Econ 5110: Managerial Microeconomics
Fall II 2018 Syllabus

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HKUST Business School

Time and Venue:

Duration: November 03 – December 22
L3 Time: 9:00 a.m. – 12:30 p.m., Venue: LSK 2003
L4 Time: 2:00 p.m. – 5:30 p.m., Venue: LSK 2003

Instructor:

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I strongly encourage you to use Email instead of the CANVAS messaging system to reach me. If you send me message via the CANVAS messaging system, it might take a long time before I know that you’re trying to contact me.

Course Web Site: https://canvas.ust.hk/

Course Description

Businesses exist to create and capture economic value. A business creates value by combining inputs such as labor, materials, and capital to make products and services that consumers need and desire. A business survives and thrives by charging a price that equals or exceeds the average cost of delivering the products and services that consumers value. In this course, students learn how businesses create and capture
value and how their abilities in doing so are impacted by various market forces and the strategic interaction with partners and competitors in the industry. Students also learn how businesses deal with competition differently depending on whether they are weaker or stronger than the competition. A good understanding of the economic principles that govern the distribution of value in markets can be critical to the formulation of a successful and sustainable business strategy.

**Learning Objectives:**

- Understand and apply tools, concepts, and theories from microeconomics to perform demand and supply analyses. Apply demand and supply analyses in predicting market price trends and related dynamics in competitive markets.
- Understand the key tradeoff between margin and volume of sales in pricing decisions, and how to use pricing strategies to relax the tradeoff.
- Understand competitors’ actions and reactions using basic game theoretic methods. In the context of oligopoly market, analyze the direct effects of a company’s initiatives such as changes pricing and capacity choice, and predict the strategic effect arising from competitors’ reactions.
- Understand the concept of experience goods and how experience goods sellers can gain trust of consumers through signaling, certification, and reputation building.
- Identify distortions in prices and qualities in the supply chain and how such distortions destroy value. Explore how mergers and strategic alliances may create value by correcting these distortions. Predict impacts of the merger or strategic alliance on companies directly involved and those not directly involved.

**Brief Course Outline**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required readings and preparation before class</th>
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| 1    | -Introduction
- Market Demand | Notes on Demand Estimation
Case “Medicines Co.” |
| 2    | -Demand and Supply Analysis | -Case “Saurer: The China Challenge (A)” |
| 3    | -Market Power and Pricing | Online Simulation: “Universal Rental Car – Pricing Simulation V2” |
| 4    | -Oligopoly Market and Game Theory, I | Case “To Enter or Not to Enter: Examining Competitive Environment of Supermarkets in Hong Kong” |
| 5    | -Oligopoly Market and Game Theory, II | |
| 6    | -Value Creation in Supply Chain | Case “UNIQLO’s Technology-driven Fashion Retailing” |
| 7    | -Asymmetric information
- Network Economics | Case “Zero-Fee Tours: An Irresistible Bargain or a Sinkhole?”
Case “Facebook: Facing Off Against Tencent” |
| December 22 | -Exam | |
**Case Study Method**

Case discussion preparation questions for each case are included in the case packet.

A significant portion of the teaching and learning of this course is inductive. That is, you will learn many concepts and topics outlined above largely through cases, examples and some simple models – this is the essence of the case study method. The goal is to carefully study specific business situations and decisions with the goal of extracting broader principles, which will then be available to you in a wide variety of managerial contexts.

Good cases are necessarily complex and ambiguous. In preparing for case discussions, you may find sorting through this complexity and ambiguity to be frustrating at times. The problems presented in a case discussion often do not have one correct answer. However, there will generally be a set of insights and solutions which are better than others. And it is in working through the messy details to find these insights and solutions – both in your own preparation and in class discussion – that the concepts and principles introduced in the readings and lectures will come to live.

**For case discussions to be an effective learning experience, it is essential that you come fully prepared to discuss the cases.** Finally, I ask that you deal with the cases as you find them; it is unproductive to seek outside or post-case data on the firm or the industry before the case discussion.

**How Will You Be Graded?**

The grade is made up of four components:

1. **Exam (55%)**: The final will be an in-class exam in the last week. It will be a combination of a few mini-case questions and quantitative questions.

2. **One Group Simulation Project (15%)**: A URL will be sent to the whole class. Each group should register before playing the simulation game. Detailed instructions will be provided in advance.

3. **One Group Written Analyses (15%)**: Each group will be asked to apply concept(s) learned in this course to analyze a real-life business model/practice/event. Detailed instructions will be provided in advance.

4. **Class Participation and Contribution (15%)**: Attendance, preparation, and participation are essential in this class, as in any class based on the case method. Obviously, you cannot participate if you are not present, so absence from a class
without legitimate excuses will lead to a reduced participation grade. Learning opportunities are maximized when students are actively engaged in class discussion. Active engagement means that you’re are listening carefully to the comments of other students and seeking opportunities to make comments that move the class discussion forward.

Students are allowed to discuss the case preparation with their group and strongly encouraged to do so in preparing for the more technical cases, such as the Medicines Co. Case.

