COURSE CONTENT

Course Coordinator	Wang Wei-Siang
Course Code	HE3621 / HE3003
Course Title	Intermediate Econometrics / Econometrics II
Pre-requisites	(HE3621) HE2005 Principles of Econometrics / HE2004 Introductory Econometrics (Min Grade :A) (HE3003) HE2003 Econometrics I
No of AUs	3
Contact Hours	39 hours (2 hours lecture and 1 hour tutorial per week)

Course Aims

This course builds on the earlier Principles of Econometrics and considers estimation using time series data and panel data. Topics covered include least-squares, maximum likelihood, instrumental variables, probit/logit model and unit root tests, cointegration using nonstationary time series data and linear panel data models.

Intended Learning Outcomes (ILO)

By the end of this course, you (as a student) would be able to:

1. Formulate and estimate econometric models and interpret results
2. Apply modern econometric methods covering time series data
3. Apply modern econometric methods to solve for endogenity problem

Course Content

1. Regression Analysis: overview
2. Basic Regression Analysis with time series data
3. Advanced Time series Topics
4. Binary Choice Models
5. Multiple Choice Models
6. Endogeneity and Instrumental Variables
7. Panel Data Models
8. Selection and Randomization

Assessment (includes both continuous and summative assessment)

1. Continuous Assessment	:	20%
2. Final examination	:	50%
Total	**:**	**100%**

Reading and References

<u>Required Textbook</u>

Jeffery Wooldridge, *Introductory Econometrics: A Modern Approach*. (7th ed. 2020)

Supplementary Textbook

James H. Stock and Mark W. Watson, Introduction to Econometrics. (4th ed. 2018)

Course Instructors

Instructor	Office Location	Email
Wang Wei-Siang	SHHK 04-55	wswang@ntu.edu.sg

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
1	Regression Analysis: overview	1-2	Wooldridge: Ch. 1-9
2 – 4	Basic Regression Analysis with time series data	1-2	Wooldridge: Ch. 10-12
5 -6	Advanced Time series Topics	1-2	Wooldridge: Ch. 18 and Lecture Note
7	Binary Choice Models	1,3	Wooldridge: Ch. 17
Recess Week			
8	Multiple Choice Model	1,3	Lecture Note
9	IV and 2SLS estimations	1,3	Wooldridge: Ch. 15-16
10– 11	Panel Data Models	1,3	Wooldridge: Ch. 13-14
12	Selection And Randomization	1,3	Wooldridge: Ch. 13 and Lecture note
13	Revision	1-3	Nil