Econ 5110: Managerial Microeconomics  
Fall 2017 Syllabus  
Xinyu Hua

**Time and Venue:**

L1 Time: 9:00–12:30, Tuesdays, Aug. 29 – Oct. 10  
Venue: LSK 2003

L2 Time: 13:30–17:00, Tuesdays, Aug. 29 – Oct. 10  
Venue: LSK 2003

*Both sections will have exam on Oct 17 (13:30-16:30, L1 in LSK 2001 and L2 in LSK 2003).

**Instructor:**

Xinyu Hua ([xyhua@ust.hk](mailto:xyhua@ust.hk); 2358-7609; LSK 6076)  
**Email is always a great way to reach me.**

**Office Hours:** Monday mornings and afternoons, or by appointment

**Course Web Site:** canvas.ust.hk

**Course Description and Learning Objectives**

Warren Buffet once said: “When an industry with a reputation for difficult economics meets a manager with a reputation for excellence, it is usually the industry that keeps its reputation intact.” Many managers fail to appreciate the numerous ways in which economic behavior and competition can destroy profitability. This course focuses on understanding individual economic behavior, competition, and market characteristics that are relevant to business and management.

- Apply demand and supply analysis in predicting market price and related dynamics in competitive markets.
- Analyze key trade-offs in pricing, and compare different pricing strategies according to industry or market conditions.
Predict competitors' actions and reactions using basic game theoretic methods. In the context of oligopoly market, analyze the direct effect and the strategic effect of various business decisions.

Explain the impacts of asymmetric information on market efficiency.

Be able to communicate microeconomic analysis in business decisions to multiple stakeholder groups.

Work effectively within a team environment for solving both technical and non-technical problems.

**Brief Course Outline**

The table below gives an approximate outline of the course.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required reading and preparation before class</th>
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<tr>
<td></td>
<td><strong>Market Demand</strong></td>
<td>Background Notes on Demand Estimation</td>
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<td>Case on “Medicines Co.”</td>
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<td><strong>Free/Easy Entry Market</strong></td>
<td><strong>Group Assignment 1 due</strong></td>
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<td>--Demand and Supply Analysis</td>
<td>Mini-Case on “Hurricane Sandy: Supply, Demand…”</td>
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<td>Case on “Subsidies and the Global Cotton Trade”</td>
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<td><strong>Monopoly Market</strong></td>
<td>Case on “Uber Pricing Strategies” (pages 3-8 only)</td>
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<td>--Pricing and Price Discrimination.</td>
<td>Case on “T-Mobile in 2013: The Un-Carrier”</td>
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<td><strong>Oligopoly Market I: Competitive Advantage</strong></td>
<td><strong>Group Assignment 2 due</strong></td>
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<td>Background Notes on “Industry and Firm Analysis”</td>
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<td>Case on “Revitalizing Dell”</td>
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<td>Case on “Enterprise Rent-A-Car”</td>
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<td><strong>Oligopoly Market II: Game Theory (Competition and Cooperation)</strong></td>
<td>Case on “Coffee Wars in India: Café Coffee Day”</td>
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<td><strong>Oligopoly Market III: Strategic Decisions</strong></td>
<td><strong>Group Assignment 3 due</strong></td>
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<td>Online Simulation on Universal Rental Car</td>
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<td><strong>Oligopoly Market IV: Strategic Decisions with Asymmetric Information</strong></td>
<td>Case on “The Zero-Fee Tours (in Hong Kong)”</td>
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<td><strong>Exam</strong></td>
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Remark: It is important to recognize upfront that this class cannot be as perfectly organized as the outline suggests. This is not accounting or statistics which begin with core, universally accepted principles, and then build to harder problems. Instead, managerial economics is complicated throughout, and we may adjust the detailed topics or learn new tools throughout the course to answer new questions that arise.

**Study Groups and Case Study Method**

You are encouraged to follow the grouping made by the MBA office. The groups are responsible for working on the cases and the group assignments.

The approach toward teaching and learning managerial economics is primarily 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. The problems presented in the case discussion may 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 alive and be enriched for you.

For a case discussion to be a valuable learning experience, it is essential that you come prepared to discuss the cases and readings assigned for that class. Finally, I ask that you deal with the cases as you find them; do not seek outside or post-case data on the firm or the industry.

How Will You Be Graded?

The grade is made up of five components:

1. Final Exam (50%): The final will be an in-class exam on Oct 17. It will be a combination of a few mini-case questions.

2. One Group Written Assignment (10%): On Sep 5, All groups please submit a demand curve constructed based on the case “Subsidies and the Global Cotton Trade,” and some other questions to be distributed.

