

# Economic Principles of Managerial Decisions

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## Course Objectives

The goal of this course is to help you use economic principles to think *strategically* about business decisions. The course is structured in two parts. The first part shall focus solely on understanding microeconomic ideas (such as the principal-agent problem) and using this understanding to make better managerial decisions. Readings will detail each concept; a case elucidating the application of that concept will then be considered. Topics will include adverse selection, game theory, price discrimination, strategic commitment, barriers to entry, and network effects.

The second part of the course considers effective strategic responses to challenges posed by the legal environment. Readings will provide background on various fields of law, such as antitrust and international trade, as well as strategic options available to managers in dealing with challenges in these areas. Cases will emphasize applying knowledge of the legal environment as well as sound business practices to successfully and ethically deal with the challenges posed. Topics will include regulation, antitrust, intellectual property, fiduciary duty, and liability.

## Leadership and This Course

The Texas MBA and BBA programs are designed to develop influential business leaders. These programs have identified four fundamental and broad pillars of leadership: knowledge and understanding, communication and collaboration, responsibility and integrity, and a worldview of business and society.

In this course, you will gain an understanding of how markets operate in the presence of real-world frictions such as hidden information, transaction costs, and barriers to entry. The second part of the

course deals with many of the legal and ethical challenges facing today's corporate leaders, and it is hoped that you will gain not only an understanding of the interaction between business leaders and society at large, but also how to interact responsibly and ethically in such contexts.

## Course Materials

The only required material for this course is the course reader.

## Grading

Your grade in the course is based on class participation (25%), problem sets (10%), a final project (15%), a midterm (15%), and a final exam (35%).

### In-Class Contributions

The key to effective classroom participation is *engagement*. I expect you to engage the material, your classmates, and the faculty with *vigor*. The quality of an individual's participation is more important than the quantity. Characteristics of valuable classroom comments include the following:

- Comments that are clearly **related to the case** and to the comments of others,
- Comments that **clarify and highlight the important aspects** of earlier comments,
- Comments that **synthesize** the main components of the discussion,
- Comments that **support the collective learning process** of the class,
- Comments that **go beyond the commonplace** and bring fresh analytic perspectives.

Class sessions should be viewed as business school analogs of professional business meetings. As such, you are expected to attend and be well prepared for every class session; in particular, you should have read and be prepared to discuss *in detail* the reading material assigned for each class. If you must miss a class due to an emergency, please send the professor a note of explanation as a courtesy prior to class. Absences are otherwise regarded as unexcused and will be reflected negatively in your class participation grade.

### Problem Sets

A small number of problem sets will be handed out throughout the quarter. You are encouraged to work together; however, you are expected to write up your own solutions. Please also note on your problem set with whom you worked.

### Final Project

The final project is a required study-group assignment that fills several unique objectives of the course. It allows you to acquire a deeper understanding of a specific organization and industry of

your choice. It lets you see up-close the impact of the legal environment on organizational performance. It gives you an opportunity to practice various forms of analysis developed in the course in a setting of special interest to you. The project also encourages you not only to reason within, but also to extend beyond, the frameworks used in the course.

The project should focus on a particular challenge within the legal environment faced by a company or nonprofit organization, although your analysis may include other strategic challenges facing the firm as well. You may select a company for which a member of your study group has worked. It is strongly encouraged that you make contacts in the organization whose problem you study. Broad topics of interest can usually be recast at the company or organizational level. For instance, “patent law” by itself is much too broad a topic for the project, but a study of how a particular semiconductor company should address the infringement of its patents by another firm is a good topic, depending on the availability of information and access to the company or industry.

The project involves two phases:

- A. Phase A consists of topic selection and culminates in a one-page prospectus due in class on April 13<sup>th</sup>. The prospectus should provide a concise overview of the topic, list the main frameworks you plan to use in your analysis of the issue, and present strategic alternatives facing the company or industry. The prospectus does not require you to choose and implement a strategy. You will not be graded on your prospectus, only your final paper.
- B. Phase II of the project is the final report and is due by 5 p.m. on May 9<sup>th</sup>. The final report should do the following: expand on the overview in the prospectus, apply frameworks that help understand the environment in which the issue or problem is located, specify a strategic alternative, describe its implementation, and explain why it is likely to be more effective than other possible strategies.

