

# Finance 30210

## Managerial Economics

### Fall 2007

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**Office Hours:** M, W, F from 1-3PM or by appt.

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**Objective:** The objective if the course is to understand how markets work. To that end, we can break up the course into roughly three pieces.

- The mechanics of demand: What motivates consumers to enter the marketplace? What are the primary factors that influence a consumer's willingness to pay? When is a demand curve an adequate representation of consumer preferences and when do we need to go a little deeper?
- The mechanics of supply: What is the decision process behind the supply curve? How do technology and factor prices influence a firm's decision process? How does market structure influence a firm's decision process?
- Market equilibrium and markets prices: What happens when consumers and firms interact in the marketplace? How are prices determined?

Finally, the main goal of the class is to teach you to think analytically about economic problems. Most of the time, it's not the final answer to a question that counts, its how you arrived at that answer.

#### Primary Sources:

- Allen, W. Bruce, et al , Managerial Economics; Theory, Applications ,and Cases,6th Edition, Norton 2006
- [The Wall Street Journal](#)
- [The Economist](#)

- [Business Week](#)

*Note: The Textbook is also available as an e-book at a lower price. Go to [www.nortonebooks.com](http://www.nortonebooks.com) for details.*

### Other Sources:

- McGuigan, James, Charles Moyer, and Fredrick Harris, Managerial Economics; Applications, Strategy and Tactics, 10th Edition, Thomson-Southwestern, 2005
- Hirschey, Mark, Managerial Economics, 11th Edition, Thomson-Southwestern, 2006
- Pepall, Lynne, Daniel Richards, and George Norman, Industrial Organization; Contemporary Theory and Practice, 3rd Edition, Thomson-Southwestern, 2005
- Varian, Hal, Microeconomic Analysis, 3rd Edition, Norton, 1992
- Varian, Hal, Intermediate Microeconomics; A Modern Approach, 6th Ed, Norton, 2002
- Kreps, David, A Course in Microeconomic Theory, 2nd Ed., Princeton University Press, 1990.
- Brickley, James, Clifford Smith and Jerold Zimmerman, Managerial economics and Organizational Architecture, 3rd Edition, McGraw – Hill/Irwin, 2004

**Grading:** There will be three non-cumulative exams given during the course as well as weekly quizzes. The quiz questions will look very similar to the problem set questions available on the web site. The final grade will be computed as follows:

|                      |            |
|----------------------|------------|
| Highest two midterms | = 200      |
| Quizzes              | = 100      |
| <b>Total</b>         | <b>300</b> |

There is also the possibility of random, unannounced quizzes, so attending class and keeping up with the material is very important. Bonus points will be awarded for exceptional class participation.

The median score (out of 300 points) will receive a 'B' for the course. The ranges for other grades will be at intervals around the median based on the class variance. For example, if the median score for the class is 230 (this is what I'm shooting for), a typical grade distribution might be as follows:

- 280 - 300: A
- 260 - 280: A-
- 240 - 260: B+
- 220 - 240: B

200 - 220: B-  
180 -200: C+  
160 - 180: C  
140 - 160: C-  
120 - 140: D  
<120 : F

**Honor Code:** This course, like all other courses at Notre Dame, is subject to the *Academic Code of Honor*. Please read the Handbook to refresh your understanding of the code.

*(Note: The books/articles listed below are NOT required reading. They are only intended to offer additional sources of information in case you would like to learn more about a particular subject)*

### **Part I: The Basics: Supply, Demand, and Equilibrium**

- **Allen, Chapter 1**

### **Part II: Mathematical Preliminaries and Optimization Theory**

- **Allen, Chapters 2**
- Binmore, K. (1983), *Calculus*, Cambridge , Cambridge University Press.
- Binmore, K.(1982), *Mathematical Analysis, 2<sup>nd</sup> Edition*, Cambridge , Cambridge University Press
- Dixit, A., 1990. *Optimization in Economic Theory*, Oxford , Oxford Press
- Sundaram, Rangarajan, 1999, *A First Course in Optimization Theory* , Cambridge University Press, Cambridge and New York

### **Part III: Consumer Demand Analysis**

- **Allen, Chapters 3,4,5,6**
- Afriat, S., 1967, “The Construction of A Utility Function from Expenditure Data”, *International Economic Review*, 8: 67-77
- Deaton, A. and J. Muelbauer, 1980, *Economics and Consumer Behavior*, Cambridge , Cambridge University Press.
- Varian, H., 1982a, The Non-Parametric Approach to Demand Analysis”, *Econometrica*, 50, 945-973
- Varian, H., 1982b, The Non-Parametric Approach to Demand Analysis”, *Econometrica*, 52, 579-597.

