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# ②國玄東華大學

# 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	計量經濟分析(	(-)		學年/學期 Academic Year/Semester		102/1	
課程名稱(英文) Course Name in English	Econometric Analysis ( I )						
科目代碼 Course Code	IIE_54600	系級 Department 碩士 & Year		開課單位 Course-Offering Department	經濟學系		
修別 Type	必修 Required	學分數/時間 Credit(s)/Hour(s)		3.0/3.0			
授課教師 Instructor	/陳建福						
先修課程 Prerequisite							

# 課程描述 Course Description

This course is the first course in econometrics at the graduate level. We will cover the basic and modern methods of econometric theory. The course materials will provide the students a foundation for empirical methods in economics.

The course is based primarily on the textbook ''Econometric Analysis'', by  ${\tt W.}$  Greene.

It is assumed that students have taken an undergraduate econometrics course. However,

students who have not taken an econometrics course at undergraduate may need to read an undergraduate —level

econometrics book written by Wooldridge or Gujarati and Porter.

In this course students must learn how to

use {\sf Stata} or other packages (for example, R, EViews, GAUSS, MATLAB, RATS, SAS, or TSP) to replicate examples in the textbook.

# 課程目標 Course Objectives

為本所必修課程之一,本所學生必須具有計量經濟學的訓練才能,根據經濟理論作實證分析,預測等分析,為本所特色之一。

	系專業能力 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
A	數理分析能力:通曉經濟學的理論技巧,應用數學與賽局解決經濟議題的能力。Mathematical analysis skills: Mastering in application of mathematical theories and game theory in analyzing economic issues	
В	實證經濟分析能力:通曉經濟學的實證技巧,善用資訊科技進行資訊蒐集、資料統計與計量分析。Empirical analysis skills: Mastering in application of statistics and econometrics in data collection and examination	•
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: Thorough 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: Thorough understanding of macroeconomic theories and relevant application	
Е	樂活能力: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 governmen	
F	溝通表達能力:思路清晰,有能力與人溝通並撰寫專業研究報告。Communication skills: Having a clear mind and capability in writing a professional academic report	
国ニ	台田Illustration · ▲ 宣麻田賜 Wighly correlated ○中麻田賜 Moderately of	rrolated

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	Introduction									
2	Stata Programmin									
3	Stata Programming									
4	Matrix Algebra									
5	Probability Theor									
6	Statistical Inference									
7	Classical Multiple Linear Regression Model									
8	Classical Multiple Linear Regression Model									
9	期中考試週 Midterm Exam									
10	Classical Multiple Linear Regression Model									
11	Classical Multiple Linear Regression Model									
12	Binary Variables in Regression and Structural Change									
13	Binary Variables in Regression and Structural Change									
14	Specification Tests and Model Selectio									
15	Instrumental Variable Estimation									
16	Instrumental Variable Estimation									
17	Nonspherical Di	Nonspherical Disturbances								
18	期末考試週 Fina	期末考試週 Final Exam								
		教	學 策	略 Tea	aching S	Strategi	les			
✓ 課堂講授 Lecture 分組討論Group Discussion 參觀實習 Field Trip										
		學期成績計算	算及多元	.評量方式	t Gradi	ng & As	sessmen	ts		
西西	 2分項目	配分比例				多元評量	量方式 A		nts	
	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		20%								
其他 Misce	llaneous _)									

#### 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.)

Greene, William H. (2012), {\em Econometric Analysis}, 7th edition, Prentice Hall, henceforth {\bf G}. (雙葉書局代理)

\item 周賓凰 (2010), 《計量經濟學:理論、觀念與應用》, 智勝出版社。

\item Davidson, R. and J.~G. MacKinnon (2004), {\item Econometric Theory and Methods}, Oxford University Press,

henceforth {\bf DM}. (新月書局代理)

\item Heij, C., P. de Boer, P.H. Frases, T. Kloek, and H.K. van Dijk (2004), {\item Econometric Methods with Applications

in Business and Economics}, Oxford University Press. (新月書局代理)

\item Johnston, J. and J. DiNardo (1997), {\em Econometric Methods}, 4th edition, McGraw-Hill, henceforth {\bf JD}.

(雙葉書局代理)

\item Verbeek, Marno (2012), {\em A Guide to Modern Econometrics}, 4th edition, Wiley. (雙葉書局代理)

# 課程教材網址(教師個人網址請列在本校內之網址)

Teaching Aids & Teacher's Website (Personal website can be listed here.)

### 其他補充說明(Supplemental instructions)