



教學計劃表 Syllabus

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| 課程名稱(中文) Course Name in Chinese | 計量經濟分析(二) | 學年/學期 Academic Year/Semester | 102/2 |
| 課程名稱(英文) Course Name in English | Econometric Analysis (II) | | |
| 科目代碼 Course Code | IIE_56300 | 系級 Department & Year | 碩士 Course-Offering Department |
| 修別 Type | 選修 Elective | 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 | /*計量經濟分析(一) | | |

課程描述 Course Description

This course focuses on advanced econometrics at graduate level. The goal of the course is to provide students a foundation in econometrics to undertake empirical work on macroeconomics and financial economics. Students will learn generalized linear regression model and the theory of time series analysis including ARIMA models, unit roots test, VAR models, cointegration, and GARCH models. In this course students will learn how to use RATS and R. If you are familiar with any computer packages such as Stata, Gauss, EViews, SAS, S+, TSP, or gretl, you are encouraged to use it. But I cannot support other software.

課程目標 Course Objectives

為本所選修課程之一，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 | |
| B | 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 | ● |
| 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: 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 | |
| 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 | ○ |
| 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 | |

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 | |

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|----|------------------------------|--|
| 2 | RATS programming | |
| 3 | RATS programming | |
| 4 | Univariate Time Series | |
| 5 | Univariate Time Series | |
| 6 | Univariate Time Series | |
| 7 | Unit Root Test | |
| 8 | Unit Root Tests | |
| 9 | Unit Root Tests | |
| 10 | Mid-term Exam | |
| 11 | Vector Autoregressive Models | |
| 12 | Vector Autoregressive Models | |
| 13 | Cointegration | |
| 14 | Cointegration | |
| 15 | Cointegration | |
| 16 | GARCH Models | |
| 17 | GARCH Models | |
| 18 | GARCH Models | |

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:

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% | | | | | | | | |
| 期中考成績 Midterm Exam | 40% | | | | | | | | |
| 期末考成績 Final Exam | | | | | | | | | |
| 作業成績 Homework and/or Assignments | 20% | | | | | | | | |
| 其他 Miscellaneous (Term paper) | 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.)

Enders, W. (2010), Applied Econometric Time Series, 3rd Edition, John Wiley & Sons.
(雙葉書局代理, Yeh-Yeh bookstore)

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)