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## Course Description

Businesses face crucial decisions that affect daily operation. These decisions affect the profitability and ability of these businesses to grow and survive. Managerial Economics offers a collection of fundamental microeconomics principles and methods that aid managers in making sound decisions. Although these principles and methods are not fool proof, thinking like an Economist will help managers to take full advantage of good opportunities and minimize the impact of unfavorable events.

In this course, we study microeconomic tools most relevant to managers. Topics include demand and supply analysis, market equilibrium, production and costs, market structure, strategic interaction, pricing, and uncertainty. This course should develop your knowledge of how markets operate and should build your capability of making sound economic decisions. By the end of this course you should be familiar with the principles and methods of Managerial Economics and their applications.

## Textbook

Baye, Michael R., *Managerial Economics and Business Strategy*, $7^{th}$ edition, McGraw-Hill Irwin, 2010

## Reading Materials and Course Information

Relevant chapters in the textbook are shown in the course outline below. Classes will be a combination of lectures and discussions. With that, you are recommended to read the assigned book chapters before coming to class. In some topics, I will use some course notes outside the prescribed textbook. Please come to class prepared. If you are having problems understanding some of the concepts, I encourage you to make use of my office hours. You have to make an appointment at least a day before of your planned visit (I prefer that you use e-mail).

## Exams

There will be 2 midterm exams (**Tuesday May 25** and **Tuesday June 8**) and a final exam (**Thursday June 17**). Each exam, including the final, will allow 2 hours to answer a combination of multiple choice and problem solving questions. All exams are closed book. You are allowed to use non-programmable calculator. The use of programmable calculator, PDA, cellular phone etc. will result to a 15 point penalty. The same penalty applies if a cell phone or text messenger rings. The coverage of each exam is given below. Note that some topics will make use of additional notes which may also be included in the exams.

| Exam | Date | Coverage |
|------|------|----------|
| Midterm 1 | Tuesday May 25 | Chapters 2, 3, and 5 |
| Midterm 2 | Tuesday June 8 | Chapters 8 and 9 |
| FInal Exam | Thursday June 17 | Chapters 10, 11, and 12 |

## Problem Sets

I believe that understanding the problems and concepts is crucial to success in this course. To maximize learning potential and success in this course, there will be 3 problem sets assigned to you for work and practice. These problem sets will be given at least a week before the due date. For greater learning

opportunities, you can work in groups although you have to write and turn in the final answers individually. The 3 problem sets are due on **Friday May 21**, **Friday June 4**, and **Tuesday June 15**. You are required to turn in each of the assigned problem sets at the beginning of the class on each due date. There will be a 15 point penalty for late submissions.

**Grading**

The 3 problem sets, 2 midterm exams, and the final exam count toward your grade as follows:

| | |
|---|---|
| Problem Set | 25% |
| Midterm | 50% (25% each) |
| Final | 25% |

**Grading Scale**

The grading scale is given below.

| Letter Grade | Grade |
|---|---|
| A | 86 and above |
| $A^-$ | 83 - 85.99 |
| $B^+$ | 80 - 82.99 |
| B | 76 - 79.99 |
| $B^-$ | 73 - 75.99 |
| $C^+$ | 70 -72.99 |
| C | 66 - 69.99 |
| $C^-$ | 63 - 65.99 |
| $D^+$ | 60 - 62.99 |
| D | 56 - 59.99 |
| $D^-$ | 53 - 55.99 |
| E | below 53 |

There are no exceptions to this scale. For instance, if you finish this course with a grade of 79.99, you will receive a B. The grade you receive is a product of many factors: learning, skills, and some random element. Sure you have the skills and learned the material in class. But there are also some random element that cannot be avoided. You guessed answers in some questions. You are sick the day before the test which diminished your capacity to review the material for the test. The topics you studied most did not appear on the test material. You are great at problem solving type of questions but not on multiple choice.

I cannot eliminate the random element but I have devised ways to mitigate its effect:

1. I give 3 tests, 2 midterms and a final which are non-cumulative.

2. I give problem sets which may be worked out in groups that count heavily in grade computation.

3. I will write tests which are combination of multiple choice and problem solving questions.

4. I will write the tests such that they cover the course material closely evenly.

**Make-up Exam Policy**

If you miss an exam due to health or some other reason, I allow you to take special make-up exam which we have to arrange. The make-up test may be a different format or be more comprehensive. To be fair with students who took the test on time, there is a 5 point penalty on make-up exams, regardless of the reason.

