



課 綱 Course Outline

國際經濟研究所碩士班

中文課程名稱 Course Name in Chinese	賽局理論與經濟應用(一)				
英文課程名稱 Course Name in English	Game Theory with Economic Applications (I)				
科目代碼 Course Code	IIE_57900	班 別 Degree	碩士班 Master' s		
修別 Type	選修 Elective	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					
近年來經濟分析大量引用賽局理論，研究生必須充分掌握此一工具，方有能力學習與理解新的經濟理論，為獨立的研究能力奠定基礎。					
課程大綱 Course Outline					
1、Introduction (1) Game form, definition and solution concepts 2、Complete Information: (1) Strategic form games a、Dominant Strategies and Dominated Strategies b、Nash equilibrium c、App. Cournot game (a) Bertrand game (2) Extensive form games a、Dynamic games, backward induction and Nash equilibrium b、Subgame perfection c、Sequential equilibria d、Bargaining games (Nash, Ariel Rubinstein) e、App. Stackelberg game (a) Centipede game (b) Entry deterrence game (3) Repeated games a、Finitely repeated prisoners' dilemma b、Folk theorem c、Reputation d、Signaling e、App. (4) Incomplete information: a、Bayesian Nash equilibrium b、Perfect Bayesian equilibrium c、Bargaining with private information					

d、Sequential equilibrium e、Revelation Principle f、App. (5) Implementation Theory a、Nash implementation b、Subgame perfect implementation c、Mechanism design d、App.
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