

Department	International College of Liberal Arts		
Semester	Spring 2026	Year Offered (Odd/Even/Every Year)	Every Year
Course Number	ECON/PSCI/QREA225		
Course Title	Game Theory		
Prerequisites	ECON101 Microeconomics		
Course Instructor	TRAN Thanh Trang	Year Available (Grade Level)	2
Subject Area	Global Business & Economics	Number of Credits	3
Class Style	Lecture	Language of instruction	English

(NOTE 1) Depending on the class size and the capacity of the facility, we may not be able to accommodate all students who wish to register for the course

Course Description	<p>This course introduces the basic ideas of game theory and strategic thinking. It studies how people make decisions when their outcomes depend on others. We learn tools such as game trees, Nash equilibrium, mixed strategies, and repeated games, and apply them to real-world situations like bargaining, auctions, competition, and public goods.</p> <p>Game theory is not only for economics. It can help you think clearly about everyday decisions – from job applications and salary negotiation to choosing a life partner – as well as understanding business strategy and political behavior.</p> <p>The course focuses on clear logic and practical applications rather than heavy mathematics.</p>
Class plan based on course evaluation from previous academic year	N/A
Course related to the instructor's practical experience (Summary of experience)	N/A
Learning Goals	<p>By the end of the course, students will be able to:</p> <ul style="list-style-type: none"> ·Understand strategic thinking in economics, politics, and daily life ·Analyze decisions in areas such as voting, negotiations, conflict, and cooperation ·Solve and interpret different types of games ·Find and explain Nash and subgame perfect equilibria ·Apply game theory to business strategy, public policy, and political behavior <p>The goal is to build strong logical and strategic thinking skills that are useful in economics, political science, and real-world decision making.</p>

iCLA Diploma Policy	DP1/DP2/DP3/DP4
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iCLA Diploma Policy

(DP1) To Value Knowledge – Having high oral and written communication skills to be able to both comprehend and transfer knowledge

(DP2) To Be Able to Adapt to a Changing World – Having critical, creative, problem-solving, intercultural skills, global and independent mindset to adopt to a changing world

(DP3) To Believe in Collaboration – Having a disposition to work effectively and inclusively in teams

(DP4) To Act from a Sense of Personal and Social Responsibility – Having good ethical and moral values to make positive impacts in the world

Active Learning Methods	Problem-Based Learning/Discussion, Debate/Group Work				
More details/supplemental information on Active Learning Methods	Problem-Based Learning (PBL): Students will work in groups to analyze strategic situations using game theory. They will apply concepts from game theory to understand problems in economics and political science, such as competition, cooperation, and decision-making. This approach helps students practice using theory to think about real-world situations.				
Use of ICT	UNIPA will serve as a repository for course materials and resources.				
Contents of class preparation and review	<ul style="list-style-type: none"> Preparation: 2 hours per week (reading the textbook/lectures materials, engaging in class exercises) Review: 3 hours per week (summarizing lecture content, reviewing the textbook) 	Hours expected to be spent preparing for class (hours per week)	2 hours	Hours expected to be spent on class review (hours per week)	3 hours
Feedback Methods	Quizzes (4 in total): 40% Midterm exam: 30% Final exam: 30%				

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
Quizzes	40%	
Midterm exam	30%	
Final exam	30%	

Required Textbook(s)	Schechter, S., & Gintis, H. (2016). Game theory in action: An introduction to classical and evolutionary models.
Other Reading Materials/URL	Watson, J. (2002). Strategy: An introduction to game theory. Myerson, R. B. (2013). Game theory. Harvard university press.

Plagiarism Policy	Maintaining academic integrity is essential for this class. You may use AI tools for brainstorming, refining drafts, and grammar checking, but must cite them explicitly (e.g., "AI-generated outline via ChatGPT, revised by student"). All work will be screened, and assessments will include randomized questions, real-world applications.
Other Additional Notes (Outline crucial policies and info not mentioned above)	<p>Class Expectations: The following rules are set to support mutual understanding and help everyone achieve the best learning outcomes.</p> <p>1. Punctuality Being on time shows respect and responsibility. Arriving late disrupts the class and reflects a lack of commitment.</p> <p>2. Engagement This is an interactive course, and your active participation is important and expected. Being engaged not only improves the discussion but also deepens your understanding of the material.</p>

(NOTE 2) Class schedule is subject to change

Class Schedule	
Class Number	Content
Class 1	Introduction to Strategic Thinking
Class 2	Extensive Form Games Ch. 1 (1.1-1.3)
Class 3	Backward Induction Ch. 1 (1.4-1.8)
Class 4	Tutorial 1: Extensive Form Practice
Class 5	Quiz 1
Class 6	Normal Form Games Ch. 2 (2.1-2.3)
Class 7	Iterated Elimination & Applications Ch. 2 (selected examples)
Class 8	Nash Equilibrium (Pure Strategy) Ch. 3 (3.1-3.4)
Class 9	Tutorial 2: Solving Nash Equilibria

Class 10	Quiz 2
Class 11	Utility & Incomplete Information Ch. 4 (4.1-4.4)
Class 12	Mixed Strategy Nash Equilibrium Ch. 5 (5.1-5.3)
Class 13	Tutorial 3: Mixed Strategy Practice
Class 14	Subgame Perfect Equilibrium Ch. 6 (6.1-6.3)
Class 15	Midterm exam
Class 16	Repeated Games (Intuition) Ch. 6 (6.6 lightly)
Class 17	Tutorial 4: SPNE & Repeated Games
Class 18	Quiz 3
Class 19	Symmetric Games Ch. 7
Class 20	Alternatives to Nash Ch. 8 (selected)
Class 21	Introduction to Evolutionary Thinking Ch. 8-10 (selected examples)
Class 22	Replicator Dynamics (Visual Only) Ch. 10 (10.1-10.4 selectively)

Class 23	Quiz 4
Class 24	Bargaining Models
Class 25	Industrial Organization Applications
Class 26	Public Goods & Climate
Class 27	Auctions & Mechanisms
Class 28	Signaling Games
Class 29	Review
Class 30	Review