Econ 5110: Managerial Microeconomics
Fall 2019 Syllabus (Tentative)

Xinyu Hua

**Time and Venue:**

L1 Time: 9:30–13:00, Tuesdays, Aug. 27 – Oct. 8
Venue: LSK 2003

L2 Time: 14:00–17:30, Tuesdays, Aug. 27 – Oct. 8
Venue: LSK 2003

*Both sections will have the exam on Oct 15 (14:00-17:00, L1 in LSK 2001 and L2 in LSK 2003).*

**Instructor:**

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

**Office Hours:** Monday mornings 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.

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<tr>
<th>Week</th>
<th>Topic</th>
<th>Required reading and preparation before class</th>
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<tr>
<td>1</td>
<td><strong>Introduction.</strong></td>
<td><strong>Market Demand</strong></td>
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<td>Background Notes on Demand Estimation</td>
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<td>Case on “Medicines Co.”</td>
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<td>2</td>
<td><strong>Free/Easy Entry Market</strong></td>
<td><strong>Group Assignment 1 due</strong></td>
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<td></td>
<td>--Demand and Supply Analysis</td>
<td>Mini-Case on “Hurricane Sandy”</td>
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<td><strong>Monopoly Market</strong></td>
<td>Case on “Subsidies and the Global Cotton Trade”</td>
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<td>3</td>
<td><strong>Monopoly Market (cont’d)</strong></td>
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<td></td>
<td>--Pricing and Price Discrimination.</td>
<td>Case on “T-Mobile in 2013: The Un-Carrier”</td>
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<td>4</td>
<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” (and Case Flash Forward)</td>
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<td>Case on “Enterprise Rent-A-Car”</td>
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<td>5</td>
<td><strong>Oligopoly Market II: Game Theory</strong></td>
<td><strong>Group Assignment 3 due</strong></td>
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<td>Brief Case on “CNS Worldwide (Cloud)”</td>
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<td>Case on “Netflix Inc.: Disruptor Faces Disruption”</td>
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<td>6</td>
<td><strong>Oligopoly Market III: Strategic Decisions</strong></td>
<td>Online Simulation on Universal Rental Car</td>
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<td>7</td>
<td><strong>Oligopoly Market IV: Strategic Decisions with Asymmetric Information</strong></td>
<td>Case on “Rural Taobao”</td>
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<td>8</td>
<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. Managerial economics is complicated throughout, and we may adjust the detailed topics or learn new tools throughout the course.

**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 (but not necessarily new). 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.

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 15**. It will be a combination of a few mini-case questions.

2. **One Group Written Assignment (10%)**: On **Sep 3**, all groups please submit answers to a few questions (to be distributed).

3. **One Group Written Case Analysis (15%)**: On **Sep 17**, some groups will submit a written report on the case “Revitalizing Dell” (and the file of Case Flash Forward), and the other groups will submit their 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 17, 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. Please finish the game by **Sep 30 (before 4pm)** and submit a brief summary on **Oct 1** (instructions to be distributed).

5. **Active Class Participation and Contribution (15%)**: Attendance, preparation, and participation are essential in this class, as in any class based on the case method. 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. You should not distribute these materials outside our class. The following books are just for reference:

**Png**: *Managerial Economics*, by Ivan Png, Pearson, Prentice Hall.


**HKUST Honor Code and Classroom Etiquette**

The HKUST Academic Integrity and Honor Code apply to this course. In particular, the assignments must be strictly your group’s original work. And you should not get any course material from the classes in previous years.

**Students are expected to arrive for class on time and the instructor will start 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 or would like to learn more mathematical analysis are encouraged to read up on the following materials (available on the course website):

1. “A Note on Demand Functions and Demand Curves” (Optional)
2. “A Note on 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
A Summary of Basic Concepts
Png: Chapter 2 (optional) and Chapter 3 (optional)

**Weeks 2: Free/Easy Entry Market**

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

**Mini-Case**: *Hurricane Sandy* (HBS)
**Case**: *Subsidies and the Global Cotton Trade* (Kellogg)
**Reading**: Png: Chapter 4 (optional) and Chapter 5 (optional)
Week 2&3: Monopoly Market -- Pricing and Price Discrimination

Uniform Pricing Methods
--Marginal Revenue and Marginal Costs
--Value-based Pricing v.s. Cost-based Pricing

Direct Segment Price Discrimination
Indirect Segment Price Discrimination (Versioning; Two-Part Tariffs)

Case: T-Mobile in 2013: The Un-Carrier (HBS)
Reading: Png: Chapter 8 (optional) and Chapter 9 (optional)

Week 4: Oligopoly Market I – Competitive Advantage

Market Power, Niche Advantage, Benefit Advantage, Cost Advantage

Cases and Presentations: Revitalizing Dell and Case Flash Forward (HBS)
Enterprise Rent-A-Car (Kellogg)
Reading: Course Site: Notes on Industry and Firm Analysis
BDSS: Chapter 8 (optional) and Chapter 9 (optional)

Week 5: Oligopoly Market II -- Game Theory (and Long Run Competition)

Game theory and Nash Equilibrium
Simultaneous Games and Cooperation in Long Run Competition
Sequential Games and Entry Threat in Long Run Competition

Cases: CNS Worldwide (HBS)
Netflix Inc.: Disruptor Faces Disruption (Ivey)
Reading: Png: Chapter 10 (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.170-182 (optional)

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

Asymmetric Information and Quality
Signaling
Reputation

Case: Rural Taobao (HBS)
Reading: Png: Chapter 12 (optional)