The paper should be written in a style suitable for thoughtful executives who are generally familiar with the situation but who are relying on your analysis of the business environment. The group project is not to exceed 20 double-spaced pages. Obviously, every member of a study group will receive the same grade on the group project. Some outstanding past study group projects will be made available on the class webpage.

## **Midterm and Final**

The midterm and final will both consist of the analysis of cases using the principles and frameworks introduced in the class.

## **McCombs Classroom Professionalism Policy**

The highest professional standards are expected of all members of the McCombs community. The collective class reputation and the value of the Texas MBA/BBA experience hinges on this. You should treat the Texas MBA/BBA classroom as you would a corporate boardroom.

Faculty are expected to be professional and prepared to deliver value for each and every class session. Students are expected to be professional in all respects.

The Texas MBA classroom experience is enhanced when:

- **Students arrive on time.** On time arrival ensures that classes are able to start and finish at the scheduled time. On time arrival shows respect for both fellow students and faculty and it enhances learning by reducing avoidable distractions.
- **Students display their name cards.** This permits fellow students and faculty to learn names, enhancing opportunities for community building and evaluation of in-class contributions. Please contact me if you need a name card.
- **Students minimize unscheduled personal breaks.** The learning environment improves when disruptions are limited.
- **Students are fully prepared for each class.** Much of the learning in the Texas BBA and MBA programs takes place during classroom discussions. When students are not prepared they cannot contribute to the overall learning process. This affects not only the individual but their peers, who count on them, as well.
- **Students respect the views and opinions of their colleagues.** Disagreement and debate are encouraged. Intolerance for the views of others is unacceptable.
- **Laptops and electronic tablets are closed and put away.** When students are surfing the web, responding to e-mail, instant messaging each other, and otherwise not devoting their full attention to the topic at hand they are doing themselves and their peers a major disservice. Those around them face additional distraction. Fellow students cannot benefit from the insights of the students who are not engaged. Students with real needs may not be able to obtain adequate help if faculty time is spent repeating what was said in class. There are often cases where learning is enhanced by the use of laptops in class. Faculty will let you know when it is appropriate to use them. In such cases, professional behavior is exhibited when misuse does not take place. If you feel being able to use an electronic device during class significantly enhances your learning experience (e.g., to electronically take notes), please contact me.
- **Phones and wireless devices are turned off.** We have all heard the annoying ringing in the middle of a meeting. Not only is it not professional, it cuts off the flow of discussion when the search for the offender begins. When a true need to communicate with someone outside of class exists (e.g., for some medical need) please inform the professor prior to class.

Remember, you are competing for the best faculty McCombs has to offer. Your professionalism and activity in class contributes to your success in attracting the best faculty to this program.

## Academic Dishonesty

Academic dishonesty is not tolerated. Such acts damage the reputation of the school and the degree and demean the honest efforts of the majority of students. The minimum penalty for an act of academic dishonesty will be a zero for that assignment or exam.

The responsibilities for both students and faculty with regard to the Honor System are described on the school website. As the instructor for this course, I agree to observe all the faculty responsibilities described therein. As a Texas student, you agree to observe all of the student responsibilities of the Honor Code. If the application of the Honor System to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification; please do so if anything is unclear.

As specific guidance for this course, you should consider the *writing* of all examinations (i.e., the midterm and final) to be an individual effort. Group *preparation* for examinations is acceptable and encouraged. Homework assignments (except the final project) are to be turned in individually, but I encourage you to work together in answering the questions. You should, however, develop your own answer and not cut and paste the work of others. Regarding the final project, *plagiarism* is completely unacceptable: if you have any questions regarding what constitutes plagiarism, please talk to me.

