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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	計量經濟分析(	-)		學年/學期 Academic Year/Semester		110/1	
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 Credit(s)/Hou		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 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 R or other packages (for example, Stata, 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:通曉經濟學的進階理論技巧,應用數學與賽局解決經濟議題的能力。A. Mathematical analysis skills: Mastering in intermediate application of mathematical theories and game theory in analyzing economic issues.	
В	實證經濟分析能力:通曉經濟學的進階實證技巧,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 intermediate application of statistics and econometrics in data collection and examination	•
С	微觀經濟之闡釋能力:通曉進階個體經濟學相關的理論與應用。Microeconomic perspective: Thorough understanding of intermediate microeconomic theories and relevant application	
D	宏觀經濟之闡釋能力:通曉進階總體經濟學相關的理論與應用Macroeconomic perspective: Thorough understanding of intermediate macroeconomic theories and relevant application	
Е	樂活能力:具備適應現代社會的進階學養以及就業能力Employment opportunities: Capabilities of intermediate working on important policy and decision challenges in business and government	
F	溝通表達能力:思路清晰,有能力與人溝通並撰寫進階專業研究報告。Communication skills: Having a clear mind and capability in writing an intermediate professional academic report	
圖示	說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately co	orrelated

授課進度表 Teaching Schedule & Content						
週次Week	內容 Subject/Topics	備註Remarks				
1	Introduction					
2	Stata Programming					
3	Stata Programming					
4	Matrix Algebra					
5	Probability Theory					
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 Selection					
15	Instrumental Variable Estimation					
16	Instrumental Variable Estimation					
17	期末考試週 Final Exam					
18	Review					
	教 學 策 略 Teaching Strategies					
✓ 課堂講	授 Lecture	Field Trip				
其他Mi	scellaneous:					
	教學創新自評Teaching Self-Evaluation					
創新教學(	Innovative Teaching)					
■ 関題導向學習(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 Cooperati	on				
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 othe	r:					

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例 Percentage	多元評量方式 Assessments							
Items		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%	<b>~</b>							
作業成績 Homework and/or Assignments	20%								
其他 Miscellaneous ()									

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), Econometric Analysis}, 7th edition, Prentice Hall (雙葉書局代理)

### 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)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

1. On-line teaching information is available on NDHU e-learning center at: http://www.elearn.ndhu.edu.tw/moodle/index.php?lang=en\_utf8

線上教學網址:線上教學網址將公佈在【東華e學苑】,請同學們自行登入查詢。

2. 東華e學苑網址:http://www.elearn.ndhu.edu.tw/moodle/

其他補充說明(Supplemental instructions)