COURSE: Microeconomics II (ECN 532)
Term: Fall Term A 2025
SLN: 86735

Professor: Hector Chade
Office: CPCOM 455F
Office Hours: Mondays 3pm-4pm
Class: Mondays and Wednesdays 8am-10:30am

E-mail: hector.chade@asu.edu

Course Description

This core class is the second course in microeconomic theory. It provides the students with a solid background in game theory and information economics. Regarding game theory, this course covers static and dynamic games of complete information, with applications to oligopoly markets, bargaining, and repeated interactions, and static and dynamic games with incomplete information, with applications to auctions and signaling in markets. theory, production and cost, choice under uncertainty, perfect competition, monopoly, games with complete information, and oligopoly. Regarding information economics, the course covers contracting problems with moral hazard, markets with adverse selection, and screening and signaling in markets. Students will obtain the requisite background in these topics that are needed for understanding fundamental real-world economic applications.

W.P. Carey School of Business Program Competencies

The W. P. Carey School of Business has established the following learning goals for its graduate students:

1. **Critical Thinking**
2. Communication
3. **Discipline Specific Knowledge**
4. Ethical Leadership or Global Leadership

Items in **bold** have significant coverage in this course.

Course Learning Objectives

1. Provide a solid foundation on microeconomic analysis of individual units, markets, and strategic settings
2. Provide a deep understanding of fundamental optimization problems solved by agents in different contexts, be it a consumer choosing a bundle of goods, or an insurance policy, or a firm choosing the pricing of its output
3. Provide a thorough coverage of standard equilibrium concepts used in economic theory: competitive equilibrium, Nash Equilibrium, Subgame Perfect Nash Equilibrium
4. Illustrate the applicability of each topic with carefully chosen real-world economic problems

Required Textbook and Other Materials

The class is based on the detailed slides that will be created for each topic, complemented by the notes you will take in class.

On top of your class notes, here are some recommended textbooks:

Varian, Hal and Marc Melitz, *Intermediate Microeconomics: A Modern Approach,* tenth edition, 2024. This is an excellent reference for intuition and a basic treatment of the topics we will cover in class.

Tadelis, Steven, *Game Theory: An Introduction*, 2013. This is an excellent reference on game theory that which covers all the game theoretic concepts we will develop in class.

Grading and Course Requirements

Graded Coursework

Weekly Assignments	30
Midterm Exam	30
Final Exam	30
Class Participation	10
Total Points	**100**

Assignments and Examinations

Every week there will be an assignment corresponding to the topic covered that week, to be turned in the following week on Canvas before the class starts. Late work is not accepted.

The midterm exam will cover approximately the first half of the course material and will take place on November 12th during class time.

The final exam will cover the second half of the course material (it is not cumulative) and will take place the last day of class, December 10th, during class time.

W.P. Carey and ASU Policies

Several important W. P. Carey and ASU Policies for the course can we be found here, including:

Honor Code, Academic Integrity and Professionalism Policy

Prohibition Against Discrimination, Harassment, and Retaliation

Instructor Absence Policy

Religious Accommodations

University-Sanctioned Activities

Tutoring Support

Threatening Behavior Policy

Student Accessibility and Inclusive Learning Services (SAILS) Accommodations

Offensive Material

Copyright Material

Course Outline

The course assumes as a pre-requisite a good command of the topics covered during the math boot camp, and also those covered in ECN 530. We will cover the following topics in this course:

1) Normal Form Games: definition and examples.

2) Static Games with Complete Information: dominated strategies, iterative elimination of dominated strategies, rationalizability, Nash equilibrium in pure strategies, Cournot and Bertrand oligopoly models, mixed strategies, Nash equilibrium in mixed strategies, examples, existence of Nash equilibrium.

3) Extensive-Form Games: definition and examples.

4) Dynamic Games of Complete Information: sequential rationality, backward induction, subgames, subgame-perfect equilibrium, Stackleberg oligopoly model, sequential bargaining.
5) Repeated Games: Multi-stage games, one-shot deviation principle, finitely and infinitely repeated games, collusion in oligopoly, the folk theorem.
6) Static Games of Incomplete Information: Bayesian Games, Bayesian equilibrium, auctions.
7) Dynamic Games of Incomplete Information: Sequential rationality and beliefs, Perfect-Bayesian equilibrium, signaling games.
8) Moral Hazard: principal-agent problem, participation and incentive constraints, optimal incentive contract.
9) Adverse Selection: Akerlof's market for lemons, screening models, signaling in markets.