

## Course Outline

**Course Code** : BSE4711  
**Course Title** : Econometrics For Business II  
**Semester** : Semester 2, Academic Year 2025/2026  
**Faculty** : Dr. Xu Le  
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### Overview

This course explores statistical methods from econometrics that are essential for causal inference. In economics and the social sciences, empirical analyses often aim to assess the impact of hypothetical scenarios—like implementing a new government policy, adjusting prices, running advertisements, or launching new products. Through this course, you will gain insight into how these empirical tools can enhance your understanding of management practices and inform data-driven decision-making. You'll learn to formulate testable questions, gather and process data using a programming language, and, most critically, interpret quantitative results to apply them effectively in real-world contexts.

### Course Objectives

The goal of this course is to equip students with a solid framework for analyzing and interpreting data through the perspective of economic models.

By the end of the course, students should be able to:

1. Formulate testable economic hypotheses.
2. Build arguments grounded in economic theory and empirical analysis.
3. Gather and analyze data to test their hypotheses effectively.

### Schedule and Outline

Lesson/ Week	Topic	Activity
1	Review, Preliminaries Introduction to Econometrics	
2	Time Series Analysis and its application (I)	
3	Time Series Analysis and its application (II)	
4	Serial Correlation and Heteroskedasticity in Time Series Regressions	
5	Panel Data I	Group Assignment 1 Due
6	Panel Data II (Self Learning Due to Public Holiday)	
<b>Recess Week</b>		
7	<b>Midterm Test</b>	Midterm
8	Instrumental Variables Estimation I	
9	Instrumental Variables Estimation II	

10	Simultaneous Equations Models	
11	Limited Dependent Variable Models and Sample Selection Corrections	Group Assignment 2 Due
12	Wrap up and Q&A	
13	<a href="#">Final Test</a>	Final Test

### **General Guide & Reading**

There is no textbook assigned for the course. If you wish to consult a textbook for reference, the following textbooks can be quite useful:

Wooldridge (2019). Introductory Econometrics: A Modern Approach ISBN:0324289782

### **Assessment**

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

### **Academic Honesty & Plagiarism**

Academic integrity and honesty is 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’s 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>

