

Econ 511: Managerial Microeconomics
Fall 2009 Syllabus (Tentative)

Department of Economics
Business School
HKUST

Xinyu Hua

Time and Venue:

L1 Time: 9:00 – 12:30, Mondays, Oct. 26 – Dec. 14
Venue: 6568

L2 Time: 14:00 – 17:30, Mondays, Oct. 26 – Dec. 14
Venue: 6568

***Note that both sections will have exam during 9:30-12:30 on Dec. 14.**

Instructor:

Xinyu Hua (xyhua@ust.hk ; 2358-7609; Room 2334)
Email is always a great way to reach me.

Office Hours: By appointment

Course Web Site: <http://lmes2.ust.hk>

Course Description and 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 competition can destroy profitability. This course focuses on understanding individual economic behavior, competition, and market characteristics that are relevant to business and management.

The course presents tools, concepts, and perspectives from economics for performing industry analysis, demand and supply analysis, and competitive analysis. It also analyzes pricing and other business decisions.

Learning Outcomes:

- Understand and use tools, concepts, and theories from microeconomics in performing industry and demand analysis.
- Apply demand and supply analysis in predicting market price and related dynamics in competitive markets.
- Understand the key trade-offs between high margin and high volume of sales in pricing decisions, and choose 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 a firm's decision such as pricing, quality choice, timing, and scope of the firm.

Brief Course Outline

The table below gives an approximate outline of the course. Readings from the case pack are marked with (CP).

	Topic	Required reading and preparation before class
Week 1	Introduction. Market Demand	CP: Notes on Demand Estimation CP: Case on “Medicines Co.”
Week 2	Market Structure Free Entry Market (Perfect Competition) Demand and Supply Analysis	CP: Notes on Demand-Supply Analysis CP: Case on “Alusaf Project” Course Site: Data on “Alusaf Project”
Week 3	Monopoly Market Pricing and Price Discrimination.	CP: Case on “Virgin Mobile”
Week 4	Industry Analysis and Competitive Advantage Competitive Analysis	CP: Case on “Matching Dell” CP: Article on “Dell”
Week 5	Oligopoly Market	CP: Mini-Case on “Nopane Advertising” Simulation on “Universal Car Rental”
Week 6	Uncertainty and Asymmetric Information --Strategic Timing. --Quality and Signaling --Herding (Optional)	CP: Case on “Blockbuster”
Week 7	Scope of the Firm --Horizontal Mergers --Vertical Integration.	CP: Article on “Office Depot and Staple”
Week 8	Exam.	

Study Groups and Case Study Method

Each group should comprise of no fewer than four but no more than eight people. Self-organization of groups is encouraged. The groups are responsible for working on the cases and the simulation project.

Each major case discussion will take about 90min. In Week 2 and Week 3, one group will be selected to make 30min presentation and share their analysis; then in the remaining 60min the whole class will have more detailed discussions. In other weeks, there is no group presentation. By Nov. 21, each group should finish the online simulation on “Universal Car Rental”.

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.

About 50% of course time will be spent on case discussions, with the remainder made up of 6-7 lectures that lay out the key class concepts and models. For each course topic there are a set of required readings, listed in the Course Outline.

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 four components:

1. Final Exam (55%): The final will be an in-class exam in the last week (**Dec. 14**). It will be a combination of a few mini-case questions and quantitative questions related to the concepts and topics in our course.

2. One Group Written Case Analysis (15%): Some groups will submit written analysis on the case “Alusaf Project” in Week 2 and the other groups will submit their analysis on the case “Virgin Mobile” in Week 3. We will make draws in Week 1. The

main text should have no more than 4 pages. During the class discussion, one group will be selected to make 30min presentation on the case.

3. One Group Simulation Project (15%): In Weeks 4-5, an URL will be sent to the whole class. Each group should register before playing the simulation game. Please finish the game by Nov. 21. The detailed instructions will be distributed in class.

4. Class Participation (15%): Attendance, preparation, and participation are essential in this class, as in any class based on the case method. Obviously, you can not participate if you are not present, so absences 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.

Class participation will be evaluated primarily on (1) the effort and incentives to prepare and to participate in class discussion, and (2) the evaluation of content based on the following:

- 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?

