Economics 170A: Managerial Economics

Syllabus and Reading List

This course is the first half of the Managerial Economics sequence. It covers a number of topics including the theory of the firm, demand theory and estimation, production and cost theory, and the theory of markets, including perfect competition and monopoly.

A major emphasis of this course is in applying the theory of the firm and tools of marginal analysis to empirical data. Computers will be heavily used to both generate data for analysis and also for doing numerical and graphical analysis using spreadsheet and other data analysis software programs.

In addition, an integral part of the course is the computer simulation game MICROSIM. Each student will be responsible for managing a firm over the quarter. Each period of the game several decisions must be made, including the price to charge for the firm's product, the quantity of labor to hire, the amount of capital in which to invest, and the level of advertising expenditure to set. Two types of markets will be simulated -- monopoly and perfect competition.

During the first half of the course, the monopoly market will be run either Saturday or Sunday evening beginning October 6th (Sunday). During the second half of the course, the competitive market will be run DAILY, excepting Sunday -- that is, Monday through Saturday. Check the Schedule for the dates and times of each market day. Decisions must be entered before 10:00 pm on each market day in order to be implemented. Otherwise the previous period's decisions will be repeated (except that no investment changes will be made). Decisions may be entered anytime from any computer with access to the World Wide Web, including any terminal on campus, the PCs in the Social Science PC Lab, or from home via a personal computer and modem. *Students will be evaluated and receive homework grades on how well their firms prosper over the weekly monopoly and the daily competitive simulations and how well they analyze the outcomes experienced by their firms and industry.*

Texts:

- William Samuelson and Stephen Marks, *Managerial Economics*, FOURTH Edition, Wiley, 2003

   The THIRD Edition of the text is an acceptable substitute for the FOURTH Edition for all the READING material the course will cover this quarter. (Substantial changes have been made between the two editions, but mostly in the material that is usually covered in Econ 170B from the latter half of the book.) But the HOMEWORK PROBLEMS assigned will be from the FOURTH Edition and are not all the same as those in the THIRD Edition. The University Library has several copies of the FOURTH Edition on reserve which can be consulted for the problem assignments. (The library has a number of copies of the THIRD Edition on reserve as well.)

- S. Gold, T. Pray, & T. Dennis, *Student Manual for MICROSIM*, Macmillan, 1984

   Although this item is out of print, a scanned copy is available on the Class Web Site at URL http://iacs5.ucsd.edu/~ec170a/class/micro.html (accessible by password only). As the MICROSIM Game has evolved over the years in Econ 170, the manual has become less and less relevant. It is a toss-up as to whether or not it will be useful to you. There are various help files available on the course web site that give better information than the manual about details of the game. Also the game will be discussed in the Wednesday evening sections (and a bit in lectures as well). Homework assignments will contain exercises that explore the game also.

Computer Accounts:

All course information will be available on the course World Wide Web site at URL http://iacs5.ucsd.edu/~ec170a. Students will be assigned a class account on the Academic Computing Service machine, iasc5, that will allow access to protected items on the class site, including the electronic version of the MICROSIM Manual and the form on which the simulation game decisions are to be entered. To find your computer account ID, go to the Class Roster (If you are not listed on the Roster, please see me as soon as possible to get a course account.)

The class web site will also contain frequently updated information about the course, including announcements, homework assignments & answer keys and a web-based Class Forum on which (threaded) discussions may take place. I will use the forum to answer any question about the course, but students are encouraged to post answers as well as questions. (The particular forum product is under consideration at this time.) Additionally, students are encouraged to use any e-mail account to communicate privately with me at ec170a@iacs5.ucsd.edu, the T.A. and with other students. You can find e-mail addresses of the T.A.'s and all registered students on the Class Roster

The class student computer accounts also permit access to the ACS PC Lab in Room 100 of the Economics Building. The PCs in the ACS PC Lab, in addition to providing access to the class web site, may also be used for e-mail and to to run PC software such as spreadsheets (Excel), word processors (Word), and the textbook supplied software, *Analytical Business Calculator*. The homework assignments will make use of varous PC software programs and you will also find them useful for analyzing your decisions and the resulting outcomes of the simulation game MICROSIM.

