Course number	U-LAS06 10019 LE43		
Course title (and course title in English)	Introduction to Game Theory-E2 Introduction to Game Theory-E2	**Instructor's name, job title, and department of affiliation**	Graduate School of Economics Program-Specific Senior Lecturer,LI CHEN
Group	Humanities and Social Sciences	**Field(Classification)**	Jurisprudence, Politics and Economics(Foundations)
Language of instruction	English	**Old group**	Group A
Number of credits	2		
Number of weekly time blocks	1	**Class style**	Lecture (Face-to-face course)
Year/semesters	2026・First semester		
Days and periods	Mon.3/Mon.4	**Target year**	Mainly 1st year students
Eligible students	For all majors		

[Overview and purpose of the course]

Game theory is the study of strategic interactions among rational decision-makers, where the outcome for each participant depends not only on their own actions but also on the actions of others. It provides a framework for analyzing situations in which individuals or groups must make decisions that affect one another.

A complete information game is a type of game in which all players have full knowledge of the rules, strategies, and payoffs of other participants, allowing them to make fully informed decisions.

This course will cover standard undergraduate-level material on complete information games, including the fundamental concepts, the formalization of game models, and key solution concepts such as Nash equilibrium. Through this course, students will gain a foundational understanding of strategic behavior in economic, political, and social contexts.

[Course objectives]

・Develop an understanding of the models and solution concepts of complete information games.
・Practice and acquire essential skills to analyze and solve application problems in complete information games.

[Course schedule and contents)]

The lectures will be organized as follows.

1. What is game theory.
2. Introduction to normal-form games.
3. Dominance and strictly dominant strategy equilibrium.
4. Common knowledge of rationality and iterated elimination of strictly dominated strategies.
5. Nash equilibrium: Theory.
6. Nash equilibrium: Applications.
7. Mixed strategy.
8. Introduction to extensive form games.
9. Backward induction.
10. Subgame perfect equilibrium: Theory.
11. Subgame perfect equilibrium: Applications.
12. Bargaining game.

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13. Repeated game.
14. Review lecture.
(Final examination.)
15. Feedback.

[Course requirements]

Certain topics will assume a foundational understanding of derivatives and integrals.

[Evaluation methods and policy]

Homework (25%)
Class participation (5%)
Final examination (70%)

[Textbooks]

Instructed during class

[References, etc.]

（References, etc.）
Introduced during class

[Study outside of class (preparation and review)]

Students will be assigned three problem sets as the homework.

[Other information (office hours, etc.)]

Office hour by e-mail appointment.

[Essential courses]