ECONOMICS AND
MANAGEMENT DECISIONS
FE 730

Professor William Samuelson
Room 530
617 353-3631 (voice)
wsamuels@bu.edu

Required Materials

William Samuelson and Stephen Marks, *Managerial Economics*, John Wiley & Sons, 8th Edition, 2015.

Packet available from SMG Copy Center. This contains short readings, cases, and review materials (last year's exams and problems).

Grading Requirements

There will be a mid-term exam **Tuesday October 17** and a final exam at the conclusion of the course. Your grade in the course will be based on the following weights:

> 15% - class participation
> 35% - Mid-term Exam
> 50% - Final Exam

The exams are closed book. However, you will be allowed to bring a single sheet of 8 1/2" x 11" paper to the exam, on which you can write any notes you wish. I hope that preparing this note sheet will be a useful way of studying for the exam. As a further review, we shall go over last year's exams in class. Throughout the course, cases, problems, and readings will be assigned for class discussion (not to be turned in).

Preparing for Class

In our view, the most effective and efficient use of classroom time aims at reinforcing, clarifying, and applying what the student has learned (or tried to learn) on an individual or group basis **before** entering the classroom. In preparing for class, read the assigned section of the text, making sure you understand the main principles. (You do not have to memorize every detail). In addition, review a number of the end-of-chapter problems to make sure that you not only understand the concepts but can also *apply* them. If a reading or a case is assigned, be prepared

to recommend (and defend) an appropriate course of action for management. Whether or not an assignment is to be handed in, the best preparation for class discussion usually means writing down some analysis and possible solutions.

As you know, participation in class is very important -- always participation of the mind and frequently participation of the mouth. Feel free to ask questions, raise relevant issues, and offer insights. Remember that the most important aspect of participation is quality, not quantity.

Course Objectives

The main aim of Managerial Economics is to present many of the decision problems managers face and to provide the economic analysis they need to guide these decisions. The amount of "pure" microeconomics is kept to a minimum. The microeconomics component is important mainly because it establishes the setting in which managers must make production, pricing, investment, and other strategic decisions.

Specific goals include:
- structuring decision problems
- analyzing a product's revenues and costs
- finding optimal (i.e. profit-maximizing) sales quantities and prices
- identifying market segments and practicing price discrimination
- analyzing firm costs in the short run and in the long run
- distinguishing different market structures: competition, monopoly, and oligopoly
- understanding the benefits and costs of government regulation
- evaluating public goods and public programs
- identifying the patterns, benefits, and costs of free trade
- coming to grips with uncertainty by making probabilistic forecasts
- making optimal sequential decisions under uncertainty
- deciding when to acquire additional information and what actions to take in light of new information
- recognizing common decision making pitfalls
- setting competitive strategies using game theory
- understanding negotiations: strategies and mutual benefits

This is a formidable list. The hope is that long after you may have forgotten the details of some particular computation or concept, you will retain the general knowledge and insights about economic decisions.

Class Meeting:

1. Tues. Sept. 5   Maximizing Profit
                          SM chapter 1 (skim) and ch. 2 (including pp. 47-53)
                          Prepare to discuss Problem 1.4
                          Problems 2.4, 2.7, 2.9, 2.10, Discussion Question (DQ)
                          Read: "An Airline that Makes Money, Really"
                          Prepare to discuss: *Apple Computers in the Mid 90s*

2. Tues. Sept. 12   Demand Analysis & Pricing
                          SM ch. 3
                          Read: "The High Cost of Raising Prices"
                                "To Set Prices, Stores Turn to Algorithms"
                          Problems 2.12, 3.4, 3.5, 3.8, 3.9, 3.10

3. Tues. Sept. 19   Cost Analysis
                          SM ch. 6 (omit pp. 189-191)
                          Problems 3.13, 6.3, 6.5, 6.9, 6.12
                          Read: "As Oil Prices Fall, Airfares still Stay High"
                          Spreadsheet Problem S2 in ch. 3 and Problem S2 in ch. 6

4. Tues. Sept. 26   Perfect Competition & Pure Monopoly
                          SM ch. 7 (omit pp.234-237); ch. 8
                          Read: "OPEC's Existential Problem"
                          Problems 7.1, 7.4, 7.6, DQ; 8.3, 8.4, 8.6, 8.8, DQ

5. Tues. Oct. 3   Oligopoly & Applications   (No class on October 10)
                          SM ch. 9; (omit pp. 278-292)
                          Read: "The Most Expensive Airports to Fly to"
                          Prepare to Discuss: "Cola Wars Continue: Coke and Pepsi in 2010"

                          Review Sample Mid-Term Exam

Tuesday. Oct. 17   **Midterm Exam**

7. Tues. Oct. 24   Government Regulation
                          SM ch. 11, pp. 341-359
                          Problems 11.2, 11.3, 11.4, 11.5
                          Read: "Record EU Fine for Truck Makers"
                                "This is What Climate Change Costs"

SM = Samuelson and Marks, *Managerial Economics*.

8. Tues. Oct. 31   Government Programs & International Trade
                             SM ch. 11 (pp. 359-370); Problems 11.9, 11.11
                             Read: "Quest to Save a few Dollars led to a Deadly Crisis"
                             SM ch. 6, pp.189-191, ch. 7, pp. 234-237
                             Prepare to discuss: *Reducing Acid Rain* (Questrom case)

9. Tues. Nov. 7   Decisions under Uncertainty
                             SM ch. 12 (omit pp. 398-404)
                             Read: "The Hidden Traps in Decision Making (HBR)
                                   "Microsoft's Universe of Risk"
                                   "How Caterpillar's Big Bet Backfired"
                             In-Class Breakout: Problems 12.4, 12.6, 12.8, 12.10

10. Tues. Nov. 14   The Value of Information
                             SM ch. 13 (omit pp. 429-434)
                             Problems 13.3, 13.5, 13.7, 13.8, 13.9
                             Prepare to discuss: *Key West Fisheries*
                             Read: "Samsung Recall's Fatal Flaw"

11. Tues. Nov. 21   Game Theory & Competitive Strategy
                             SM ch. 9 (pp. 282-290); SM ch. 10 (omit pp. 319-326)
                             Read: "Developers Duel over Malls in Missouri"
                             Problems 9.3, 9.6, 9.7
                             Problems 10.3, 10.6, 10.9, 10.10

12. Tues. Nov. 28   Bargaining and Negotiation
                             SM ch. 15 (omit pp. 486-494)
                             Prepare to Play: "Battle for Air Passengers"
                             Buying and Selling a Maine House

13. Tues. Dec. 5   Summary & Review
                             Review Sample Final Exam

Tues. Dec. 12   **Final Exam**