



## Syllabus

Course No.	1900703W	College	Economics and Management	Dept.	Management Science Engineering
Teacher	Haiyan Xu				
Time	2022.12.19—2023.01.06				
Course Name	English	Game Theory			
	Chinese	博弈论			
Course credits hours	Total	Theory	Office Hour or Practice	Credits	
	70	60	10	12.0	
<b>Course description:</b> Describe the aims of the course This course is a survey of the main ideas and techniques of game-theoretic analysis related to bargaining, conflict, and negotiation. As such, the course emphasizes the identification and analysis of archetypal strategic situations frequently occurring in bargaining situations. At the same time, some new developments of game theory will be introduced, such as Conflict Analysis. The goals of the course to provide students with a foundation to: (i) Apply game-theoretic analysis, both formally and intuitively, to negotiation and bargaining situations. Recognize and assess archetypal strategic situations in complicated negotiation settings. (ii) Know the evolution of game theory about conflict analysis and apply this theory to model and analyze some conflict events. (iii) Using some software to negotiate and solve conflicts.					
<b>Requirements for courses; ability and knowledge in advance</b>					
Some basic probability knowledge.					
<b>Course structure explanation:</b> Make clear the necessary parts, optional parts, distribution of hours. Courses with experiments or practice are expected to explain credit hours needed, content, scheme and functions.					

Chapter 1 Background of Game Theory (2 credit hours)

Chapter 2 Defining Negotiation and Its Components (4 credit hours)

Chapter 3 Game Theory and Business Strategy (14 credit hours)

Definition of game

\_ Static game

- Normal form game

- Nash equilibrium

\_ Dynamic game

- Extensive form game

- Subgame perfect Nash equilibrium

Chapter 4 Communicating in Negotiation (4 credit hours)

Chapter 5 Case Analysis and Software Introduction (4 credit hours)

Chapter 6 Conflict and Negotiation (2 credit hours)

Chapter 7 Conflict Analysis(8 credit hours)

\_ Types of conflict

- Normal form

- Option form

- Graph form

\_ Types of stability

- Nash

- GMR

- SMR

- SEQ

Chapter 8 Case Analysis and GMCRII-Software Introduction (2 credit hours)

#### **Teaching methods (Lectures, practice, etc)**

80% lectures and 20%practice

#### **Forms of evaluation and requirements**

**Structure of the final grade(including presence, class performance, ), focus of exam, forms of exam(test, interview, final report, etc)**

Homework & Quiz (40%)

Attendance (10%)

Project including topic selection, PPT design, and presentation (20%)

Final Exam (30%)

<b>Textbook</b>	<b>Name</b>	<b>Publisher</b>	<b>Author</b>	<b>Year</b>	<b>Price</b>
	Conflict Management A Practical Guide to Developing Negotiation Strategies Corvette	Corvette Pearson Prentice Hall	Barbara A. Budjac	2006	
<b>References</b>	<b>Name</b>	<b>Publisher</b>	<b>Author</b>	<b>Year</b>	<b>Price</b>
	Interactive Decision Making: The Graph Model for Conflict Resolution,	Wiley, New York, U.S.A.	Fang, L., Hipel, K.W.,	<b>1993</b>	
<b>Website</b>					
<b>Course members</b>					
<b>College</b>					