

EEIO2025

Industrial Organization

Module II, 2025-2026

Course Information

Instructor: Chen Lyu

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Office Hour: TBA

Classes:

Lectures: Tue & Fri 15:30-17:20

Venue: TBA

Course Website:

TBA

1. Course Description

1.1 Context

Course overview:

Industrial Organization (IO) studies firms' behaviors and interplay in a market context. We will explore the basic economic theories and frameworks for understanding firm behaviors like pricing, collusion, entry deterrence, merger & acquisition, vertical contracting as well as their welfare consequences.

Although the course focuses on theories, I will also discuss major anti-trust policies and practices. In the last couple of lectures, I will also provide a brief introduction to empirical (structural) IO. Basic tools from game theory will be introduced when necessary.

1.2 Textbooks and Reading Materials

Main reference:

my lecture notes

Other references:

1. Pepall, L., Richards, D., & Norman, G. (2014). Industrial organization: Contemporary theory and empirical applications (fifth edition). John Wiley & Sons.
2. Tirole, J. (1988). The theory of industrial organization. MIT press.
3. A guide to anti-trust laws in the US: <https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws>

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or NO)

1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	No
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	No
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	No
	2.2. Students will be able to apply leadership theories and related skills.	No
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	No
	3.2. Our students will practice ethics in the duration of the program.	No
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Yes (many applications and policy discussions are international)
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Yes (we study IO theories)
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes (we explore the basic tools for this)
	5.3. Our students will demonstrate competency in critical thinking.	Yes (critical thinking is important if one wants to apply theories to the real-world situations.)

2.2 Course specific objectives

Students will acquire basic yet solid analytical tools for understanding markets and industries, and know how the theories are used to guide anti-trust policies and empirical studies.

2.3 Assessment/Grading Details

Grading is based on the following:

- 1) Midterm Exam (50 points)
- 2) Final Exam (50 points)

Notes:

1. If one misses the midterm, 25 points of her/his midterm will be moved to the final. There will be no make-up exams.
2. Students must follow the class attendance policies of the school. Violations may cause consequences that I'm not able to waive. In particular, being absent for more than 30% of the classes will lead to failure of the course.

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work;

taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

AI tools requirements:

Using AI tools to complete assignments or assessments without the approval of the course instructor will be regarded as an act of academic dishonesty. Depending on the severity of the situation, penalties will be implemented in accordance with the provisions of the Peking University Graduate Student Handbook.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

3. Topics, Teaching and Assessment Schedule (Tentative)

Topic	Sub-topic
Monopoly	Monopoly pricing
Monopoly	Price discrimination
Monopoly	Designing vertically differentiated products
Monopoly	Designing horizontally differentiated products
Monopoly	Bundling and tying
Oligopoly	Cournot competition
Oligopoly	Bertrand competition with homogeneous products
Oligopoly	Bertrand competition with differentiated products
Oligopoly	Sequential-move competition

Oligopoly	Personalized pricing under competition
Midterm	Tenth class
Oligopoly	Repeated interaction and collusion
Formation of market structure	Horizontal mergers
Formation of market structure	Entry deterrence and predation
Vertical Relationship	Double-marginalization and ways to avoid it
Vertical Relationship	Vertical restraints
Empirical IO	Introduction to structural IO
Final Exam	Jan 16

4. Miscellaneous