## Students with Disabilities

Upon request, the University of Texas at Austin provides appropriate academic accommodations for qualified students with disabilities. Services for Students with Disabilities (SSD) is housed in the Office of the Dean of Students, located on the fourth floor of the Student Services Building. Information on how to register, downloadable forms, including guidelines for documentation, accommodation request letters, and releases of information are available online at <http://deanofstudents.utexas.edu/ssd/index.php>. Please do not hesitate to contact SSD at (512) 471-6259, VP: (512) 232-2937 or via email if you have any questions.

## Schedule

### Introduction

#### SESSION 1: INTRODUCTION

This session introduces the goals of the class and the how to use the ideas of economists to make more profitable managerial decisions. We will introduce many of the issues discussed in-depth later in the semester by considering the challenges Netflix faces with respect to entering a new market, creating a new platform for the distribution of media, how to use its first-mover advantage, and using its network to its advantage.

**Case:** Netflix

**Reading:** *Competitive Solutions: The Strategist's Toolkit*, pp. 9-34

### Game Theory

#### SESSION 2: SIMULTANEOUS GAMES

This session introduces students to the ideas of game theory and their application to managerial decisionmaking. We introduce the solution concepts of iterated dominance and Nash equilibrium and consider how to use them to explain business outcomes such as oligopoly pricing decisions.

**Case:** Airbus and Boeing: Superjumbo Decisions

**Reading:** *The Art of Strategy*, pp. 102-108

*Games and Information*, pp. 9-32

#### SESSION 3: SEQUENTIAL GAMES

This session builds upon Session 2 by considering sequential games. Many times, games between firms take place sequentially, with one firm having the chance to move before another, such as when deciding to enter new markets or introduce new products. The case exemplifies decisionmaking in such an environment and shows the power of “backward induction” in managerial decisionmaking.

**Case:** Philips' Compact Disc Introduction (B)

**Reading:** *The Art of Strategy*, pp. 33-47

*Games and Information*, pp. 35-44, 83-86

Half-Truth of First-Mover Advantage

#### SESSION 4: REPEATED GAMES AND COLLUSION

This session builds upon the prior two by introducing the idea of repeated games. Many interactions are repeated—you expect to interact with fellow students many years into the future, and firms expect to interact with suppliers, customers, and competitors many years into the future as well.

Such repeated interaction can enable firms to formulate and use profitable strategies unavailable in “one-shot” games.

**Case:** General Electric vs. Westinghouse in Large Turbine Generators

**Reading:** *Game-Changer*, pp. 78-80

*Games of Strategy*, pp. 255-281

## The Principal-Agent Problem

### SESSION 5: MORAL HAZARD

This session focuses on strategic interactions between a principal and an agent when the agent’s actions are hidden from the principal, a situation known as *moral hazard*. Such interactions are pervasive in firms: shareholders and corporate officers, managers and employees, general contractors and subcontractors. The case considers an example where an entrepreneur hopes to sign a contract to become an agent of a venture capital firm. We will consider the underlying moral hazard problem as well as possible solutions.

**Case:** Sky Air, Inc.

**Reading:** *Competitive Solutions: The Strategist’s Toolkit*, pp. 187-199

### SESSION 6: HIDDEN INFORMATION

This session again considers the principal-agent problem, but focuses on environments where the agent has knowledge that the principal does not. For instance, corporate officers may know more than shareholders about the true profitability of a firm, or sellers may know more about the true quality of an item than the buyer. Many principal-agent problems have both hidden information and moral hazard. We will consider how Safelite formulated a successful response to this joint problem.

**Case:** Performance Pay at Safelite Auto Glass (A)

**Reading:** None

### SESSION 7: SIGNALLING

This session considers the use of signalling in the principal-agent context. In many environments, agents will undertake costly signaling efforts in order to demonstrate an important attribute. For instance, a firm may wish to convince clients it is qualified to perform a particular contract. The case considers an important application of this idea: a firm may engage in costly behavior to convince others it has low costs of production in order to forestall entry into its market.