Readings:

The key materials are the lecture notes, cases, and additional readings. **Due to copyright, only hard copies will be distributed.** And you should not distribute these materials outside our class for any education or business purpose.

The textbook for reference is *Managerial Economics*, Asia-Pacific Edition, by Ivan Png, 2005, Pearson, Prentice Hall.

Course Website/Additional Materials:

Additional notes, case preparation questions, and announcements will be posted in the course website under "ECON 511: Managerial Microeconomics." **You are responsible for checking this site and downloading these materials, as some of them will not be handed out in class.** In addition, feel free to use the discussion board to communicate with your classmates. I will also post announcements to provide clarification on issues that come up.

HKUST Academic Integrity and Honor Code

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/vpao/integrity>

http://www.ust.hk/vpao/conduct/good_learning_experience.pps

Group Assignment

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 properly cite the sources.

Attendance

You are expected to attend each class and participate in discussion. Please notify the instructor ahead of time if you will be unable to attend any particular class.

Classroom Etiquette

Students are expected to arrive for class on time and the instructor will start and end the class according to schedule. Your participation grade may be reduced in case of significant delays. Students are expected to remain in the classroom for the duration of the class.

Students should demonstrate respect for the instructor and fellow students during the class period. You are welcome to bring your laptop to class in order to take notes or perform calculations on your own computer. 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. For general guidelines about proper classroom behavior, please consult: http://www.ust.hk/vpao/conduct/good_learning_experience.pps

Course Outline (Details)

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 can not 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 and applications. 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.

Review 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” ;

Weeks 1:

a) Introduction

b) Demand

Understanding Customer Value and Demand Curve
Demand Estimation (Data Analysis; Customer Value Method)

Case:

Medicines Co. (HBS)

Reading:

CP: Notes on Demand Estimation
Png: Chapter 2, Chapter 3 (optional)

Weeks 2:

a) Economy of Scale and Market Structure

Reading:

Png: Chapter 7 (pp.231-246) (optional)

b) Free Entry Market

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

Case:

The Alusaf Hillside Project (HBS)

Reading:

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

Week 3:

a) Monopoly Market

Pricing Methods

- Marginal Revenue and Marginal Costs (Excel)
- Markup and Price Cost Ratio
- Breakeven Analysis
- Customer Value Model

Reading:

Png: Chapter 8 (pp.267-277, 288-289) (optional)

b) Price Discrimination

Direct Segment Price Discrimination
Indirect Segment Price Discrimination

Case:

Virgin Mobile (HBS)

Reading:

Png: Chapter 9 (pp.313-323, 327-340) (optional)

Week 4:

a) Industry Analysis and Competitive Advantage

Five Forces (Not to be discussed in class)

Four Types of Competitive Advantage:

- Market Power
- Niche Advantage
- Benefit Advantage
- Cost Advantage

Case:

Matching Dell (HBS)

Reading:

CP: Notes on Industry Analysis and Competitive Advantage

b) Competitive Analysis (Strategic Thinking)

Game theory: Theory of Strategy
Nash Equilibrium
Simultaneous Games: Prisoners' Dilemma and Applications
Sequential Games

Reading:

Png: Chapter 10 (pp.349-357, 367-381) (optional)
CP: "The right game: Use game theory to shape strategy,"
Adam M. Brandenburger and Barry J. Nalebuff,
Harvard Business Review, July-August, 1995 (optional)

Week 5:

a) Oligopoly Market

Price and Quantity/Capacity Competition
Direct Effects and Strategic Effects
Strategic Preemption

Tools:

Spreadsheets for Solving Oligopoly Price or Quantity Competition

Cases:

Nopane Advertising (HBS)
Simulation on Universal Car Rental (HBS)

Reading:

CP: Chapter 11 on Oligopoly (Optional)

Week 6:

a) Uncertainty and Strategic Timing

Example:

Phillips CD Introduction (HBS)

b) Asymmetric Information, Quality, and Signalling

Case:

Blockbuster (Kellogg)

Reading:

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

Week 7:

a) Horizontal Mergers

Reasons for Horizontal Mergers
Strategic Effects of Horizontal Mergers

b) Vertical Integration

Traditional Reasons for Vertical Integration
Double Markup Problem and Solutions
Holdup Problem and Solutions (for reference only)

Article:
Office Depot and Staple

Week 8:

Exam