch3	
4	Linear Regression with Single Regressor	Ch4-5	
5	Linear Regression with Multiple Regressors	Ch6-7	Assignment 1
6	Practice with R		
Recess Week			
7	Nonlinear Regression	Ch8	
8	Regression with Panel Data	Ch10	
9	Regression with Binary Variables	Ch11	Assignment 2
10	Instrumental Variables I	Ch12	
11	Instrumental Variables II	Ch12	
12	Presentation of Group Project Proposals		Group Project Proposal
13	Course Summary and Final Review		
Reading Week			

Academic Honesty & Plagiarism

Academic integrity and honesty are essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. 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 examinations/tests, or inappropriate use of resources.

Plagiarism is "the practice of taking someone else's work or ideas and passing them off as one' own" (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. In case of any doubt, you should consult your instructor.

Additional guidance is available at:
- http://www.nus.edu.sg/registrar/administrative-policies-procedures/acceptance-record#NUSCodeofStudentConduct
- http://nus.edu.sg/osa/resources/code-of-student-conduct