

EC 325 Strategy: An Introduction to Game Theory

(Fall 2026)

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Office Hours: by appointment

Course Description

Game theory is a fundamental discipline in the fields of economics, political science, biology, and beyond, as it provides a systematic framework for analyzing strategic interactions among rational decision-makers. This undergraduate course in Game Theory offers students a comprehensive introduction to the core concepts, principles, and applications of this fascinating field.

The course begins with an overview of the basic components of game theory, including players, strategies, payoffs, and extensive and normal form representations. Students will learn how to model different types of games, ranging from simple two-player games to more complex multi-player scenarios, and study various solution concepts such as dominant strategies, Nash equilibrium, and subgame perfection.

Throughout the course, students will explore various classical games, including the Prisoner's Dilemma, the Battle of the Sexes, and the Tragedy of the Commons. By examining these games, students will gain insight into real-world situations such as social dilemmas, competition, cooperation, and bargaining. Furthermore, applications of game theory in diverse fields will be discussed, ranging from economics and business strategy to politics, law, and environmental issues. The course will include interactive discussions and problem-solving exercises to enhance students' understanding of the concepts and their practical applications.

Requirements

Prerequisites

Students taking this course should have already successfully completed the courses "Mathematics for Economics," and "Microeconomics."

Textbooks

For this course, we will use the following textbook:

- *Strategy: An Introduction to Game Theory* (2013) by Joel Watson (W.W.Norton).

Two excellent textbooks that we will also use (not as textbooks but we will cover some of the applications) are:

- *Strategy and Politics: An Introduction to Game Theory* (2015) by Emerson M.S. Niu and Peter C. Ordeshook (Routledge)
- *A Primer in Game Theory* (1992) by Robert Gibbons (Pearson)

It is essential that you will repeat at home the material that we cover in class! (including solving again all the exercises that we did in the classroom).

Academic Integrity

Bard College Berlin maintains the highest standards of academic integrity and expects students to adhere to these standards at all times. Instances in which students fail to meet the expected standards of academic integrity will be dealt with under the Code of Student Conduct, Section 14.3 (Academic Misconduct) in the Student Handbook.

Accommodations

Bard College Berlin is committed to inclusion and providing equal access to all students; we uphold and maintain all aspects of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the ADA Amendments Act of 2008, and Section 3 of the German Disability Equality Act of April 27, 2002 (Federal Law Gazette I p. 1468). If you have a disability, or think you may have a disability, please contact the Disability Accommodation Coordinator, Atticus Kleen, (accommodations@berlin.bard.edu) to request an official accommodation.

Requests for accommodations should be made as early as possible to ensure adequate time for coordination and planning. Please note that accommodations are not retroactive and may require advance notice to implement.

If you have already been approved for accommodations with the Disability Accommodation Coordinator, please arrange to meet with me outside of class so that we can develop an implementation plan.

Students may face extenuating circumstances related to various personal or external factors, which impact their academic performance. While these circumstances often do not fall within the legal framework of Disability Accommodations, Bard College Berlin is committed to supporting students experiencing such circumstances. A student needing a short extension or a replacement assignment because of an extenuating circumstance is encouraged to make arrangements directly with instructors if possible. If further support is needed, please visit the [Bard College Berlin Accessibility page](#). Questions about this process can be directed to James Harker (j.harker@berlin.bard.edu) or Maria Anderson-Long (m.andersonlong@berlin.bard.edu).

Attendance

Attendance at all classes is a crucial part of the education offered by Bard College Berlin. To account for minor circumstances, **two absences from twice-per-week courses** or the equivalent (e.g. one absence from a once-per-week course) should not affect the participation grade or require documentation.

Bard College Berlin may not offer credit for any course in which a student has missed more than 30% of classes, regardless of the reasons for the absences. The full Bard College Berlin attendance policy can be found in the Student Handbook, Section 2.8.

Assessment

Assessment will be based on attendance, preparation for classes, regular and active participation, professionalism (see below), presentation of exercises as well as a midterm (60 minutes) and final examination (90 minutes).

Policy on Late Submission of Papers

Students receive end-of-semester grades for their seminar work. Students are entitled to make an appointment with an instructor to discuss seminar participation, or may be asked to meet with the instructor at any stage in the semester regarding class progress.

Grade Breakdown

Seminar preparation, professionalism and participation 30%
Presentation of exercises 20%
Midterm examination 20%
Final examination 30%

Schedule

The Fall semester runs from Monday, August 31 and runs until Friday, December 18, with the Fall break planned from Monday, October 19, - Sunday, October 25, 2026.

- Normal course sessions end on Friday, December 11.
- Completion week is from Monday, December 14 through Friday, December 18.
- Make-up classes and final exams can take place in completion week.
- Students are required to be on campus during completion week.

Scheduled class times will be available online under the relevant course heading:

[BCB Fall Semester 2026 Course Search Page](#)

Classes missed due to federal holidays will not be rescheduled. Classes missed due to conferences or due to illness (of the professor) are rescheduled.]

Wednesday and Friday: 14-15:30

Part I		Introduction
Week 1	Introduction; Extensive Form	Watson, Chs. 1-2
Week 2	Strategies; Normal Form	Watson, Ch. 3
Week 3	Beliefs, Mixed Strategies, Expected Payoffs; General Assumptions and Methodology	Watson, Chs. 4-5
Part II		Analyzing Behavior in Static Settings
Week 4	Dominance and Best Response; Rationalizability and Iterated Dominance	Watson, Chs. 6-7
Week 5	Location, Partnership, and Social Unrest; Nash Equilibrium	Watson, Ch. 8
Week 6	Nash Equilibrium	Watson, Ch. 9
Week 7	Oligopoly, Tariffs, Crime, and Voting Midterm Exam	Watson, Ch. 10
		Fall Break
Week 8	Mixed Strategy Nash Equilibrium; Strictly Competitive Games and Security Strategies;	Watson, Chs. 11-12
Week 9	Contract, Law, and Enforcement in Static Settings	Watson, Ch. 13
Part III		Analyzing Behavior in Dynamic Settings
Week 10	Extensive Form; Sequential Rationality and Subgame Perfection	Watson, Chs. 14-15
Week 11	Topics in Industrial Organization; Parlor Games	Watson, Chs. 16-17