The first assignment will be to familiarize yourself with these computer systems. This and all subsequent assignments will be posted on the class web site only. You should check it regularly for all course information.

Exams and Grades:

A midterm exam will be given on Wednesday, October 30, from 7:00 - 9:00 pm in a room to be announced. The final will be given on WEDNESDAY, December 11th, 2002, from 8:00 - 11:00 a.m. [NOTE: THIS IS A CORRECTION TO AN INCORRECT EARLIER ANNOUNCEMENT.] The midterm will constitute about 25% of your grade and the final about 40%. The remaining 35% will be based on homework assignments(15%) and performance in the MICROSIM game (20%). Homework problems will be assigned approximately weekly.

Office Hours:

My office hours for this course will be on Wednesday afternoon from 2:00 to 3:00 pm and also by appointment. My office is room 317 of the Economics building. I can also be reached by electronic mail to ask questions, set up an appointment, and the like. You can send e-mail to my course address ec170a@iacs5.ucsd.edu. I strongly encourage you to make use of this way of communicating with me.

Teaching Assistants:

This course will have two teaching assistants, xxx xxx and Mr. Steven Scroggin. The TAs will grade your homework, hold section meetings and office hours to discuss the homework (and other problems), and will help grade course exams. There will be an *additional* evening section every Wednesday from 7:00 - 8:00 pm in York 2622. I will use this section to discuss the Microsim game. For times of all section meetings and office hours see Sections and Office Hours.

Optional sections will be held in the ACS PC Lab in Room 100 of the Economics Building to go over specific computer related problems and homework. See Office Hours for details.

Honors Section:

This course will have an honors section that is part of the Economics Department's Honors Program. In order to receive credit for the honors section, students should enroll in Econ170AH instead of Econ170A. Honors students will meet one (1) hour extra per week with me, either individually or as a group (depending on the number of students enrolled in the honors section). The additional hour will be spent in student presentations of short (2-5 pg) papers discussing current economics topics related to the material of the course. Students should find these section meetings enjoyable and helpful in making the material of the course more relevant.

In order to encourage qualified students to enroll in the honors section, I will offer to write a letter of recommendation to graduate school for any student who participates in the section. I will be unable to write a very helpful or meaningful letter for anyone who is eligible for the honors section but chooses not to enroll in it.

Lecture Dates, Topics, and Reading Assignments:

- **September 26 & October 1: Introduction**

  o Samuelson & Marks, Chapter 1, "Introduction..." pgs. 1 - 26

  o Gold/Pray/Dennis, Chapters 1 - 5, pgs. 1 - 97

  o Notes on Microsim: <u>Rules and Readme Files on Costs</u>

  (The Rules and Readme material should be read as soon as possible as it is necessary to understand the MICROSIM game. The Manual may be prerused as needed.)

- **October 3, and 8: Marginal Analysis**

  o Samuelson & Marks, Chapter 2, "Optimal Decision ...", pgs. 28 - 79

- **October 10, 15, & 17: Demand Analysis**

  o Samuelson & Marks, Chapter 3, "Demand Analysis ...", pgs. 80 - 126 & 136 - 138

- **October 22, 24, & 29: Demand Estimation and Forecasting**

  o Samuelson & Marks, Chapter 4, "Estimating Demand ...", pgs. 139 - 188
  and Chapter 5, "Forecasting ...", pgs.189 - 221

- **October 30: Mid-Term Exam: *7:00 - 9:00 PM* York 2622 (Note Room!)**

- **October 31, November 5, & 7: Production Analysis**

  o Samuelson & Marks, Chapter 6, "Production",pgs. 222 - 260

- **November 12, 14, & 19: Cost Analysis**

- Samuelson & Marks, Chapter 7, "Cost Analysis", pgs. 261 - 318

- **November 21 & 26: Market Structure I: Competition**

  - Samuelson & Marks, Chapter 8, "Perfect Competition", pgs. 321 - 359

- **November 28: Thanksgiving Holiday: NO CLASS TODAY**

- **December 3 & 5: Market Structure II: Monopoly (Revisited) and Monopolistic Competition**

  - Samuelson & Marks, Chapter 9, "Monopoly", pgs. 360 - 392

- **December 11:[CORRECTED DATE] Final Exam 8:00 - 11:00 a.m.**