

**Course ID and Title: ECON 480
Economics of Industrial Organization**

Units: 4.0

**Term – Day – Time: Fall 2024 - Tue & Thu -
12:00-1:20pm**

Location: THH 116

Instructor: Ziyi Qiu

Office: KAP 116D

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Course Website: TBD

Office Hours: TBD

Course Description

This course explores topics on firms' various competitive behaviors in different market structures. The course is organized into five major sections. In the first section, we provide an overview of diverse market structures and firm's competitive behaviors. In the second section, we discuss perfect competition with identical and multiple types of firms, monopoly and monopolistic behavior. In the third section, we study noncooperative oligopoly models, including Cournot, Stackelberg and Bertrand competition. The fourth section covers topics of horizontal and vertical mergers while the final section focuses on antitrust case studies. A detailed breakdown of each topic and suggested readings are outlined below.

Course Topics and Suggested Readings

Section 1: Introduction

Topic 1: Overview of Market Structures and Firm's Competitive Behavior

- Key Factors of Market Structure
- Perfect Competition, Key Features and Examples
- Monopoly, Key Features and Examples
- Monopolistic Competition, Key Features and Examples
- Oligopoly, Key Features and Examples
- Government Regulations in Different Market Structures

Suggested Readings:

- Carlton and Perloff, Chapter 2, "The Firm and Costs"
- Church and Ware, Chapter 1, "Introduction"
- Tirole, Chapter 0, "The Theory of Firm"

Section 2: Competition and Monopoly

Topic 1: Perfect Competition with Identical Firms

- Definition and Characteristics of Perfect Competition
- Single Competitive Firm's Short Run Shutdown and Long Run Exit Decisions
- Short Run and Long Run Supply Curve
- Short Run and Long Run Perfect Competition Market Equilibrium
- Market Efficiency and Government Regulation

Topic 2: Perfect Competition with Multiple Types of Firms

- Competitive Firm's Short Run Shutdown and Long Run Exit Decisions with Multiple Types of Firms
- Short Run and Long Run Supply Curves with Multiple Types of Firms
- Short Run and Long Run Market Equilibrium with Multiple Types of Firms

Suggested Readings:

- Carlton and Perloff, Chapter 3 "Perfect Competition"
- Church and Ware, Chapter 2 "The Welfare Economics of Market Power"

Topic 3: Monopoly, Dominant Firm and Market Power

- Definition and Characteristics of Monopoly
- Monopoly Market Equilibrium and Market Power
- Lerner's Index, Elasticity of Demand and Deadweight Loss
- Government Regulation of Monopolization Behavior

Suggested Readings:

- Carlton and Perloff, Chapter 4 "Monopolies, Monopsonies, and Dominant Firms"
- Church and Ware, Chapter 4 "Market Power and Dominant Firm"
- Tirole, Chapter 1 "Monopoly"

Topic 4: Monopolistic Competition

- Definition and Characteristics of Monopolistic Competition
- Short Run Monopolistic Competition Market Equilibrium
- Long Run Monopolistic Competition Market Equilibrium
- Government Regulation of Monopolistic Competition Behavior

Suggested Readings:

- Carlton and Perloff, Chapter 7 "Product Differentiation and Monopolistic Competition"
- Church and Ware, Chapter 11 "Product Differentiation"
- Tirole, Chapter 7 "Product Differentiation: Price Competition and Non-Price Competition"

Section 3: Oligopoly and Noncooperative Competition

Topic 1: Cournot Competition

- Definition and Characteristics of Cournot Competition
- Cournot Competition Basic Duopoly Model

- Cournot Competition Extended Duopoly Model
- Cournot Competition Multi-Firm Model

Topic 2: Stackelberg Competition

- Definition and Characteristics of Stackelberg Competition
- Stackelberg Competition Basic Duopoly Model
- Stackelberg Competition Extended Duopoly Model
- Stackelberg Competition Multi-Firm Models
- Comparison of Cournot and Stackelberg Market Equilibrium

Topic 3: Bertrand Competition

- Definition and Characteristics of Bertrand Competition
- Bertrand Equilibrium with Identical Firms
- Bertrand Equilibrium with Different Costs of Production
- Comparison of Bertrand, Cournot, Stackelberg, Perfect Competition and Monopoly

Suggested Readings:

- Carlton and Perloff, Chapter 6 “Oligopoly”
- Church and Ware, Chapter 8 “Classic Models of Oligopoly”
- Tirole, Chapter 5 “Short Run Price Competition”

Section 4: Merger and Acquisition

Topic 1: Horizontal Merger and Acquisition

- Definition and Characteristics of Horizontal Mergers
- Six Major Merger Waves
- Anticompetitive Effects of Horizontal Mergers
- Procompetitive Effects of Horizontal Mergers
- The 2010 Horizontal Merger Guidelines
- Recent Horizontal Merger Cases

Topic 2: Vertical Merger and Acquisition

- Definition and Characteristics of Vertical Mergers
- Elimination of Double Marginalization
- Vertical Merger Foreclosure Analysis
- The 2020 Vertical Merger Guidelines
- Recent Vertical Merger Cases

Suggested Readings:

- Church and Ware, Chapter 23 “Horizontal Mergers”
- Church and Ware, Chapter 22 “Vertical Mergers”
- 2010 Horizontal Merger Guidelines

