

# ECON4114 Industrial Organization and Competitive Strategy

## Syllabus

2019/2020 Fall Semester, Department of Economics, Hong Kong university of Science and Technology

### Instructor Information

Instructor	Email	Office Location & Office Hours
Kohei Kawaguchi (Lecturer)	econ4114.2019@gmail.com	LSK6070, Mon 14:00-18:00, Tue 15:30-18:00, Thu 15:30-18:00
Bowen Qu (TA)	bquab@connect.ust.hk	LSK4063, Seat 11, Mon 14:30-17:30.

### Communication rule

- Contact me whenever you had anything not clear about the lecture.
- The instructor will be around the office during the above office hours for answering questions related to the class. You can just drop by the office, but it is safer for you to make an appointment in advance by mail, in order to ensure that the instructor is in the office.
- If you do not find the instructor in the office during the office hour, you can mail to the above address. Then, the instructor will come back to the office.
- You can also make an appointment by mail outside the above office hours. But then the instructor's availability is not guaranteed.
- You can ask questions by mail as well. But the instructor can be very slow to reply, especially in the evening and in the weekend.

### General Information

#### Prerequisite

ECON3014 Managerial Microeconomics; or

ECON 3113 Microeconomic Theory I & Econ 3133 Microeconomic Theory II

Students should have already learned many industrial organization concepts and basic game theory from ECON3014 or Econ 3133. Therefore, for concepts that you have already learned, I would only briefly review or teach at a relatively fast pace. With the time saved, I would cover some more advanced topics in industrial organization. You should also be comfortable with simple calculus. Students are required to conduct a group research project under my supervision.

#### Description

This course teaches student knowledge about key aspects of an industry: market, firms, and regulator. For market, we covers market structures, market power, and sources of market power. For firms, we cover

topics on pricing, quality, branding, and asymmetric information. From regulator perspective, we cover welfare, regulation, and competition policy. Students are trained to understand microeconomic models and game theory and apply them to analyse real-life market scenarios.

## Expectations and Goals

Completing this course, students are expected be able to:

- Apply frameworks and concepts in industrial organization to explain rationales for commonly observed business practices;
- Apply frameworks and concepts in industrial organization and game theory to explain reasoning behind strategic interaction among firms and predict market outcomes following changes in market environment;
- Identify distortions and inefficiency arising from misalignment of interests between firms and the society, and assess the effectiveness of regulatory and competition policies;
- With the professor's help, build a simple theoretical model in a group and apply it to analyze a current business issue.

## Class Time

Mon, Wed, 12:00-13:20.

## Course Materials

Lecture notes, HW assignment, and practice questions will be posted on the course website in canvas.

## Recommended Materials

*Industrial Organization, Markets and Strategies* (2nd edition), by Paul Belleflamme and Martin Peitz, Cambridge University Press.

## Evaluation

Your course grade is made up of four components:

**1. Midterm Exam (20%):** There will be one midterm exam. This is an in-class, closed-book, closed-note exam. The exam will cover lecture materials, problem sets and assigned reading (if any). The date and exact coverage of the midterm exam will be announced near the midterm season.

**2. Final Exam (40%):** Final exam is cumulative. The style is similar to the midterm exam. The exam is centrally administered during December 7-19 and the date and time will be announced by the ARR.

*Important note on absence from exam:* You will need a very strong justification for missing an exam. Application for a make-up exam have to be supported by valid documents. Considering the extra time that you can prepare for the exam, the level of difficulty of the make-up exam will be adjusted upward to be fair to the rest of the class.

**3. Class Participation (5%):** Every time a student asks a question during the lecture, the student gets 1 point, regardless of its quality, and each student can earn up to 5 points in total. Please self-report the question(s) you have asked on Canvas after each class. For recording your class participation, I would set up a discussion on Canvas titled "Class Participation". If you have asked a question during the class or right after the class on a day, write a remark under the discussion containing your name, student ID, and your

question. There is no participation point for just showing up the class; thus, there is no penalty in no-show, either.

**4. Problem Sets (15%):** There will be at least 9 problem sets. Each problem set counts as 3 points. Each student can earn up to 15 points. Problem sets are graded based on effort instead of accuracy. Full solutions will be posted on Canvas, and more challenging questions will be discussed in tutorial.

**5. Group Project (20%):** Students form groups of up to four members. Select a current business issue related to topic(s) covered in our course. Seek professor's approval for the topic. Once the topic is approved, write an economic model and solve the model to analyze the business issue. Professor will provide you guidance on modeling and give you hints for solving the model. [If your model is developed by the professor, the professor retains the right to the model.] You're fully responsible for writing the rest of the project. This project can be used to meet the ECON 4670 (Economics Research and Communication) requirement.

While you are strongly encouraged to conduct theoretical research and I believe you would find the process rewarding, it is an option to carry out a policy discussion or a case study.

## 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/>).

## Schedule

### Course Schedule

In total, we have 25 classes. The classes are all recorded and will be available online.

Part	Date	Topic	Reading
	9/2		
Market power and imperfect competition	9/4		Ch. 2
	9/9		Ch. 3
	9/11		Ch. 4
Sources of market power	9/16		Ch. 5
	9/18		Ch. 6
	9/23		Ch. 7
Pricing strategies and market segmentation	9/25		Ch. 8
	9/30		Ch. 9
	10/2		Ch. 10
	10/7	Public holiday	

<b>Part</b>	<b>Date</b>	<b>Topic</b>	<b>Reading</b>
	10/9		Ch. 11
	10/14	Review	
	10/16	In-class midterm-exam	
<b>Product quality and information</b>	10/21		Ch. 12
	10/23		Ch. 13
<b>Theory of competition policy</b>	10/28		Ch. 14
	10/30		Ch. 15
	11/4		Ch. 16
	11/6		Ch. 17
<b>Network economics</b>	11/11		Ch. 20
	11/13		Ch. 21
	11/18		Ch. 22
	11/20		Ch. 23
	11/25	Review	
	11/28	Backup/In-class group work	