

University of Notre Dame
Department of Finance
Economics of the Firm
Fall 2009

John Stiver
231 Mendoza College of Business
Notre Dame, IN 46556
Phone: (574) 631-2803
Fax: (574) 631-5255
Email: jstiver@nd.edu
Web: www.nd.edu/~jstiver

Readings:

- McGuigan, James, R. Charles Moyer, and Frederick Harris, *Managerial Economics; Applications, Strategy, and Tactics 11th Edition*, Southwestern, 2008
- Harford, Tim, *The Undercover Economist (Paperback)*, Random House, 2007
- Steven, Landsburg, *The Armchair Economist (Paperback)*, Free Press, 1995

Course Objectives:

The primary objective for this course is decision making in the context of managing a business. If we think of profits as revenues minus costs, then maximizing profits relies on minimizing costs while maximizing revenues. Completion of this problem requires an understanding of three topic areas:

- 1) Production and cost decisions – we need to determine a method and a scale of production to manufacture your product at the lowest possible cost
- 2) Consumer analysis and demand forecasting – we need an understanding of the consumer you face. Specifically, how will your customer base respond to changes in your price and how is your customer base affected by demographic changes.
- 3) Market Structure and Strategy – how should you set your price knowing that you face competition in the marketplace? How does a changing marketplace affect your pricing strategy?

However, the bigger picture of this course is to understand decision making in a broader context. Economics is all about human behavior. That is, why do people do what they do? In this sense, being an economist is a lot like being a detective.

Just as detectives look for clues to solve a crime, we look at the behavior of individuals and use these observations on human behavior to understand the objectives behind those decisions.

Class Preparation:

The two paperbacks listed above are intended to be some light summer reading. They will be useful in that they will get you to start thinking like an economist. We will use some of the examples in the paperbacks in the first meeting (they give some good examples of basic economic behavior). You don't have to read each from cover to cover. Pick out the chapters that you find most interesting. Note that for each meeting, I have listed the textbook chapters that will be covered. It would be useful if you could read through the listed chapters before we meet. This should be a very quick reading. I am not looking for you to completely understand everything (if that was the case, what's the point of the class?!). Your first reading should focus on some of the terminology and a basic familiarity of the concepts. After each session, you should be able to work through the exercises listed. These exercises will not be graded. They are meant to give you a chance to practice some of the tools discussed in class. Solutions will be made available online. If you have trouble with any of the exercises, you can contact me, or we can discuss them the following class.

Grading:

Each class will finish off with some group work. The group work will focus on the subject matter from class and will probably look similar to the practice questions. If your group can finish off the assignment by the end of class, you can turn it in before you leave. Otherwise, you can email to me or bring it to the next session. The group will get a common grade for the project. There will also be a comprehensive final at the end of the term. This exam will be geared to problem solving and will also look similar to the group projects/exercises. The final exam will be taken individually. The breakdown for the final course grade will be as follows:

- 50% Group Projects
- 50% Final Exam

Session I (July 23rd – South Bend): Some Basic Fundamentals

This session lays out the basic assumptions and tools that we will rely on for the remainder of the class. First and foremost, I will introduce you to *Homo Economicus*, or, "Economic Man". We assume that economic man behaves in a very specific way, so we should spend some time thinking about whether or not our behavioral assumptions are reasonable. Next, we will look at some of the implications the existence of economic man has for how markets function and

how market prices are determined. Truthfully, there are very few applications of supply and demand that are reasonable for analyzing the real world, but the simple supply/demand story will always provide some good intuition into how a more complicated world functions. Finally, we will finish up with a few statistical tools that will come in handy later on in the course.

- **McGuigan, Chapters 1,2**

Practice Questions:

- **Chapter 1: Exercises 1, 3, 5**
- **Chapter 2: Exercises 1, 2, 4, 7, 8**

Session II (October 3rd): Cost Analysis

This session takes a close look at the cost side of a firm's decision process. First, we have to distinguish between the firm's short-term decisions versus its long term decisions. The short term refers to a time frame short enough that some elements of the firm's production process are considered fixed (i.e. a firm can't change the size of its production facility overnight). Next, we need to distinguish between *allocative efficiency* and *scale efficiency*. Allocative efficiency refers to the process of finding an effective mix of resources in your production process (i.e. do I rely more on automation or labor in my manufacturing process). Scale efficiency refers to the selection of the overall size of your production process (i.e. is there a point where my company is too big and, hence, inefficient?). These decisions will determine what your cost structure will look like.

- **McGuigan, Chapters 7,8,9**

Practice Questions:

- **Chapter 7: Exercises 1, 5, 6, 8, 11**
- **Chapter 8: Exercises 2, 6, 8**
- **Chapter 9: Exercises 1, 2, 3**

Session III (October 31st): Consumer Demand Analysis

Once we have a good handle on your production costs, we need to have a better understanding of your customer base. Given demographic data, can we determine an estimate of your customer base? Can we forecast sales for your product based on the price that you charge? Can we estimate how your customers will respond to changes in your price as well as changes in other factors such as a change in your competitor's price?

- **McGuigan, Chapters 3,4,5**

Practice Questions:

- **Chapter 3: Exercises 2, 3, 8, 12**
- **Chapter 4: Exercises 2, 3, 8, 11**
- **Chapter 5: Exercises 3, 5, 6, 10, 11**

Session IV (November 21st): Competitive Pricing Techniques

Now, we have all the pieces in place (almost)! The final issue facing the firm is an understanding of the competitive environment in which it operates. In this session, we will look at the simplest of environments. Specifically, we will focus on industry structures where pricing decisions are competitive (i.e. you choose your price taking the decisions of your competitors as a given constant). In a monopoly environment, you are by definition, the only firm in the marketplace, so competitive pricing is a reasonable assumption. In a pure/monopolistic competition framework, you face the opposite extreme – you have so many competitors that the effect of any one competitor’s behavior is small enough that it can be ignored. In this environment, we will look at a variety of pricing structures from the simplest (you set one price to everybody) to the more complex (you set multiple prices to different customer types).

- **McGuigan, Chapters 10,11,14**

Practice Questions:

- **Chapter 10: Exercises 5, 6, 8, 9**
- **Chapter 11: Exercises 3, 4, 5, 6, 11**
- **Chapter 14: Exercises 1, 3, 4, 8**

Part V (December 5th): Strategic Pricing Techniques

In the grand finale, we will move from competitive pricing to strategic pricing. In this environment, you face a small number of competitors (think about the airline or automotive industries). In this market structure, you can no longer ignore your competitors decisions. In fact, you have to assume that any decision you make will cause a reaction from your competitors. Therefore, we need to take those responses into consideration when setting our prices.

- **McGuigan, Chapters 12,13**

Practice Questions:

- **Chapter 12: Exercises 1, 2, 3, 5, 6**
- **Chapter 13: Exercises 2, 3, 9, 13**

Final Exam: December 18th, 8:00AM – 12:00PM