Section 5: Antitrust Case Studies:

- Microsoft and Blizzard Merger (2022)
- Microsoft and Activision Merger (2022)
- Meta and Within Merger (2021)
- NVIDIA and ARM Merger (2020, failed)
- T-Mobile and Sprint Merger (2020)
- AT&T and Time Warner (2018)
- Amazon and Whole Foods Merger (2017)
- Alaska and Virgin American Airline Merger (2016)
- Facebook and WhatsApp Horizontal Mergers (2014)
- US Airway and American Airline Merger (2013)
- Facebook and Instagram Merger (2012)
- Southwest and AirTran Merger (2011)
- The United and Continental Airline Mergers (2010)
- Delta and Northwest Airline Merger (2008)

Recommended Preparation: Intermediate Microeconomic Theory

Course Notes

The electronic copies of lecture notes, homework and solutions will be posted on the course website.

Recommended Textbooks

- Dennis Carlton and Jeffrey Perloff, Modern Industrial Organization, Pearson Addison Wesley, 2005.
- Church, Jeffery and Roger Ware, Industrial Organization: A Strategic Approach. The McGraw-Hill Companies, 2000.
- Jean Tirole, The Theory of Industrial Organization, Cambridge: MIT Press, 1988.

Note that textbooks are recommended but not required for the course. Other academic literature, regulation guidelines and supplemental reading materials will be posted on the course website.

Description and Assessments

The course evaluation consists of three homework assignments (30%), two midterms (30%), one class presentation (10%), and one final research paper (30%).

Assignment: Homework assignments will be posted on the course website. Each assignment counts toward 10 percent of the final grade. Assignments will be due at the beginning of the indicated class time. Tentative due date of each assignment is listed below.

- Homework 1 due on TBD
- Homework 2 due on TBD
- Homework 3 due on TBD

No late assignment is accepted for grading and missed assignment will be marked zero. If you have medical reason, please notify me with the doctor notes. Assignment solutions will be provided in class right after submission and posted on the course website.

Midterm Exams: There will be two midterm exams. Each midterm counts toward 15 percent of the final grade. The midterm exams will be scheduled on the following dates.

- Midterm 1 on TBD
- Midterm 2 on TBD

A missed exam will result in a zero mark. If you are unable to take the exam, please contact me before the exam. All excuse must be made for a legitimate reason (e.g., illness with a doctor's note). There will be no make-up midterm exams. However, grading weight for a missed midterm exam based on a legitimate reason will be imputed by your final report score.

Final Project: In the final project, students will practice analytical skills by conducting case studies of the recent antitrust cases. Students will explore academic literature, news articles and legal documents and apply the economic insights learned in class to conduct antitrust analyses. The final project counts for a total of 40 points toward the final grade and the assessment consists of two parts: (1) **class presentation** and (2) **a final report**. Student presentation counts for 10 percent toward final grade and the final report counts for 30 percent toward the final grade.

Each student can choose any topic in the abuse of dominant conducts we have studied in class. An ideal candidate case should be a high-profile case happened in the recent years. You may refer to lecture notes for some suggested case candidates. Each student should email me your top three choice(s) of candidate case in different anticompetitive conduct categories. After I collect everyone's preference, the final topic assignment will be posted on blackboard. The date to submit your top three case choices is

- Submission of three antitrust case choices due on TBD

- Final topic assignment and schedule will be posted on blackboard on TBD

Class Presentation: Each group will present the selected antitrust case study in class based on the assigned schedule. Each presentation will be 40 minutes long, including 5-10 minutes for audience’s questions. Before presentation, each group needs to email me the electronic version of your presentation at least 24 hours before your presentation. Also please indicate what supplies (i.e., HDMI adapter, laptop) you may need for the presentation. Students are required to attend all the presentations even if it’s not your turn to present and are encouraged to ask questions during the presentations. **Attendance will be checked each time and each attendance counts toward half bonus point of your final grade.**

Final Research Paper: Each student is required to submit an individual final report of the selected antitrust case. The report should be consistent with the presentation but shows more details and rigorous analyses. The suggested content for presentations includes but not limited to the following elements.

- Introducing the case background, parties involved, relevant markets and industry, other competitors in the market, nature of business conduct and whether there are similar conducts happened in the past.
- Conducting academic literature and news article review to understand what economic arguments are for and against the certain conduct.
- Reviewing court documents, in particular the court’s decision, plaintiff and defendant’s arguments regarding the potential harms/benefits of the target conduct. Showing the battleground, justifications of harms and/or efficiencies and conclusions.
- Applying economic theories and insights into analyzing the cases. Conducting your own analysis by forming your thoughts and presenting your findings.
- Concluding the presentation and discussing the potential concerns and limitations with the analysis.

For report submission, please email it to me before the deadline.

- Final Report due on TBD

Grading Breakdown

Course final grades will be calculated based on the following criteria.

Assessment	% Of Grade
Homework 1	10%
Homework 2	10%
Homework 3	10%
Midterm 1	15%
Midterm 2	15%

Class Presentation	10%
Final Report	30%
Total	100%

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Support Systems:

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.

Provides overall safety to USC community. dps.usc.edu