3. One Group Written Case Analysis (15%): On Sep 19, Some groups will submit a written report on the case “Revitalizing Dell”, and the other groups will submit the report on the case “Enterprise Rent-A-Car”, based on the case preparation questions on the course site. The report should be in PowerPoint format and has no more than 20 slides. During the class on Sep 19, two groups will be selected to make 20-min presentation each.

4. One Group Simulation Project (10%): In Week 5, a URL will be sent to the whole class. Each group should register before playing the simulation game. Please finish the game by Oct. 2 (before 4pm). The detailed instructions will be distributed.

5. Class Participation and Contribution (15%): Attendance, preparation, and participation are essential in this class, as in any class based on the case method. Learning opportunities are maximized when students are actively engaged in 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. Class participation will be evaluated also on (1) the effort and incentives to prepare and to participate in class discussion, and (2) the evaluation of content:
Relevance: Are your comments related to the case and to the comments of others?
Advancement: Does your comment move the class discussion forward?
Fact-Based: Have you used specific data from the case, from readings, or from personal experience to support the assertions that you are making?
Logical: Is your reasoning logical? Do you use economic concepts correctly?

What Materials Will We Use?

The key materials are the lecture notes, cases, and additional readings. Due to copyright, you should not distribute these materials outside our class for any education or business purpose. The following books are just for reference:


HKUST Honor Code and Classroom Etiquette

The HKUST Academic Integrity and Honor Code apply to this course. The complete text of the Academic Integrity and Honor Code is available on the websites: http://www.ust.hk/vpaaos/integrity

In particular, the assignment 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 cite the sources.

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 or ipad to class. However, you may not engage in distracting behavior such as surfing the Web or instant-messaging.

Course Outline (Details)

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 (available on the course website):

1. “A Note on Cost Functions and Cost Curves” (Optional)
2. “A Note on Demand Functions and Demand Curves” (Optional)
3. “A Note on Market Equilibrium and Competitive Market Equilibrium” (Optional)
Weeks 1: Introduction and Demand

Customer Value, Demand Curve, Elasticity, and Factors Affecting Demand
Demand Estimation (Customer Value Method)

Case:
Medicines Co. (HBS)

Reading:
Course Site: Notes on Demand Estimation
Png: Chapter 2, Chapter 3 (optional)

Weeks 2: Free/Easy Entry Market

Firm’s Supply Decisions: Costs and Capacity
Demand-Supply Analysis

Cases:
Hurricane Sandy: Supply, Demand, and Appropriate Responses (HBS)
Subsidies and the Global Cotton Trade (Kellogg)

Reading:
Png: Chapter 4 (pp.105-121, pp.125-128), Chapter 5 (optional)

Week 3: Monopoly Market -- Pricing and Price Discrimination

Uniform Pricing Methods
--Marginal Revenue and Marginal Costs (Excel)
--Value-based Pricing: e.g. Customer Value Model
--Cost-based Pricing: Markup and Price Cost Ratio

Direct Segment Price Discrimination
Indirect Segment Price Discrimination

Cases:
Uber Pricing Strategies and Marketing Communications (UV)
T-Mobile in 2013: The Un-Carrier (HBS)

Reading:
Png: Chapter 8 (pp.267-277, 288-289), Chapter 9 (pp.313-323, 327-340)
(optional)

Week 4: Oligopoly Market I -- Competitive Advantage

Four Types of Competitive Advantage:
--Market Power
--Niche Advantage
--Benefit Advantage
--Cost Advantage
Case and Group Presentation 1: 
*Revitalizing Dell* (HBS)

Case and Group Presentation 2: 
*Enterprise Rent-A-Car* (Kellogg)

**Reading:**
Course Site: Notes on Industry and Firm Analysis  
BDSS: Chapter 8 (pp.258-264) and Chapter 9 (optional)

**Week 5: Oligopoly Market II -- Game Theory (Competition and Cooperation)**

Game theory and Nash Equilibrium  
Simultaneous Games and Cooperation  
Sequential Games and Entry Threat

**Case:**  
*Coffee Wars in India: Café Coffee Day 2013* (HBS)

**Reading:**  
Png: Chapter 10 (pp.349-357, 367-381) (optional)

**Week 6: Oligopoly Market III -- Strategic Decisions**

Price, Quantity/Capacity, Advertising, New Product Introduction, etc.  
Direct Effects and Strategic Effects

**Tools:**  
Spreadsheets for Solving Oligopoly Price or Quantity Competition

**Simulation:**  
*Simulation on Universal Car Rental* (HBS)

**Reading:**  
BDSS: Chapter 5 (pp.180-192), Chapter 7 (Optional)

**Week 7: Oligopoly Markets IV -- Strategic Decisions with Asymmetric Information**

Asymmetric Information and Quality  
Signaling  
Reputation

**Case:**  
*The Zero-Fee Tours (in Hong Kong)* (HKU)

**Reading:**  
Png: Chapter 12 (pp.431-442) (optional)