國立東華大學

課　　綱　Course Outline

經濟學系博士班國際組

中文課程名稱 Course Name in Chinese	計量經濟分析(二)				
英文課程名稱 Course Name in English	Econometric Analysis (II)				
科目代碼 Course Code	EC__D0210	班 別 Degree	博士班 Ph.D.		
修別 Type	必修 Required	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite					

課程目標
Course Objectives

Econometric Analysis (II) is a required course in the Ph.D. program. Ph.D. students must acquire some basic trainings in econometrics to conduct empirical analysis and forecasting based on economic theory. This course is also a distinguishing characteristic in the Ph.D. program.

系教育目標
Dept.'s Education Objectives

1	培育具獨立學術研究與專業能力之優秀經濟人才。 Foster potential talents with professional knowledge and empirical skills in economics.

	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：通曉經濟學的高階理論技巧，應用數學與賽局解決經濟議題的能力 Mathematical analysis skills: Mastering in advanced application of mathematical theories and game theory in analyzing economic issues	
B	實證經濟分析能力：通曉經濟學的高階實證技巧，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 advanced application of statistics and econometrics in data collection and examination	●
C	觀經濟之闡釋能力：通曉高階個體經濟學相關的理論與應用 Microeconomic perspective: Thorough understanding of advanced microeconomic theories and relevant application	

D	宏觀經濟之闡釋能力：通曉高階總體經濟學相關的理論與應用 Macroeconomic perspective: Thorough understanding of advanced macroeconomic theories and relevant application	
E	樂活能力：具備適應現代社會的高階學養以及就業能力 Employment opportunities: Capabilities of advanced 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高階專業研究報告 Communication skills: Having a clear mind and profound ability in presenting advanced professional academic research	

圖示說明Illustration ：● 高度相關 Highly correlated ○中度相關 Moderately correlated

課程大綱
Course Outline

1.Nonlinear Regression Models
2.Nonspherical Disturbances: Generalized Linear Regression Model
3.Heteroscedasticity
4.Autocorrelation
5.Generalized Method of Moments Estimation
6.Panel Data
7.Computation-Intensive Methods
Monte Carlo Methods and Bootstrapping
8.Quantile Regression

資源需求評估（師資專長之聘任、儀器設備的配合・・・等）
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

This course will be taught by the instructor in our department. We will use a notebook, a projector and a statistic software to teach this course.

課程要求和教學方式之建議
Course Requirements and Suggested Teaching Methods

This course will be a lecture format and we will give students several classroom practices about empirical applications.

其他
Miscellaneous