

| 國立中山大學 103學年度第1學期 課程教學大綱                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                |    |    |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|----|----|-----------|
| 中文名稱                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 計量經濟學（一）         |                |    | 課號 | ECON502   |
| 英文名稱                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ECONOMETRICS (I) |                |    |    |           |
| 課程類別                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 講授類              | 必選修            | 必修 | 系所 | 經濟學研究所碩士班 |
| 授課教師                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 李慶男              |                |    | 學分 | 3         |
| 課程大綱                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                |    |    |           |
| <p>This is a course of basic econometrics. Econometrics is concerned with the systematic study of economic phenomena using observed data. We will mainly concern on the treatment of parametric modeling. (Therefore, there is a field called Nonparametric Econometrics—see Pagan and Ullah, 1999, Nonparametric Econometrics)</p> <p>To study the econometrics parametrically, we will first discuss regression analysis. The regression analysis put some variables (especially economic variables) to be some function (linear or nonlinear) of other economic variables and verse vise. These constitute the study of multiple regression and simultaneous equations model.</p> <p>On the other hand, time series analysis of econometrics, we regard the economics variable is coming from some stochastic mechanism of her own past and new innovation (unit variable time series analysis) and even stochastic function of other variables past value and innovation (vector time series analysis). These two views of econometrics is now somewhat merging. (See Granger, 2001, Macro Econometrics – Past and Future, Journal of Econometrics, 100).</p> <p>Extension of Basic Model</p> <p>Structure Change</p> |                  |                |    |    |           |
| 課程目標                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                |    |    |           |
| <p>Our object in this course is to study the regression analysis of econometrics. With this statistical background, I hope you will have the basic skill to read modern therical Journal article.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                |    |    |           |
| 授課方式                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                |    |    |           |
| <p>課堂上課討論，電腦上機。</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                |    |    |           |
| 評分方式〔評分標準及比例〕 <a href="#">等第制單科成績對照表</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                |    |    |           |
| <p>1.Mid-term examination：40%</p> <p>2.Quizzes：10%</p> <p>3.Final examination：50%</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                |    |    |           |
| 參考書/教科書/閱讀文獻〔請遵守智慧財產權觀念，不可非法影印。教師所提供之教材供學生本人自修學習使用,不得散播及做為商業用途〕                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                |    |    |           |
| <p>Textbooks: 1. Greene, W. H. (2000), Econometric Analysis, 4th Edition, Prentice Hall. (Required)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                |    |    |           |
| 每週課程內容及預計進度                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  |                |    |    |           |
| 週次 日期                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  | 授課內容及主題        |    |    |           |
| 1 2014/09/15~2014/09/21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  | Matrix Alrebra |    |    |           |

|    |                       |                                                                                                              |
|----|-----------------------|--------------------------------------------------------------------------------------------------------------|
| 2  | 2014/09/22~2014/09/28 | Matrix Algebra                                                                                               |
| 3  | 2014/09/29~2014/10/05 | Matrix Algebra                                                                                               |
| 4  | 2014/10/06~2014/10/12 | Probability Theory                                                                                           |
| 5  | 2014/10/13~2014/10/19 | Probability Theory                                                                                           |
| 6  | 2014/10/20~2014/10/26 | Statistical inference                                                                                        |
| 7  | 2014/10/27~2014/11/02 | Statistical inference                                                                                        |
| 8  | 2014/11/03~2014/11/09 | Ordinary Least squared estimation under ideal condition.                                                     |
| 9  | 2014/11/10~2014/11/16 | Ordinary Least squared estimation under ideal condition.                                                     |
| 10 | 2014/11/17~2014/11/23 | Mid-term examination                                                                                         |
| 11 | 2014/11/24~2014/11/30 | Linear Regression that violates ideal condition: (Greene, Ch.8, 1, 12, 13) (*)<br>(i). Stochastic Regressor  |
| 12 | 2014/12/01~2014/12/07 | Linear Regression that violates ideal condition: (Greene, Ch.8, 11, 12, 13) (*)<br>(i). Stochastic Regressor |
| 13 | 2014/12/08~2014/12/14 | Linear Regression that violates ideal condition: (Greene, Ch.8, 11, 12, 13) (*)<br>(i). Stochastic Regressor |
| 14 | 2014/12/15~2014/12/21 | Linear Regression that violates ideal condition: (Greene, Ch.8, 11, 12, 13) (*)<br>(i). Stochastic Regressor |
| 15 | 2014/12/22~2014/12/28 | Panel Data Models (Greene, Ch14)                                                                             |
| 16 | 2014/12/29~2015/01/04 | Panel Data Models (Greene, Ch14)                                                                             |
| 17 | 2015/01/05~2015/01/11 | Seeming Uncorrelated Regression Model (SURE): (Greene, Ch.15)                                                |
| 18 | 2015/01/12~2015/01/18 | Final Examination                                                                                            |

## 課業討論時間

時段1:  
時間：星期一15:10~17:00  
地點：社4037  
時段2:  
時間：星期四15:10~17:00  
地點：社4037

## 系所學生專業能力/全校學生基本素養與核心能力

| 系所學生專業能力/全校學生基本素養與核心能力 | 課堂活動與評量方式    |         |            |                 |                 |         |        |              |       |                 |
|------------------------|--------------|---------|------------|-----------------|-----------------|---------|--------|--------------|-------|-----------------|
|                        | 本課程欲培養之能力與素養 | 紙筆考試或測驗 | 課堂討論(含案討論) | 個人書面報告、作業、作品、實驗 | 群組書面報告、作業、作品、實驗 | 個人人口頭報告 | 群組口頭報告 | 課程規畫之校外參訪及實習 | 證照/檢定 | 參與課程規畫之校內外活動及競賽 |
| ※系所學生專業能力              |              |         |            |                 |                 |         |        |              |       |                 |
| 1.經濟分析。                | V            | V       |            | V               |                 | V       |        |              |       |                 |
| 2.專業技術。                | V            | V       |            | V               |                 | V       |        |              |       |                 |
| 3.國際視野與國際移動能力。         |              |         |            |                 |                 |         |        |              |       |                 |
| 4.守法紀與積極進取的態度。         |              |         |            |                 |                 |         |        |              |       |                 |
| 5.問題解決能力。              |              |         |            |                 |                 |         |        |              |       |                 |
| 6.生涯發展的瞭解及規劃。          | V            |         | V          | V               |                 | V       |        |              |       |                 |
| 7.專業能力與生涯發展。           | V            | V       |            | V               |                 | V       |        |              |       |                 |
| ※全校學生基本素養與核心能力         |              |         |            |                 |                 |         |        |              |       |                 |

|              |   |  |   |  |   |  |   |  |  |  |  |
|--------------|---|--|---|--|---|--|---|--|--|--|--|
| 1.表達與溝通能力。   | V |  | V |  | V |  | V |  |  |  |  |
| 2.探究與批判思考能力。 | V |  | V |  | V |  | V |  |  |  |  |
| 3.終身學習能力。    |   |  |   |  |   |  |   |  |  |  |  |
| 4.倫理與社會責任。   |   |  |   |  |   |  |   |  |  |  |  |
| 5.美感品味。      |   |  |   |  |   |  |   |  |  |  |  |
| 6.創造力。       | V |  | V |  | V |  | V |  |  |  |  |
| 7.全球視野。      | V |  | V |  | V |  | V |  |  |  |  |
| 8.合作與領導能力。   |   |  |   |  |   |  |   |  |  |  |  |
| 9.山海胸襟與自然情懷。 |   |  |   |  |   |  |   |  |  |  |  |

[回上一頁](#)