

<b>Kainan University</b>	<b>Department</b> Business Administration
<b>Programme</b>	Bachelor Degree
<b>Course Title</b>	Game Theory for Business and Economics
<b>Course Code</b>	
<b>Status</b>	Compulsory
<b>Level</b>	Undergraduate
<b>Credit Hours</b>	3
<b>Contact Hours</b>	
<b>Pre-requisite (if any)</b>	No
<b>Co-requisites (if any)</b>	No
<b>Teaching Methodology</b>	Lecture
<b>Method of Evaluation State weightage of each type of assessment</b>	Quiz : 10% Mid-term exam : 40% Final exam : 50%

企管系 李文雄 (C)  
主任

課務組  
08.08.20  
收

course code/title

課務組 郭惠嫻  
辦事

<b>Instructor(s)</b>	Name : Dr. Moussa Larbani Room : 742 Tel No. : Extension 6129 E-mail : <a href="mailto:m_larabni@yahoo.fr">m_larabni@yahoo.fr</a> Consultation Hours : Monday 13 PM-15 PM, Tuesday 11AM-12PM, Friday 9Am-10AM.
<b>Semester Offered</b>	Semester II, 2006/2007
<b>Course Objectives</b>	At the end of this course the students will know how to apply game theory, especially Nash equilibrium, for analyzing and solving real-world business and economic conflict situations. It is also intended in this course to strike a balance between theoretical and practical aspects of game theory.
<b>Course Synopsis</b>	Decision making problems are intimately associated with every sphere of human life. Politicians, doctors, engineers, social activists, managers, in short everybody makes decisions in his/her own area. This course deals with decision making problems that arise in business and economics. Many decision making problems in business and economics involve several decision maker with conflicting interests. Game Theory is the most adequate tool for analysing and solving such problems. The main purpose of this course is to provide a basis for analyzing and solving conflict situations using game theory. The main topics of this course are: non cooperative games and cooperative games and their applications to Business and economics.

Course Outlines		
Part	Topics	Chapters
1 Basic Game Theory	Introduction to Games and Their Theory	1
	Games of Chance	3
	Nash Equilibrium for Two-Person Games	4
	Mixed Strategies and Mixed Strategy Nash Equilibrium	5
	$n$ -Person Games in Normal Form	6
	Non Cooperative Market Games in Normal Form	7
	2 Games with Sequential Structure	Credibility and Subgame Perfect Equilibrium
Repeated Games		9
Evolutionary Stability and Bounded Rationality		10
3 Games with Imperfect Information		Signaling, Screening and Sequential Equilibrium
	Games between a Principal and an Agent	12
	Auctions	13
	4 Games Involving Bargaining	Two-Person Bargains
$n$ -Person Bargaining and the Core		15
5 Games, Marketing, and Politics		Two-Sided Markets and Matching Games
	Voting Games	17

<b>References</b>	<b>Required</b> Gardiner R., Games for Business and Economics, Willey, 2003. <b>Recommended</b> 1. Fudenberg D. and J. Tirol, Game Theory, MIT Press, 1991. 2. Gibbons R. Game Theory for Applied Economics, Princeton University Press, 1992.
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