



課 綱 Course Outline
經濟學系碩士班

中文課程名稱 Course Name in Chinese	計量經濟分析（一）				
英文課程名稱 Course Name in English	Econometric Analysis（一）				
科目代碼 Course Code	IIE_54600	班 別 Degree	碩士班 Master' s		
修別 Type	必修 Required	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite	non				
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。					
系教育目標 Dept.' s Education Objectives					
1	培育具學術深造潛力及實務發展能力的優秀經濟人才。 Educate postgraduate students with professional knowledge and empirical skills for further academic research.				
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：通曉經濟學的理论技巧，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论與應用。 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论與應用 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		
課程大綱 Course Outline		
1、MATRIX ALGEBRA 2、PROBABILITY AND DISTRIBUTION THEORY 3、STATISTICAL INFERENCE 4、THE CLASSICAL LINEAR REGRESSION MODEL 5、FUNCTIONAL FORM, NONLINEARITY, AND SPECIFICATION 6、DATA PROBLEMS 7、HETEROSCEDASTICITY 8、AUTOCORRELATED DISTURBANCES		
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.)		
課程要求和教學方式之建議 Course Requirements and Suggested Teaching Methods		
本課程以講授方式進行，輔以課堂討論。		
其他 Miscellaneous		