COURSE OUTLINE

BSE3703 Econometrics for Business I

AY 2022/23 Semester II Syllabus



Instructor Office Email Office Hours

Dr. Tingting Wu BIZ2, 03-35 ting wu@nus.edu.sg By appointments*

^{*}Extended consultation hours will be set up and announced prior to the final exam. In the meantime, all teaching staff will be available for discussions before and after lectures and tutorials so please feel free to approach the lecturer and tutors. You may also email all teaching staff at any time for further questions and office hour requests.

COURSE OVERVIEW

The ability to apply econometric methods is an essential part of modern undergraduate degree training in economics. This module contributes to the achievement of these subject specific skills by providing an introduction to common issues and related econometric techniques relevant to the empirical evaluation and analysis of data pertinent to the fields of business and economics

The module is approached in a practical way that focuses on the application and interpretation of econometric techniques to business and economic data, with less emphasis on the statistical theory aspects of the subject. This approach ensures that students gain knowledge and experience to undertake business and economic analysis with the use of computer software.

KEY LEARNING OUTCOMES

On successful completion of the module, students should be able to:

- Critically understand of the nature of econometric models
- Abstract the essential features of an econometric issue or problem
- Have developed the analytical skills that allow students to formulate and consider a range of econometric problems and issues.
- Apply econometric software to business and economic data
- Perform and critically evaluate model adequacy using relevant diagnostic and specification tests
- Be critical in the interpretation and evaluation of their own empirical research and that of others in the areas of business and economic development

ASSESSMENT

1. Quiz: 30%

2. Group Project: 30%4. Final Test: 40%

Assessment of group project will be based on the group-work. This means that all members in a group will receive equal assessment for their aggregate work. All the group members should fully participate in the learning activities and contribute to the team's performance in good faith. More details will be provided in the class.

TEACHING/LEARNING VEHICLES

1. Lecture Notes

The lecture slides will be available at Canvas before each class meeting. Students are expected to visit the site regularly, download, and preview the lecture slides and the relevant text-book chapters before coming to class.

2. Textbooks

The syllabus for the module is covered adequately by many textbooks. The core references are

• Main

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

Using R for introductory Econometrics, 2nd edition, Florian Heiss (2016)

• Supplementary:

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

3. Quiz

There will be three quizzes related to the lecture notes. These problems are designed to check your progress as well as extend and reinforce concepts covered in class. Students are required to tackle the problems individually.

4. Group Project

Students will form their own team and one data analysis case study will be assigned. The case materials designed by the lecturer will be made available through Canvas as well. Each team will need to submit an analysis report and do a presentation in the scheduled lecture.

5. Final Test

The final test covers all the lecture materials throughout the course.

Note that no make-up test is available for a missed test.

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 doubts, you should consult your instructor.

Additional guidance is available at: http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct

Online Module on Plagiarism: http://emodule.nus.edu.sg/ac/

TENTATIVE SCHEDULE

Week	Lecture
Week 1	Course Overview and Introduction to Econometrics
Week 2	Review of Probability and Statistics
Week 3	Simple Linear Regression
Week 4	Properties of Simple Linear Regression & Quiz 1
Week 5	Multivariate Linear Regression
Week 6	Statistical Inference and More About MLR
Recess Week	
Week 7	Regression Analysis through R & Quiz 2
Week 8	Probit & Logistic Regression
Week 9	Proxy and Instrumental Variable Regression
Week 10	Regression Discontinuity & Quiz 3
Week 11	Differences in Differences & Final Review
Week 12	Group Project Presentation
Week 13	Final Test

Reading Week