

# ECON4114 Industrial Organization and Competitive Strategy (4 units)

## Syllabus

2023/2024 Spring Semester

Department of Economics, Hong Kong University of Science and Technology

### Instructor Information

| Instructor                 | Email                   | Office Location & Office Hours |
|----------------------------|-------------------------|--------------------------------|
| Kohei KAWAGUCHI (Lecturer) | kkawaguchi@ust.hk       | LSK6070, appointment basis     |
| Yi Zhang (TA)              | yzhangil@connect.ust.hk | LSK5067, appointment basis     |

### 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 for the industrial organization and competitive strategy. The learning goal of this course is to be able to apply Economics and Econometrics reasoning to problems related to competitive strategy and competition policy. The topics include monopoly and oligopoly pricing, merger and acquisition, vertical restraints, horizontal agreement, monopolization, R&D, regulation, auction, etc., across various industries such as the pharmaceutical industry, app economy, media, online shopping platforms. I assume that students are already familiar with 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 invite 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 10:30-11:50.

Tutorial (irregular): Thu 17:00-17:50.

## Course Materials

I post the teaching materials in the designated Slack workspace.

## Textbook

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

## Recommended Materials

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

## Evaluation

Students in Hong Kong are not allowed to attend the class online. Only students outside Hong Kong who got the approval in advance can do so. The online students have to voice up to ask questions and participate in the classroom discussion. I treat in-class and online students equally in the evaluation. Because the contribution to the classroom discussion shares a substantial portion of the evaluation, I recommend online students to do their best to actively participate in the classroom discussion.

1. Approximately A range for  $\geq 90$ , B range for  $\geq 80$ , and C range for  $\geq 50$ .
2. **Contribution to discussion 40%:** 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 40.
3. **Analytical problem sets 20%:** 5% x 4

4. **Report 40%:** 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. The final report can be used for claiming ECON4670 credit.

(1) Review 5%: by the end of March

- ① Review the relevant documents
- ② Summarize key information

(2) Outline 5%: by the end of April

- ① Organize sections
- ② Outline arguments

(3) First draft 5%: by the last class

(4) Submitted draft 25%: by 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/>).