**Prerequisite**

The course catalog stated prerequisite for this course are Principles of Microeconomics ( ECO 2023) and Calculus (MAC 2233 or MAC 2311). I will assume you know the materials from principles of economics. You are advised to review the principles materials if you feel rusty. I also assume that you possess good basic Algebra skills.

**Methodology in Managerial Economics**

Managerial Economics involves a lot of analytical thinking. Measuring and solving problems using mathematics improve decision-making (and also elegant). Learning managerial economics with mathematics is the price we have to pay to solve business and economics problems systematically and logically. We cannot manage what we cannot measure. I have to emphasize that this is not a math course.

A cornerstone of Managerial Economics is the marginal analysis. We use marginal analysis to analyze optimization problems such as profit maximization. The mathematical counterpart of marginal analysis is Differential Calculus. In this course, you will have the opportunity to apply the basic Algebra and Differential Calculus you learned before with emphasis on interpretation rather than the technique. You will need to be able to work with such tools in order to be successful in this course. I will review and develop with you the Calculus used in this course. See me early if you have difficulty working with Calculus.

**Course Outline and Reading**

1. Math Review                                                                                My Notes

2. Introduction to Managerial Economics                                                       Chapter 1

3. Demand and Supply                                                                          Chapter 2

4. Quantitative Demand Analysis                                                               Chapter 3

5. Production and Costs                                                                        Chapter 5

6. Competitive, Monopolistic, and Monopolistically Competitive Markets                         Chapter 8

7. Oligopoly                                                                                   Chapter 9

8. Game Theory and Oligopoly                                                                   Chapter 10

9. Pricing Strategies with Market Power                                                        Chapter 11

10. The Economics of Information                                                               Chapter 12

A detailed course outline with book chapters, pages, topics, and dates is attached below. I emphasize that the calendar of topics below is tentative (I might get behind but will surely catchup). **Exam dates, however, are not tentative**.

**The Contract**

We each have responsibilities in this course. I am responsible to deliver my best in teaching this course and for assessing your performance appropriately, consistently, and objectively. We are all responsible for maintaining proper classroom behavior. You are responsible for keeping up with the material. You are also responsible for seeking help if needed. **Class attendance is required and you may not come to class late**. You are responsible for any act of cheating. If such cheating occurs I am responsible to take appropriate actions prescribed by the Dean of Student Office. You are responsible for knowing and understanding all the rules of this course. I promise to keep my end of this agreement. I expect you to do the same.

**Students with Disabilities**

The University of Florida strives to provide reasonable accomodations for students with disabilities. Students with disabilities must provide me with documentations through the Dean of Student Office at the beginning of the semester.