**Case:** Signalling Costs

**Reading:** *The Art of Strategy*, pp. 235-243

*Economics, Organization, and Management*, pp. 154-159

## Strategic Interactions Between Firms

### SESSION 8: PRICE DISCRIMINATION

Price discrimination is a common strategy used by firms to enhance profits. In this session, we consider several methods of price discrimination as well as how and when they may be used profitably. The case considers a classic example of when price discrimination may be helpful: when selling software to a variety of users with different needs and different willingness-to-pay.

**Case:** Cambridge Software Corporation

**Reading:** *Competitive Solutions: The Strategist's Toolkit*, pp. 260-278

### SESSION 9: THE HOLD-UP PROBLEM

The hold-up problem is a classic problem in negotiation, and can lead to highly inefficient behavior by firms. In this session, we outline the essential components of the hold-up problem and consider possible solutions. The case considers a classic example of the hold-up problem: the relationship between producers and distributors.

**Case:** Coming Soon: A Theater Near You

**Reading:** Sustaining Superior Profits: Customer and Supplier Relationships

### SESSION 10: ENTRY AND ENTRY DETERRENCE

This session considers the classic business problem of entry into a new market. We consider which strategies allow for successful market entry (such as product differentiation) and when they are likely to be successful. The case considers one of the most difficult markets to enter: passenger air travel.

**Case:** Dogfight over Europe: Ryanair (A)

**Reading:** Strategies to Crack Well-Guarded Markets

### SESSION 11: BARRIERS TO ENTRY

Building on Session 11, we now consider the perspective of incumbent firms. Entry almost always leads to lower profits, and so the construction of barriers to entry is an important part of the successful manager's toolkit. In this session, we consider the myriad of tools available to managers to create barriers to entry and how they were used in the airplane "black box" business.

**Case:** FLYHT: Crossing the Chasm

**Reading:** None

### SESSION 12: NETWORK EFFECTS

This session considers the importance of network effects, where a service becomes more valuable to users as other users partake. For instance, the choice of word processing software exhibits strong network effects, since users care about the software available for the operating system, and such software is written only for the most popular systems. Network effects also allow managers to create



barriers to entry as new entrants will find it hard to create large networks. The case considers an example of both fighting dominant networks as well as creating a powerful network of one's own.

**Case:** One Game to Rule Them All: Lord of the Rings Online and the MMO Market

**Reading:** Networks and Positive Feedback: How to Exploit Network Effects

### **SESSION 13: MANAGING A PLATFORM**

This session builds on the idea of network effects by considering how to successfully manage platforms that bring together users and service providers. Cell phones, video game systems, and credit cards are all examples of platforms. We consider how to exploit the advantages of being a platform provider and how to make optimal pricing decisions for both sides of the market.

**Case:** Power Play (A): Nintendo in 8-bit Video Games

**Reading:** Strategies for Two-Sided Markets

### **SESSION 14: AUCTIONS**

Auctions are a common device by which products are bought and sold. Yet, unlike posted price markets, auctions are inherently strategic: the price one bidder pays is determined by the actions of other bidders. Examples of important auctions include the FCC spectrum auctions, government procurement, and the selling by government of rights to drill for oil or cut timber. This class will investigate how to formulate bidding strategy in a number of different auction environments.

**Case:** Bidding Exercises

Bidding for Antamina

**Reading:** *Competitive Solutions: The Strategist's Toolkit*, pp. 303-323.

### **SESSION 15: GAME THEORY AT WORK—SIMULATION**

This session is the capstone for the game theory segment of the course. Teams of students will act as members of an oil production board for their respective countries. You will be asked to integrate the lessons learned from previous class sessions to maximize profits for your country.