The in-class participation will be evaluated primarily on (1) the motivation and effort to prepare for and contribute to class discussion, and (2) the evaluation of content based on the following:

- Relevance: Is your comment relevant to the issue raised?
- Evidence: Have you used specific facts or data from the case or other sources including actual personal experience to support the assertions that you are making?
- Advancement: Does your comment move the class discussion forward in a constructive manner?
- Logic: Is your reasoning logical? Do you apply economic concepts correctly?

What Materials Will We Use?

Readings:

The key materials are the lecture notes, cases, and additional readings posted on the course website. You should not distribute these materials outside our class. Materials in this course are designed to be self-sufficient. However, some students may still find it helpful to have supplementary readings to reinforce/verify their understanding of course materials. For that reason, the following supplementary textbooks are provided as optional references.

Optional Supplementary References:

Course Website/Additional Materials:

Additional notes, case preparation questions, and announcements will be either handed out in class or posted on the course website under “ECON 5110: Managerial Microeconomics.”

HKUST Academic Integrity and Honor Code
The HKUST Academic Integrity and HKUST MBA Honor Code apply to this course.

**Group Assignments**

Assignments must be strictly your group’s original work. You may not discuss these assignments with any person other than your group members. If your analysis contains any information from outside sources, you must properly cite the sources.

**Classroom Etiquette**

Students are expected to arrive for class on time and the instructor will start and end the class according to schedule. Students should demonstrate respect for the instructor and fellow students during the class period. Please try to avoid side conversations when your classmates raise questions or give comments.

You are welcome to bring your laptop to class in order to take notes or perform calculations as needed. However, you may not engage in distracting behavior such as using your laptop to surf the Web, to check e-mail, or to do instant-messaging.

**Detailed Course Outline**

This detailed course structure is designed to help you organize what you learn into a coherent framework for managerial microeconomics. However, it is important to recognize upfront that this class may not be as perfectly organized as the outline suggests. Instead, managerial economics is complicated throughout, and we may adjust the detailed topics or learn new tools throughout the course to answer new questions as they arise.

**Optional Pre-Readings:**

Students who have not been exposed to microeconomics at all or would like to learn more mathematical analysis are encouraged to read up on the following background materials (notes available in the notes pack and on the course website):

1. “A Note on Cost Functions and Cost Curves”;
2. “A Note on Demand Functions and Demand Curves”;
3. “A Note on Market Equilibrium and Competitive Market Equilibrium” ;
Week 1:

a) Introduction

b) Demand

Understanding Customer Value, Demand Curve, and Price Elasticity
Demand Estimation (Customer Value Method)

Case:
The Medicines Company (HBS Case: 502-006)
(You are encouraged to prepare for this case with your group)

Optional Reading:
Notes on Demand Estimation
Png: Chapter 2, Chapter 3

Week 2: Free/Easy Entry Market

Firm’s Supply Decisions: Costs and Capacity
From Firm Supplies to Market Supply
Demand-Supply Analysis

Optional Reading:
Png: Chapter 4, Chapter 5; Carlton, Perloff: Chapter 3

Week 3:

a) Market Power and Pricing

Cost-based Pricing: Markup and Price Cost Ratio; breakeven analysis
Value-based Pricing: e.g. Customer Value Model
Implication of Profit Maximization: Marginal Revenue = Marginal Cost

Optional Reading:
Png: Chapter 8; Carlton, Perloff: Chapter 4
b) **Price Discrimination and Pricing Structure**

Direct Segment Price Discrimination  
Indirect Segment Price Discrimination  
Two-part Tariffs  
Subscription contracts

**Case:**  
*Saurer: The China Challenge (A)* (IMD Business Case IMD399)

**Optional Reading:**  
Png: Chapter 9; Carlton, Perloff: Chapter 9

**Week 4: Oligopoly Markets and Game Theory, I**

Game theory: Theory of Strategy  
Price and Quantity/Capacity Competition  
Direct Effects and Strategic Effects  
Competition in the Short-run and Long-run

**Simulation:**  
*Universal Rental Car – Pricing Simulation V2* (HBS Simulation: 7005)

**Optional Reading:**  
Png: Chapter 10; Carlton, Perloff: Chapter 6

**Week 5: Oligopoly Markets and Game Theory, II**

Competition for First-Mover Advantage  
Collusive Pricing  
Predatory Conducts

**Case:**  
*To Enter or Not to Enter: Examining Competitive Environment of Supermarkets in Hong Kong* (HKUST Business Case)

**Optional Reading:**  
Carlton, Perloff: Chapter 5

**Week 6: Value Creation in Supply Chain**

Problem of Double Markup  
Other externalities in Supply Chain  
Incomplete Contract and Hold-up Problem

**Case:**
UNIQLO’s Technology-driven Fashion Retailing, (HKUST Business Case)
Optional Reading:
Carlton, Perloff: Chapter 12

Reviewing of key concepts and practicing with sample exam questions

Week 7:
Topic 1: Asymmetric information and Reputation

Adverse Selection and Moral Hazard
Experience Goods

Case:
Zero-Fee Tours: An Irresistible Bargain or a Sinkhole? (ACRC Case: HKU972)

Optional Reading:
Carlton, Perloff: Chapter 13

Topic 2: Network Economics

Case:
Facebook: Facing Off Against Tencent (ACRC Case: HK1103)

Week 8: Exam

A three-hour final exam is scheduled at 2:00 p.m. - 5:00 p.m. on December 22.