



## 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	107/1
課程名稱(英文) Course Name in English	Econometrics(I)			
科目代碼 Course Code	EC_31700	系級 Department & Year	學二	開課單位 Course-Offering Department
修別 Type	學程 Program	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	/#統計學(二)			

### 課程描述 Course Description

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, multicollinearity, and heteroscedasticity.

### 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.

#### 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：應用數學與賽局理論分析與解決經濟議題的能力。Mathematical analysis skills: application of mathematical theories and game theory to analyze economic issues	
B	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 examination	●
C	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	
E	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 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	Introduction to econometrics	

2	Basics of probability and statistics	
3	Oct. 10: Holiday (No class)	
4	Basics of probability and statistics	
5	Two-variable regression model	
6	Two-variable regression model	
7	Two-variable regression model	
8	Two-variable regression model	
9	期中考試週 Midterm Exam	
10	Extension of two-variable regression model	
11	Multiple regression model	
12	Multiple regression mode	
13	Multiple regression model	
14	Dummy variable regression model	
15	Dummy variable regression mode	
16	Dummy variable regression model	
17	Multicollinearity	
18	期末考試週 Final Exam	

教學策略 Teaching Strategies

- 課堂講授 Lecture
  分組討論 Group Discussion
  參觀實習 Field Trip  
 其他 Miscellaneous: Computer Exercises

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 Industry-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:

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學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		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	10%								課程參與和討論
期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam	30%	✓							
作業成績 Homework and/or Assignments									
其他 Miscellaneous (平時考 (Quiz))	30%	✓							

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.)

Gujarati, D. N. and D. C. Porter (2009), Basic Econometrics, 5th edition, New York: McGraw-Hill. (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)

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

Personal website can be listed here.)

e學苑

其他補充說明 (Supplemental instructions)