**Case:** Negotiation Simulation: OPEQ

**Reading:** None

## **Strategy in the Legal Environment**

### **SESSION 16: INTRODUCTION TO LAWMAKING**

Laws are byproducts of competing interests. Throughout the world democratic political systems rely upon elected parliamentary or legislative bodies to pass laws. This session focuses on competing interests as inputs in the legislative process. A plurality of interests may become active on an issue, and the session focuses on predicting the intensity and likely impact of interest group activity. The

readings introduce a framework for the analysis of actions by interest groups, based on *pluralism*. The analysis of issues, their impact on interests, and the nature and features of institutions provide the foundations for formulating effective strategies for dealing with issues in government arenas. The readings provide a basic overview of Congress and a framework to predict likely outcomes in legislative decision-making.

**Case:** Carried Interest

**Reading:** Interest Group Analysis

### **SESSION 17: LEGISLATIVE INSTITUTIONS**

The objective of the session is to bring together the analysis of interests and their likely impact with features of the institution and the preferences of their officeholders. We will illustrate some principles of collective choice through a legislative role-playing exercise. The analysis of issues, their impact on interests, and the nature and features of institutions provide the foundations for formulating effective strategies for dealing with issues in government arenas. The readings provide a basic overview of Congress and a framework to predict likely outcomes in legislative decisionmaking.

**Case:** Internet Taxation

**Reading:** *The New American Democracy*, pp. 311-334

*Business and Its Environment*, pp. 162-178

### **SESSION 18: REGULATION AND RULEMAKING**

This session focuses on strategic interaction with regulatory institutions. We consider when and how firms should engage in regulatory lobbying to achieve strategic objectives. The case exemplifies these principles, considering whether, and, if so, how Goodyear should approach NHTSA regarding its plan to provide tire grades to consumers.

**Case:** Goodyear and the Threat of Government Tire Grading

**Reading:** An Introduction to Rulemaking

### **SESSION 19: INTERNATIONAL TRADE AND ANTIDUMPING**

International trade policy structures the market environment in many industries. The specific policy instrument considered in this session is antidumping, whereby a country may restrict imports from another if “unfair” competition is established. The case focuses on the experience of a Brazilian steel company, CSN, in dealing with U.S. trade law and its strategy for responding to an antidumping petition. The session provides an opportunity to discuss the domestic industry's efforts to limit foreign competition through the use of politics and regulation.

**Case:** CSN and Steel Antidumping (A)

**Reading:** *International Economics: Theory and Policy*, pp. 142-147

### **SESSION 20: ANTITRUST—MONOPOLIZATION**

In the past several years, antitrust enforcement in the United States, the European Union, and other countries has become more active. In addition, antitrust authorities have begun to address issues in information industries. This session considers an important case affecting the computer, software, Internet, and related industries. In addition to its implications for those industries, the case provides some important lessons for dealing with government. The session will include a discussion of the implications of the economics of winner-take-most markets and the antitrust hazards in those markets.

**Case:** The Microsoft Antitrust Case

**Reading:** A Note on Antitrust and Competitive Tactics

**Assignment:** Half of the study groups will be assigned to argue the viewpoint of Microsoft's competitors and the DOJ in the antitrust case ("the prosecution"). The other half is to be prepared to defend Microsoft's position in the antitrust case ("the defense"). Two study groups (one on each side) will be randomly selected to present their positions in class, courtroom style.

### **SESSION 21: ANTITRUST—MERGERS**

In addition to regulating individual firm behavior, antitrust enforcement authorities are also charged with considering the competitive implications of firms choosing to merge. Due to the increasingly international nature of business, firms must acquire permission from several different regulatory authorities before proceeding with a merger. In this case, we consider the decision-making process and legal guidelines of the European Union's Competition Commission and how this influences the strategy of merging firms.

**Case:** Antitrust Regulations in a Global Setting: The EU Investigation of the GE/Honeywell Merger

**Reading:** Competition Policy in the European Union in 1995

*Managers and the Legal Environment*, pp. 535-538

### **SESSION 22: CORPORATE GOVERNANCE—FIDUCIARY DUTY AND INSIDER TRADING**

Corporate officers and directors have a fiduciary duty to their shareholders and the firm. This session will consider what constraints and demands on officer behavior are imposed by this precept. In particular, we shall consider how this relationship dictates the rules regarding insider trading. Students should come prepared to discuss not just the 10b-5 Plans case but also which, if any, individuals in the Texas Gulf Sulphur Case violated their fiduciary duty and/or engaged in insider trading.

