國立東華大學

教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	計量經濟學AA			學年/學期 Academic Year/Semester	105/1
課程名稱(英文) Course Name in English	Econometrics				
科目代碼 Course Code	FIN_5010AA	系級 Department & Year	碩士	開課單位 Course-Offering Department	財務金融學系
修別 Type	必修 Required	學分數/時間 Credit(s)/Hour(s)	3.0/3.0		
授課教師 Instructor	/林金龍				
先修課程 Prerequisite					

課程描述 Course Description

Econometric Analysis is the first-year graduate course in econometrics. The course aims at equipping the students with the knowledge for econometric theory and advanced empirical analysis, especially in the fields of finance and economics. Thus, the focus is placed upon methodology rather than proving statistical theorems. I adopt the book written by William H. Greene for its broad coverage and clear exposition.

While students may have only limited exposure to econometrics, I shall allocate parts of the course on regression mode specification and testing as is covered in Stock and Watson (2007). They are extremely useful in real empirical analysis

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	具備財務金融的分析能力	●
B	具備企業財務管理專業能力	●
C	具備英語閱讀溝通協調等能力	●
D	具備獨立研究之技能，以進行財金議題研究	●
E	具備個人投資理財能力	○
F	具備電腦程式運算及設計能力	●

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 of econometrics and R (chap 1)	

2	Linear regression model and least squares (Chaps. 2,3)	
3	Statistical properties of the least squares estimator (chap 4)	
4	Inference and prediction (chap 5)	
5	Functional form and structural change (chap 6)	
6	Specification analysis and model selection (I) (Stock and Watson, chaps 7,9)	
7	Specification analysis and model selection (II) (Stock and Watson, chaps 7,9)	
8	Generalized regression model (chap 8)	
9	期中考試週 Midterm Exam	
10	Instrumental variables estimation (chap 12)	
11	panel data (I) (chap 5)	
12	panel data (II) (chap 5)	
13	Model for discrete choice (I) (Chap 23)	
14	Model for discrete choice (II) (Chap 23)	
15	Series correlation; model with lagged variables (chaps 19,20)	
16	Time series models (chap. 21)	
17	Maximum likelihood estimation (chap. 16)	
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: term paper

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									
期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam									
作業成績 Homework and/or Assignments	30%								
其他 Miscellaneous (term paper)	40%				✓				

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.)

William H. Greene, Econometric Analysis, 7th ed., 2012 New Jersey: Prentice Hall

James H. Stock and Mark Watson, Introduction to Econometrics, updated 3rd edition, Boston: Addison-Wesley, 2015

Bruce E. Hansen, Econometrics, available at
http://www.ssc.wisc.edu/~bhansen/econometrics/Econometrics.pdf

Grant V. Farnsworth (2008) Econometrics in R. PDF and a browsable HTML version files are available at www.r-project.org

Christian Kleiber and Achim Zeileis, Applied Econometrics with R, Springer, 2008

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.)

faculty.ndhu.edu.tw/~jlin

其他補充說明 (Supplemental instructions)