**ECP 3703 Managerial Economics Topic Outline, Chapter Readings, and Schedule (Summer A 2010)**

| Week | Date | Day | Period | | Chapter/Pages | | Topic |
|---|---|---|---|---|---|---|---|
| **Week 1** | 10-May | M | 9:30-10:45 | | Syllabus | | Syllabus |
| | 11-May | T | 9:30-10:45 | | Notes | | Math Review |
| | | | 11:00-12:15 | | Ch 1, pp. 1-14, 19-25 | | Introduction to Managerial Economics |
| | 12-May | W | 9:30-10:45 | | Ch 2, pp. 36-46 | | Demand |
| | 13-May | R | 9:30-10:45 | | Ch 2, pp. 46-54 | | Supply, Market Equilibrium |
| | | | 11:00-12:15 | | Ch 2, pp. 54-66 | | Price Restrictions, Comparative Statics |
| | 14-May | F | 9:30-10:45 | | Ch 3, pp. 73-79 | | Elasticity, Elasticity and Total Revenue |
| **Week 2** | 17-May | M | 9:30-10:45 | | Ch 3, pp. 79-85 | | Factors Affecting Own-Price Elasticity, Elasticity and Marginal Revenue |
| | 18-May | T | 9:30-10:45 | | Ch 3, pp. 85-95 | | Cross-Price and Income Elasticity, Obtaining Elasticities from Demand Functions |
| | | | 11:00-12:15 | | | | Uses of Elasticity |
| | 19-May | W | 9:30-10:45 | | Ch 5, pp. 155-167 | | Production Function, Measures of Productivity, Algebraic Forms |
| | 20-May | R | 9:30-10:45 | | Ch 5, pp. 167-171 | | Isoquants, Marginal Rate of Technical Substitution, Isocosts |
| | | | 11:00-12:15 | | Ch 5, pp. 171-175 | | Cost Minimization, Optimal Input Substitution |
| | 21-May | F | 9:30-10:45 | | Ch 5, pp. 175-181 | | Cost Function, AC and MC, Relationship among Costs |
| **Week 3** | 24-May | M | 9:30-10:45 | | Ch 5, pp. 181-189 | | Fixed and Sunk Costs, Economies of Scale, Multiple-Output Cost Functions |
| | 25-May | T | 9:30-10:45 | | **Midterm 1** | | **Midterm Exam 1 (Chapters 2,3, and 5)** |
| | | | 11:00-12:15 | | | | |
| | 26-May | W | 9:30-10:45 | | Ch 8, pp. 264-272 | | Perfect Competition, Firm Demand, Profit Maximization |
| | 27-May | R | 9:30-10:45 | | Ch 8, pp. 272-277 | | Shut Down Condition, Long Run Decisions |
| | | | 11:00-12:15 | | Ch 8, pp. 277-291 | | Monopoly, Sources of Monopoly Power, Monopoly Profit Maximization |
| | 28-May | F | 9:30-10:45 | | Ch 8, 282-293 | | Monopoly Profit Maximization (continued), Welfare Implications |
| **Week 4** | 31-May | M | | | **No Classes** | | **No Classes** |
| | 1-Jun | T | 9:30-10:45 | | Ch 8, 293-302 | | Monopolistic Competition, Profit Maximization, Optimal Advertising |
| | | T | 11:00-12:15 | | Ch 9, pp. 313-323 | | Oligopoly, Cournot Oligopoly |
| | 2-Jun | W | 9:30-10:45 | | Ch 9, pp.330-334 | | Stackelberg Oligopoly |
| | 3-Jun | R | 9:30-10:45 | | Ch 9, 334-339 | | Bertrand Oligopoly, Comparing Oligopoly Models |
| | | | 11:00-12:15 | | Notes | | Introduction to Game Theory |
| | 4-Jun | F | 9:30-10:45 | | Ch 10,pp.352-363 | | Simultaneous Move One-Shot Games |

| Week | | Date | | Day | | Period | | Chapter/Pages | | Topic |
|---|---|---|---|---|---|---|---|---|---|---|
| **Week 5** | | 7-Jun | | M | | 9:30-10:45 | | Ch 10, pp. 363-376 | | Repeated Games |
| | | 8-Jun | | T | | 9:30-10:45 | | **Midterm 2** | | **Midterm Exam 2 (Chapters 8 and 9)** |
| | | | | | | 11:00-12:15 | | | | |
| | | 9-Jun | | W | | 9:30-10:45 | | Ch 10, pp. 376-384 | | Multistage Games |
| | | 10-Jun | | R | | 9:30-10:45 | | Ch 11, pp.395-404 | | Some Pricing Rules, Price Discrimination (1st and 2nd degree) |
| | | | | | | 11:00-12:15 | | Ch 11, pp. 404-410 | | 3rd Degree Price Discrimination and Two Part Pricing |
| | | 11-Jun | | F | | 9:30-10:45 | | Ch 11, pp. 410-415 | | Block Pricing, Bundling |

| Week | | Date | | Day | | Period | | Chapter/Pages | | Topic |
|---|---|---|---|---|---|---|---|---|---|---|
| **Week 6** | | 14-Jun | | M | | 9:30-10:45 | | Ch 11, pp. 415-419 | | Peak-Load Pricing, Cross Subsidies, Transfer Pricing |
| | | 15-Jun | | T | | 9:30-10:45 | | Ch 12, pp. 433-442 | | Mean and Variance, Uncertainty and Consumer Behavior, Consumer Search |
| | | | | | | 11:00-12:15 | | Ch 12, pp. 442-447 | | Uncertainty and the Firm, Producer Search, Profit Maximization |
| | | 16-Jun | | W | | 9:30-10:45 | | **Review** | | **Optional** |
| | | 17-Jun | | R | | 9:30-10:45 | | **Final Exam** | | **Final Exam (Chapters 10, 11, and 12)** |
| | | | | | | 11:00-12:15 | | | | |
| | | 18-Jun | | F | | | | **Class Ends** | | **No Classes** |