**Cases:** Texas Gulf Sulphur: The Timmons Ontario Mine  
10b5-1 Plans: Mortgaging a Defense Against Insider-Trading

**Reading:** The Fiduciary Relationship: A Legal Perspective  
Note on Insider Trading Liability

### **SESSION 23: CORPORATE GOVERNANCE—HOSTILE TAKEOVERS AND DEFENSES THEREOF**

The market for firms themselves is heavily regulated, as firm acquisitions and mergers often lead to economic decisions (such as relocation, layoffs, etc.) that engender legislative responses. Hence, a large body of law has developed around the defense of hostile takeovers, with the poison pill being the primary instrument a target firm can use to resist a takeover. The case focuses on the recent hostile takeover of Peoplesoft by Oracle, and we will discuss strategies available to both the acquiring firm and the target firm.

**Case:** Oracle's Hostile Takeover of Peoplesoft (A)

**Reading:** Evaluating M&A Deals—How Poison Pills Work

### **SESSION 24: INTELLECTUAL PROPERTY—WHAT CAN A FIRM PROTECT?**

In information industries intellectual property is the principal asset of many companies. For these companies protecting their information assets is crucial to creating and sustaining a competitive advantage and capturing value. The protection of digital intellectual property is a particular challenge. This case concerns an e-commerce company that faces a database protection challenge and must formulate a strategy to deal with it. The case is set in the United States, but intellectual property issues are pervasive everywhere.

**Case:** BitTorrent

**Reading:** *Managers and the Legal Environment*, pp. 305-342

### **SESSION 25: INTELLECTUAL PROPERTY—THE STRATEGIC USE OF PATENTS**

The strategic use of intellectual property is becoming more and more important, as intellectual property becomes a larger and larger part of firms' assets. Patents do not just confer temporary monopoly power but also can be used to create lasting competitive advantage through network effects, as well as for defense in patent infringement cases, among other uses. The case will focus on how to use economic reasoning in addition to legal understanding to properly analyze managerial options, as well as considering proactive measures that a manager can take to help prevent a crisis in the first place.

**Case:** Amgen Inc.'s Epogen

**Reading:** None

## **SESSION 26: TORTS AND LIABILITY**

Companies receive guidance on issues such as safety, health, and the environment from a number of public sources. One is regulation that imposes standards on performance, design and workmanship. The setting of such standards is complex and difficult particularly when technology is changing. An alternative guide for companies comes from the common law, which is a system of law that relies on decisions by judges guided by precedents from earlier cases.

**Case:** Merck: Managing Vioxx (A, B)

**Reading:** *Business and Its Environment*, pp. 391-406

## **Conclusion**

### **SESSION 27: GROUP PRESENTATIONS**

Half of the groups will be present their projects. Each presentation will take the form of a presentation to the company's board in which the group summarizes the issues at stake, considers the various strategic options, and specifies concrete recommendations and the reasoning behind them.

### **SESSION 28: GROUP PRESENTATIONS**

The other groups will present their projects. Each presentation will take the form of a presentation to the company's board in which the group summarizes the issues at stake, considers the various strategic options, and specifies concrete recommendations and the reasoning behind them.

### **SESSION 29: INTEGRATING LEGAL PRINCIPLES INTO CORPORATE STRATEGY**

In this session we will jointly generate an integrated strategy for USG Corporation, using lessons from throughout the course. The case provides an opportunity to apply the course frameworks to one of the largest legal decisions a corporation can make: whether to enter bankruptcy. We will also have the opportunity to review and consider elements of product liability law, fiduciary duty, and how an evolving legal environment can change negotiating strategies. The last session will also include a short review of the material of the course.

**Case:** USG (A)

**Reading:** Note on Bankruptcy in the United States