

Course Outline

Course Code : RE2801
Course Title : Research Methodology in Real Estate
Semester : Semester 2, Academic Year 2024/2025
Time & Venue : Thursday 10:00-12:00PM (Lecture, BIZ2 0511), 14:00-16:00 (Tutorial, BIZ2 0227)
Faculty : Associate Prof Fan Yi (Lecture), Ms Gao Qiuxia (Tutor)
Department : Real Estate
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Overview

This course teaches the skills needed for scientific research in real estate and urban studies. It focuses on the applied econometrics. Major topics includes multiple regressions, simultaneous equation models, discrete choice models, time series analysis, differences-in-differences, fixed verse random effects and panel data analysis. The issues of model selections, multicollinearity, heteroscedasticity, autocorrelation, instrumental variables and identification are introduced. It also addresses the whole research process including identifying research problem; defining research questions, objectives and significance; conducting literature review; developing research framework and research design; collecting data and performing survey; conducting qualitative or quantitative analyses; reasoning research results and writing up.

Learning Outcomes

Through this course, students will be able to:

- Understand the whole process of undertaking scientific research.
- Understand the different requirements of dissertation and academic exercise.
- Apply basic econometric analysis and understand how to develop a good research design for quantitative analysis.

Course Prerequisite(s)

Nil

Course Preclusion(s)

Nil

General Guide & Reading

- Booth, W.C., G.G. Colomb, J.M. Williams, J.B. Bizup, W.T. Fitz Gerald (2016) **The Craft of Research. 4th Edition**. Chicago: The University of Chicago Press.
- Wisker, G. (2018) **The Undergraduate Research Handbook. 2nd Edition**. London: Macmillan International Higher Education.
- Angrist, J. D., & Pischke, J. S. (2014). **Mastering 'metrics: The path from cause to effect**. Princeton University Press.
- Woolridge J.M. (2016) **Introductory Econometrics: A Modern Approach, 6th edition**.

Tentative Schedule & Outline

Week	Date	Topic	Activity
1	13 – 17 Jan	Introduction	
2	20 – 24 Jan	Research motivation, key concepts, and data	
3	27 Jan – 31 Jan	No Class on CNY	
4	3 – 7 Feb	Case study and qualitative research; Research proposal	Tutorial 1
5	10 – 14 Feb	Linear regression I: case-1 (MCQ Quiz 1 in Class)	Tutorial 1
6	17 – 21 Feb	Linear regression II: case-2	
22 Feb – 2 Mar		RECESS WEEK	
7	3 – 8 Mar	EXAMINATION (MID-TERM TEST & PROJECT CONCLUTATION)	
8	10 – 14 Mar	Hedonic regression: case-3	Tutorial 2
9	17 – 21 Mar	Logistic regression: case-4	Tutorial 2
10	24 – 28 Mar	Time series analysis: case-5	Tutorial 3
11	31 Mar – 4 Apr	Difference-in-Differences model: case-6	Tutorial 3
12	7 – 11 Apr	Group presentations	Tutorial 4 (Group presentations)
13	14 – 18 Apr	MCQ Quiz 2 in Class	
19 – 25 Apr		READING WEEK	
26 Apr – 10 May		EXAMINATION (2 WEEKS)	
		<i>1 May: Labour Day</i>	

Assessment

Assessment Components	Weightage (%)
• Group Project	35
• Mid-Term Test	30
• Class performance and participation in Tutorials	20
• Quiz	15
Total	100

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’ 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>

About me

Prof. Fan Yi is an associate professor in the Department of Real Estate at NUS Business School. Her research interests lie in urban economics and labour economics, focusing on social and environmental sustainability. Her work has been published at leading journals, such as *American Economic Journal: Economic Policy*, *Journal of Urban Economics*, *Review of Finance*, *Journal of Economic Behavior & Organization*, *Journal of Regional Science*, *China Economic Review*.

Dr. Fan has served as guest editor of *Renewable & Sustainable Energy Reviews* and has been ad hoc reviewers for more than 40 journals. She has been awarded NUS Business School Teaching Excellence Award and NUS Humanities and Social Sciences Faculty Research Fellowship. Dr Fan obtained her PhD from the London School of Economics and Political Science in 2015. Prior to joining NUS, she has taught in universities in Hong Kong and the United Kingdom.