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②图玄束華大學

教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	計量經濟學(一)				學年/學期 Academic Year/Semester		112/2	
課程名稱(英文) Course Name in English	Econometrics(I)							
科目代碼 Course Code	EC31700	系級 Department 學二 (& Year		開課單位 Course-Offering Department	經濟學系			
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)			3.0/3.0			
授課教師 Instructor	/羅德芬							
先修課程 Prerequisite	/#統計學(二)							

課程描述 Course Description

This is an entry-level course in theoretical econometrics. It covers statistical topics that are of particular interest in economics and related fields. Basically, it will cover linear regression analysis of single-equation and multiple-equation models. This course is intended as an introduction to econometric methods, and to be a useful prerequisite to further study in theoretical econometrics or applied econometrics.

The prerequisite for the course is a basic knowledge of statistics. Students should have had at least one semester course in statistics using calculus. There is no specific course prerequisite in matrix algebra, but some familiarity with matrices and the ability and willingness to manipulate them algebraically will be helpful.

For each topic, we will have some take-home exercises for your own practice. Students are required to do those exercises by themselves. Discussion between students is allowed and encouraged, but simply copying others' solutions without any self-thinking will be not helpful to the understanding of econometric topics. The solutions to take-home exercises will be announced in the class one week after take-home exercises.

課程目標 Course Objectives

This course is an introductory econometrics at the undergraduate level. This course aims at giving students basic understanding of econometrics theories and applying econometric techniques of regression analysis. Various econometric models are illustrated by practical examples based on concrete data to achieve this goal. We will cover the following topics: classical linear regression model, hypothesis testing, dummy variable regression, and multicollinearity.

	条專業能力 Basic Learning Outcomes	課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
	數理分析能力:應用數學與賽局理論分析與解決經濟議題的能力。Mathematical analysis	
A	skills: application of mathematical theories and game theory to analyze economic issues	
В	實證經濟分析能力:善用資訊科技進行資訊蒐集、資料統計與計量分析。Empirical analysis skills: application of statistics and econometrics in data collection and examinatio	•
С	微觀經濟之闡釋能力:通曉個體經濟學相關的理論與應用。Microeconomic perspective: understanding of microeconomic theories and relevant application	
D	宏觀經濟之闡釋能力:通曉總體經濟學相關的理論與應用。Macroeconomic perspective: understanding of macroeconomic theories and relevant application	

自我調整適應社會之能力:具備適應現代社會的學養以及就業能力。Employment opportunities: capabilities of working on important policy and decision challenges in business and government



圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated

授課進度表 Teaching Schedule & Content

週次Week	內容 Subject/Topics	備註Remarks
1	Ch1. Introduction to Econometrics and Economic Data	
2	Ch2. Statistical Review	
3	Ch2. Statistical Review (cont.)	
4	Ch3. The Simple Regression Model	
5	Ch3. The Simple Regression Model (cont.)	
6	Ch4. The Estimation of Multiple Regression Analysis	
7	Holiday	
8	第一次小考 Ch4. The Estimation of Multiple Regression Analysis (cont.)	
9	期中考試	
10	Ch5. The Inference of Multiple Regression Analysis	
11	Ch5. The Inference of Multiple Regression Analysis (cont.)	
12	Ch6. Further Issues on the Multiple Regression Model	
13	Ch6. Further Issues on the Multiple Regression Model (cont.)	
14	Ch7. Multiple Regression Model with Qualitative Variables	
15	第二次小考 Ch8. More on Specification and Data Issues	
16	期末考試	
17	期末考試檢討	
18	彈性教學	

教學策略 Teaching Strategies
✓ 課堂講授 Lecture
教學創新自評Teaching Self-Evaluation
創新教學(Innovative Teaching)
問題導向學習(PBL) 團體合作學習(TBL) 解決導向學習(SBL)
翻轉教室 Flipped Classroom 磨課師 Moocs
社會責任(Social Responsibility)
□ 在地實踐Community Practice □ 產學合作 Industy-Academia Cooperation
跨域合作(Transdisciplinary Projects)
□跨界教學Transdisciplinary Teaching □跨院系教學Inter-collegiate Teaching
□ 業師合授 Courses Co-taught with Industry Practitioners
其它 other:

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例	多元評量方式 Assessments							
Items	Percentage	測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance									
期中考成績 Midterm Exam	40%								
期末考成績 Final Exam	40%								
作業成績 Homework and/or Assignments									
其他 Miscellaneous (小考)	20%								

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目(書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

Wooldridge, J. M. (2019), Introductory econometrics: A modern approach (7th edition). Canada: Cengage Learning, 華泰書局代理。

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

 $\label{thm:condition} \mbox{Teaching Aids \& Teacher's Website} (\mbox{Including online teaching information.}$

Personal website can be listed here.)

http://www.elearn.ndhu.edu.tw/moodle/course/view.php?id=98914

其他補充說明(Supplemental instructions)

預計講授單元將視課程實際進度隨時調整。