

ECON4114 Industrial Organization and Competitive Strategy (4 units)

Department of Economics, Hong Kong University of Science and Technology

2025/2026 Spring Semester

Instructor Information

Instructor	Email	Office Location & Office Hours
Kohei KAWAGUCHI (Lecturer)	kkawaguchi@ust.hk	LSK6070, appointment basis
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Communication rule

- I set up a discord server for communicating with students. I will share the link to the server in the first lecture.
- I post teaching materials and communicate with students on the discord server.
- Discord should be the primary way of contacting me. If you send me a message by email, I may not respond to you.
- I will be responsive during the day but will be slow in the evening and weekend.
- You can make an appointment to see me in the office or zoom.

General Information

Enrollment requirement

The prerequisite of this course is ECON3014 Managerial Microeconomics or (ECON3113 Microeconomic Theory I and ECON3133 Microeconomic Theory II).

Course objectives and intended learning outcomes

This is an elective course in industrial organization and competitive strategy. It applies Economics and Econometrics reasoning to problems in competitive strategy and competition policy.

Intended Learning Outcomes (ILOs)

By the end of this course, students should be able to:

1. Apply Economics and Econometrics reasoning to real-world problems in competitive strategy and competition policy.
2. Analyze monopoly and oligopoly pricing problems using formal economic arguments.

3. Evaluate merger and acquisition issues using theory and evidence.
4. Assess competitive conduct and policy topics such as vertical restraints, horizontal agreement, monopolization, regulation, R&D, and auctions.
5. Discuss how these tools apply across industries such as pharmaceuticals, app economy, media, and online shopping platforms.

Scope (illustrative topics)

- Monopoly and oligopoly pricing
- Merger and acquisition
- Vertical restraints
- Horizontal agreement
- Monopolization
- R&D
- Regulation
- Auction

Assumed background - Introductory microeconomics, game theory, managerial economics, and econometrics.

Teaching and learning activities

The course adopts the following approaches to meet the objectives. Each topic consists of two classes. In the first class, I introduce a case study and invites students to the classroom discussion. In the second class, I present formal arguments using Economics and Econometrics. Finally, I ask students to summarize and comment on the topics covered in the lecture. I expect students to actively participate and discuss in the classroom and learn how Economics and Econometrics can help us to clarify and solve issues.

To evaluate whether the students understand how to apply Economics and Econometrics reasoning to the real-world problem, I will assign a report to discuss one of the hot topics in the corporate strategy and competition policy. The progress of the report is evaluated at several milestones.

Class Time

Lecture: Tue, Thu 15:00-16:20.

Tutorial (only when announced): Mon 18:00-18:50.

Course Materials

I post the teaching materials in the discord server.

Textbook

- Besanko, Dranove, Shanley, and Schaefer, 2015, Economics of Strategy, 7th edition.
 - This book is available online at the HKUST Library.

Recommended Materials

- Cabral, 2017, Introduction to Industrial Organization, 2nd edition.
- Belleflamme and Peitz, 2015, Industrial Organization: Markets and Strategies, 2nd edition.
- Motta, 2015, Competition Policy: Theory and Practice.

Evaluation

Approximately A range for ≥ 85 , B range for ≥ 70 , and C range for ≥ 50 .

Assessments

1. Contribution to discussion (30%) (ILO 1, 5)
 - I give every question and comment in the classroom 1 point. If it is a good question, I will give 2 points.
 - To claim credit for a question, you need to take note of i) your name, ii) your student id, iii) your question, and iv) my answer, in the relevant channel of the discord server before the start of next class.
 - The points are up to 30. The point per class is up to 2 points.
 - Success criterion: Ask relevant, clearly stated questions/comments and post them with the answer in the designated Discord channel (max 2 points per class).
2. Analytical problem sets (20%) (ILO 2, 3, 4)
 - 10% x 2
 - Monopoly pricing, oligopoly pricing, merger simulation, demand/cost estimation.
 - Success criterion: Correct answers with clear reasoning and key steps; organized and readable solutions.
3. In-class exam (20%) (ILO 1, 2, 3, 4, 5)
 - 20% x 1
 - Analytical problems and one discussion problem.
 - Success criterion: Correct solutions with clear derivations; well-reasoned discussion answer grounded in economic reasoning.
4. Report (30%)
 - I evaluate the submitted work based on the clarity of the argument, the strength of the supporting theory and evidence, the effectiveness of the proposed solution to the suggested problem, and the basic understanding of Economics and Econometrics.
 - I automatically deduct 10% if (i) a claim/fact that should reference a source is not cited, or (ii) a cited source does not exist or is not relevant.
 - The final report can be used for claiming ECON4670 credit.
 - Outline (5%) (ILO 1, 5): by the end of March. Success criterion: Review documents, summarize key information, organize sections, outline arguments.

- First draft (5%) (ILO 1, 3, 4, 5): by the end of April. Success criterion: Develop an evidence-based argument using theory and empirical reasoning.
- Submitted draft (20%) (ILO 1, 3, 4, 5): May 16. Success criterion: Clear problem definition, appropriate theory and evidence, coherent argument, feasible proposed solution, proper citations.

Assessment task summary

Assessment task	Contribution to overall course grade (%)	Due date / frequency
Contribution to discussion	30	Every class (record on Discord before next class)
Analytical problem sets	20	2 problem sets (10% x 2)
In-class exam	20	TBA
Report: Outline	5	End of March
Report: First draft	5	End of April
Report: Submitted draft	20	May 16

Schedule

The weekly schedule is tentative and may change.

- Discussion topics
 - Killer acquisition
 - Algorithmic collusion
 - DeFi
 - Collusion
 - License auction
 - Market power
 - Management practice
 - Data privacy
 - Sin goods
 - Willingness to pay
 - and so forth
- Analytical topics
 - Monopoly pricing
 - Oligopoly pricing
 - Merger simulation
 - Demand/Cost estimation

Academic Integrity

Without academic integrity, there is no serious learning. Thus, you are expected to hold the highest standard of academic integrity in the course. You are encouraged to study and do homework in groups. However, no cheating, plagiarism will be tolerated. Anyone caught cheating, plagiarism will fail the course. Please make sure adhere to the HKUST Academic Honor Code at all time (see <http://www.ust.hk/vpao/integrity/>).