课程大纲
COURSE SYLLABUS

1.	课程代码/名称 **Course Code/Title**	博弈论及应用 **Game Theory and Its Applications**
2.	课程性质 **Compulsory/Elective**	必修课
3.	课程学分/学时 **Course Credit/Hours**	3/48
4.	授课语言 **Teaching Language**	中英双语 English & Chinese
5.	授课教师 **Instructor(s)**	陈康林，商学院 CHEN Kanglin, College of Business
6.	是否面向本科生开放 **Open to undergraduates or not**	否
7.	先修要求 **Pre-requisites**	无
8.	教学目标 **Course Objectives**	
	The course demonstrates how insights of game theory can be utilized by managers to address important decisions confronting the firm. The primary focus of the analysis is on understanding how other players form their strategies and expectations in order to identify one's own best response strategy. We will utilize game theoretic reasoning to analyze issues related to entry into new markets or exit from established businesses, changing the perceptions of competitors, the extent of product differentiation and proliferation that is implied by competition, and strategies aimed at alleviating price competition among firms.	
9.	教学方法 **Teaching Methods**	
	This course introduces the basic concepts and applications of game theory. The emphasis is on the unifying perspective that game theory offers to questions in economics, finance, business, other disciplines, and everyday life. It will enable students to view social interactions as strategic games, to use game theoretic concepts to predict behavior in these interactions and to conceive of ways in which altering the game affects social outcomes.	
10.	教学内容 **Course Contents** （如面向本科生开放，请注明区分内容。 If the course is open to undergraduates, please indicate the difference.） The schedule is subject to change at the instructor's discretion. Students are advised to check the course website regularly for updated information. Topics covered in this course will be including (tentatively) but not limited to:	

	Section 1	Introduction of Game Theory: Introduction; Elements of a Game; Thinking Strategically
	Section 2	Sequential-move Games: Definition; Guessing Game
	Section 3	Nash Equilibrium: pure and mixed strategy Nash equilibria

Section 4	Simultaneous-move Games: Definition; Centipede Game; Ultimatum Bargaining; Pure-Coordination Game; Assurance Game	
Section 5	Best-response Curve Analysis	
Section 6	Games with Incomplete Information: Bayesian Nash Equilibrium; Signaling games	
Section 7	Repeated Interactions: Repeated prisoners dilemma; finite and infinite repeated games; folk theorems	
Section 8	Perfect Bayesian Equilibrium	
Section 9	Disclosure games, Communication games and Bayesian persuasion	
Section 10	Recent development and applications of Game Theory	

11. 课程考核
Course Assessment

（①考核形式 Form of examination；②.分数构成 grading policy；③如面向本科生开放，请注明区分内容。

If the course is open to undergraduates, please indicate the difference.）
1. 期末考试 40%
Final exam 40%
2. 平时作业 20%
Assignments 20%
3. 课程报告 30%
Presentation 30%
4. 课堂表现 10%
Class participation 10%

12. 教材及其它参考资料
Textbook and Supplementary Readings

Martin J. Osborne and Ariel Rubinstein, "A Course in Game Theory", MIT Press, 1994
Harvard Business School Cases: A case pack will be provided for the students