

# ECO326H1 S

## Advanced Microeconomics - Game Theory

### Winter 2024 Syllabus

#### Course Meetings

##### ECO326H1 S

Section	Day & Time	Delivery Mode & Location
LEC0101	Monday, 10:00 AM - 1:00 PM	In Person: UC 161

Refer to ACORN for the most up-to-date information about the location of the course meetings.

#### Course Contacts

**Instructor:** Marcin Peski

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#### Course Overview

Game theory and applications. Topics include: strategic and extensive games, with applications to economics.

This is a class in game theory. Game theory analyzes the behavior of small groups of agents in strategic situations, i.e., situations where the actions of each of the agents may affect payoffs or incentives of the others. The class will be quite rigorous as one of its goals is to give you some idea about what people study in a formal economics graduate program. The main emphasis will be on learning formal concepts and methods how to approach and think about games. As illustrations, we will see a broad range of application from economics, political science, sociology, job search, dating, etc. At the end of the class, you will be able to

- describe a situation that you encounter in your work or life and that involves interaction of two or more people as a game,
- identify key features of the game (number of players, actions, payoffs, whether the game has simultaneous or sequential moves, whether there is any incomplete or asymmetric information) and describe a formal model of the game,
- analyze the game and predict what behavior or what actions are likely to be chosen.

#### Course Learning Outcomes

By the end of the course, students will be able to produce or analyze strategic reasoning, and find solution to various games.

**Prerequisites:** ECO200Y1(70%)/ECO204Y1/ECO206Y1; ECO220Y1(70%)/ ECO227Y1/ (STA237H1(70%), STA238H1(70%))/ (STA247H1(70%), STA248H1(70%))/ (STA257H1, STA261H1)

**Corequisites:** None

**Exclusions:** ECO316H1, ECO326H5

**Recommended Preparation:** MAT235Y1/MAT237Y1/ECO210H1

**Credit Value:** 0.5

## Course Materials

Martin Osborne "Intorduction to game theory"

## Marking Scheme

Assessment	Percent	Details	Due Date
Midterm	47%		2024-02-12
Quizzes	6%		2024-01-15
In-Person Final Exam	47%		Final Exam Period

## Late Assessment Submissions Policy

no late term work