### **Part IV: Technology, Costs and Pricing**

- **Allen, Chapters 8 - 12**
- Baumal, W., J. Panzar, and R. Willig, 1982, *Contestable Markets and the Theory of Market Structure*, New York , Harcourt Brace.

- Bresnahan, T. and P. Reiss, 1991, “Entry and Competition in Concentrated Markets”, *Journal of Political Economy*, 99: 977-1009.
- Davies, S. and C. Morris, 1995, “A New Index of Vertical Integration; Some Estimates for UK Manufacturing”, *International Journal of Industrial Organization*, 13: 151-78.
- Domowitz, I. , R. Hubbard, and B. Peterson, 1988, “Market Structure and Cyclical Fluctuations in Manufacturing”, *Review of Economics and Statistics*, 70, 55-66.
- Eaton, B. and N. Schmitt , 1994, “Flexible Manufacturing and Market Structure,”, *American Economic Review*, 84, 875-88.\
- Gilligan, T, M. Smirlock, and W. Marshall , 1984, “Scale and Scope Economics in the Multi-Product Banking Firm, *Journal of Monetary Economics*, 13, 1393-405.
- Graham, John and Beverly Robson, 2000, Prescription Drug Prices in Canada and the US – Part I, A Comparative Price Survey, Fraser Institute, *Public Policy Sources No. 42*
- Hall, R., 1988, “The Relation between Price and Marginal Cost in US Industry”, *Journal of Political Economy*, 96: 921-47.
- Hotelling, H., 1929,”Stability in Competition”, *Economic Journal*, 39: 41-57.
- Panzar, J., 1989, “Technological Determinants of Firm and Industry Structure”, In R. Schmalensee and R. Willig Eds, *Handbook of Industrial Economics*, Vol 1, Amsterdam, New Holland, 3-60.
- Stocking, G. and W. Mueller , 1955, “The Cellophane Case and the New Competition”, *American Economic Review*, 45: 29-63.
- Sutton, John, 2001, *Technology and Market Structure*, Cambridge , MA , The MIT Press.
- Varian, Hal, 1989, “Price Discrimination”, In R. Schmalensee and R. Willig Eds, *Handbook of Industrial Economics*, Vol 1, Amsterdam, New Holland, 3-60.

## **Part V: The Basics of Game Theory**

- **Allen, Chapter 14**
- Fudenberg, D., and Tirole, J.,1991, *Games and Economic Behavior*, Cambridge , MIT Press
- Myerson, R., 1991, *Game Theory*, Cambridge , Harvard University Press

## **Part VI: Strategic Interaction**

- **Allen, Chapters 13**
- Bulow, J., J. Geanakoplos, and P. Klemperer, 1985, “Multi-market oligopoly; Strategic Substitutes and Complements”, *Journal of Political Economy*, 93, 488-511.

- Kreps, D. and J. Sheinkman, 1983, “Quantity Precommitment and Bertrand Competition Yield Cournot Outcomes”, *Bell Journal of Economics*, 14: 326-37.
- Liebermanm Marvin and D. Montgomery, 1998, “First Mover (Dis)Advantages; Retrospective and Link With Resource Based Views”, *Strategic Management Journal*, 19. 1111-25
- Marvel, H., 1989, “Concentration and Price in Gasoline Retailing”, in Leonard Weiss Ed., *Concentration and Price*, Cambridge , MA , The MIT Press
- Rosenthal, R. 1981, “Games of Perfect Information; Predatory Pricing and the Chain Store Paradox”, *Journal of Economic Theory*, 25, 92-100.
- Selton, R. , 1978, “The Chain Store Paradox”, *Theory and Decision*, 9: 127-59
- Sutton, J., 1991, *Sunk Cost and Market Structure*, MA, The MIT Press

