



浙江大學

ECON927

Strategic Behaviour and Decision Making

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Instructor Contact Details

Lecturer-in-charge: Dr. Wenhua JIANG

Email: wlwyxy_29@zju.edu.cn

Office location: Huajiachi Campus, Zhejiang University, Hangzhou, China

Consultation Time: Book appointment by sending email to:

wlwyxy_29@zju.edu.cn

Teaching Times, Modes and Locations

Course Duration: 28 June 2026 to 17 July 2026

Modes: Face-to-face

Location: Huajiachi Campus, Zhejiang University via face-to-face

Academic Level

Postgraduate

Credit Points:

The course is worth 6 units of credit point.

Credit Hours

The number of credit hours of this course equals to the credits of a standard semester-long course.

Contact Hours

The course contains a total of 53 contact hours, which consists of orientation, lectures, seminars, quiz, discussion, research, case study, small tests, assignments, on-site field trip(s), in-class and after-class activities, revision, self-study, and final exam. Students will receive an official transcript which is issued by Zhejiang University when completing this course.

Enrolment Requirements

Eligibility requires enrollment in an overseas university as an undergraduate or

postgraduate student, proficiency in English, and pre-approval from the student's home institution.

Course Description:

Decision makers face two fundamental sources of uncertainty: uncertainty about the state of nature and uncertainty about the strategic behaviour of other decision makers. This course focuses on strategic uncertainty and examines how game theory provides a rigorous framework for analyzing and guiding strategic decision-making.

Game theory studies environments in which agents have conflicting interests and where individual actions directly influence both one's own payoffs and the payoffs of others. The course develops formal models of strategic interaction and emphasizes equilibrium analysis, rationality assumptions, and their implications for economic and organizational outcomes.

A broad range of applications from economics and business are explored, including firm pricing and output decisions, market entry and exit, collusion, bargaining, auctions, signaling, and contract problems. Through both theoretical and applied perspectives, the course equips students with advanced analytical tools for research and professional decision-making in strategic environments.

Prerequisite:

N/A

Learning Resources

- Robert Gibbons (1992). *Game theory for applied economists*, Princeton University Press.
- Martin J. Osborne and Ariel Rubinstein(1994). *A Course in Game Theory*, MIT Press.
- Roger B. Myerson (1991). *Game theory: Analysis of conflict*, Harvard University Press.
- Dixit, A. K., Skeath, S., & Reiley, D. H. (2020). *Games of strategy* (4th ed.). W.W. Norton & Company.

Learning Objectives

By the end of this course, students will be able to:

1. Demonstrate advanced understanding of the core concepts, solution techniques, and theoretical foundations of game theory.
2. Formulate and analyse strategic interaction models and derive equilibrium outcomes using rigorous game-theoretic methods.

3. Apply game-theoretic frameworks to complex real-world economic and business problems and produce analytically justified predictions.
4. Critically assess alternative modelling approaches by evaluating their assumptions, strengths, and limitations.
5. Integrate game-theoretic reasoning into professional, academic, and policy-oriented discussions with clarity and analytical depth.

Course Delivery:

Face-to-face Lecture mode includes lectures, seminars, quiz, discussion, research, case study, small tests, assignments, on-site field trip(s), in-class and after-class activities, revision, and final exam. The following course will be taught in English. There will also be guest speakers and optional field trips available for students who would like to enhance their learning experience. All courses and other sessions will be run during weekdays.

Topics and Course Schedule:

WK	Topic	Activities
1	Orientation	
1	Introduction to Game Theory	Lecture; Tutorial
1	Strategic Thinking and Rational Decision-Making	Lecture; Tutorial
1	Static Games of Complete Information I	Lecture; Tutorial
1	Static Games of Complete Information II	Lecture; Tutorial
1	Dynamic Games of Complete Information I	Lecture; Tutorial
2	Subgame Perfection & Applications	Lecture; Tutorial
2	Repeated Games & Cooperation	Lecture; Tutorial
2	Games of Incomplete Information II	Lecture; Tutorial
2	Quiz	Closed book

2	Auctions: Theory & Applications	Lecture; Tutorial
2	Mechanism Design Introduction	Lecture; Tutorial
3	Signaling Games & Screening	Lecture; Tutorial
3	Behavioral Game Theory	Lecture; Tutorial
3	Applications in Business and Economics	Lecture; Tutorial
3	Applications: Economics, Networks & Politics	Lecture; Tutorial
3	Revision	Tutorial
3	Final Exam	Closed book

Assessments:

Class participation	15%
Quiz	15%
Assignments	20%
Final exam	50%

Pass Requirement (Double Pass Rule)

To pass this course, students are required to achieve:

- an overall mark of 50% or above, and
- a pass mark (50% or above) in the Final Examination.

Students who achieve an overall mark of 50% or above but do not achieve a pass in the Final Examination will receive a fail grade for the course.

Grade Descriptors:

HD	High Distinction	85-100
D	Distinction	75-84
Cr	Credit	65-74
P	Pass	50-64
F	Fail	0-49

High Distinction 85-100

- Treatment of material evidences an advanced synthesis of ideas
Demonstration of initiative, complex understanding, and analysis.
- Work is well-written and stylistically sophisticated, including appropriate referencing, clarity, and some creativity where appropriate.
- All criteria addressed to a high level.

Distinction 75-84

- Treatment of material evidences an advanced understanding of ideas
Demonstration of initiative, complex understanding and analysis
Work is well-written and stylistically strong.
- All criteria addressed strongly.

Credit 65-74

- Treatment of material displays a good understanding of ideas.
- Work is well-written and stylistically sound, with a minimum of syntactical errors.
- All criteria addressed clearly.

Pass 50-64

- Treatment of material indicates a satisfactory understanding of ideas
Work is adequately written, with some syntactical errors.
- Most criteria addressed adequately.

Fail 0-49

- Treatment of ideas indicates an inadequate understanding of ideas
Written style inappropriate to task, major problems with expression.
- Most criteria not clearly or adequately addressed.

Academic Integrity

Students are expected to uphold the university's academic honesty principles which are an integral part of the university's core values and principles. If a student fails to observe the acceptable standards of academic honesty, they could attract penalties and even disqualification from the course in more serious circumstances. Students are responsible for knowing and observing accepted principles of research, writing and any other task which they are required to complete.

Academic dishonesty or cheating includes acts of plagiarism, misrepresentation, fabrication, failure to reference materials used properly and forgery. These may include, but are not limited to: claiming the work of others as your own, deliberately applying false and inaccurate information, copying the work of others in part or whole, allowing others in the course to

copy your work in part or whole, failing to appropriately acknowledge the work of other scholars/authors through acceptable referencing standards, purchasing papers or writing papers for other students and submitting the same paper twice for the same subject. This Academic Integrity policy applies to all students of the Zhejiang University in all programs of study, including non-graduating students. It is to reinforce the University's commitment to maintain integrity and honesty in all academic activities of the University community.

Policy

The foundation of good academic work is honesty. Maintaining academic integrity upholds the standards of the University. The responsibility for maintaining integrity in all the activities of the academic community lies with the students as well as the faculty and the University. Everyone in this community must work together to ensure that the values of truth, trust and justice are upheld.

Academic dishonesty affects the University's reputation and devalues the degrees offered. The University will impose serious penalties on students who are found to have violated this policy. The following penalties may be imposed:

- ✓ Expulsion
- ✓ Suspension
- ✓ Zero mark /fail grade
- ✓ Marking down
- ✓ Re-doing/re-submitting of assignments or reports, and
- ✓ Verbal or written warning