## **Part VII: Anti-competitive Strategies, Collusion, and Non-Price Competition**

- **Allen, Chapter 13**
- Baldwin, J., 1995, *The Dynamics of Industrial Competition*, Cambridge , MA , Harvard University Press.
- Benoit J., 1984, “Financially Constrained Entry in a Game With Incomplete Information”, *RAND Journal of Economics*, 15, 490-9
- Benoit J., and V. Krishna, 1985, “Finitely Repeated Games”, *Econometrica*, 53: 890-904.
- Bolton, P., J. Brodley, and M. Riordan, 2000, “Predatory Pricing; Strategic Theory and Legal Policy”, *Georgetown Law Review*, 88
- Caves, R.E., 1988, “Industrial Organization and New Finding on the Turnover and Mobility of Firms”, *Journal of Economic Literature*, 36, 1947-82
- Dixit, A, 1980, “The Role of Investment in Entry Deterrence”, *The Economic Journal*, 90, 95-106.
- Dunne, T., M. Roberts, and L. Samuelson, 1989, “The Growth and Failure of US Manufacturing Plants”, *Quarterly Journal of Economics*, 104, 671-98.
- Fudenberg, D. and J. Tirole, 1986, “A Signal Jamming Theory of Predation”, *RAND Journal of Economics*, 17: 366-76.
- Gilbert, R., 1989, “Mobility Barriers and the Power of Incumbency”, in R. Schmalensee and R. Willig, *Handbook of Industrial Organization*, Vol.1, Amsterdam : North Holland : 476-535.
- Jovanovic, B., 1982, “Selection and the Evolution of Industry”, *Econometrica*, 50, 649-670.
- Klepper, S., 2002, “Firm Survival and the Evolution of Oligopoly”, *RAND Journal of Economics*, 33: 37-61.

- McGee, J. , 1958, Predatory Price Cutting, The Standard Oil Case”, *Journal of Law and Economics*, 1: 137-69.
- Milgrom, P. and J. Roberts, “Limit Pricing and Entry Under Incomplete Information; an Equilibrium Analysis”, *Econometrica*, 50: 443-60.
- Philips, L, 1995, *Competition Policy; A Game Theoretic Analysis*. Cambridge , MA Cambridge University Press.
- Porter, R. and J. Zona, 1993, “Detection of Bid Rigging in Procurement Auctions”, *Journal of Political Economy*, 101: 518-38.
- Saloner G., 1987, “Predation, Mergers and Incomplete Information”, *RAND Journal of Economics*, 18: 165-86.
- Spence, A.M., 1977, “Entry, Investment, and Oligopolistic Pricing”, *Bell Journal of Economics*, 8: 534-44.

### **Part IX: Risk, Uncertainty and Information Economics**

- Allen, Chapters 15, 17, 18
- Akerlof, G., (1970), “The Market for Lemons; Quality, Uncertainty, and the Market Mechanism”, *Quarterly Journal of Economics*, 89: 488-500.
- Pratt, J., 1964, “Risk Aversion in the Small and in the Large”, *Econometrica*, 32, 122-136
- Ross, S., 1976, A Simple Approach to the Valuation of Risky Streams”, *Journal of Business*, 51, 453-475

### **Part X: Optimal Mechanism Design and Auction Theory**

- **Allen, Chapter 16**
- Bulow, J. and P. Klemperer, 2002, “Prices and the Winners Curse”, *RAND Journal of Economics*, 33, 1-21.
- Crampton, P. and J.A. Schwartz, 2000, “Collusive Bidding; Lessons from FCC Spectrum Auctions”, *Journal of Regulatory Economics*, 17, 229-52
- Klemperer, P, 1998, “Auctions With Almost Common Values: The “Wallet Game” and its Applications, 1998, *European Economic Review*, 42, 757-69
- Klemperer, P, 2002, “What Really Matters in Auction Design?” , *Journal of Economic Perspectives*, 16, 161-89.
- Lucking-Reily, David, 2000, “Vickrey Auctions in Practice: From 19<sup>th</sup> Century Philately to 21<sup>st</sup> Century E-Commerce”, *Journal of Economic Perspectives*, 14: 183-92
- Milgrom, P and R. Weber, 1982, “ A Theory of Auctions and Competitive Bidding”, *Econometrica*, 50: 1089-1122.
- Myerson, R., 1981, “Optimal Auction Design”, *Mathematics of Operations Research*, 6: 58-73.
- Riley, J. and W. Samuelson, 1981, *American Economic Review*, 71: 381-92.
- Riley, J. and H. Li, 1961, Counter speculation and Competitive Sealed Tenders, *Journal of Finance*, 16: 8-37.