Managerial Economics
Professor Cliff Hawley
BADM 631
Aug.-Sept. 2009
CRN 53109 Sect 7B1
BKM10

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I. Class Meetings
BADM 631 meets Tuesdays and Thursdays for six weeks beginning August 4th and ending Thursday September 10th. Please confirm these dates by checking the EMBA website for schedules of all our class sessions.

II. Text

In addition to the text reading, there are short articles that I ask you to read as well. These are / will be posted to eCampus (eCampus.wvu.edu).

III. Problem Sets:
There are two problem sets consisting of end-of-chapter problems that are required during the semester. For these two problem sets, you may work in teams of two or three people (but not any larger
than three). Alternatively, you may work alone if you prefer. I know that in other courses you often work in larger teams. Groups that have been teams of four in the past might want simply to break up into two teams of two. An old team of five can be a team of three and a two for this class.

The first problem set is due Thursday August 20th. Each team will turn in one copy of their work sent via email to me as a PDF file. This problem set consists of the assigned problems that are in bold and underlined through Chapter 7 listed in the schedule of assignments below. Similarly the second problem set consists of the remaining problems listed and in bold and underlined and is due Tuesday September 8th, also sent as a pdf via email.

IV. Individual Homeworks:
Six times or more during our course, I will post short homeworks on eCampus. The homeworks are to be done individually. I will post them on eCampus at the end of class or later that evening. The homework is due before the start of the next class. Late work will not be read and will receive a score of zero. Typically the homework will reinforce material we have just finished in class. In computing your grade on this section of work, I will drop your lowest homework score.

V. Threaded Discussions:
I will post topics for discussion weekly on eCampus and expect students to participate, making substantial comments. Substantive participation on each topic my expectation. At a minimum this means for each topic one substantive posting and in addition, one substantive response to a posting by another student. Please email me if you have an idea that would be excellent for threaded discussion. Or even better, just bring up the idea in class.

Please note that I expect you to attend class. I do realize that it is not always possible to attend class but please note that it is required that you notify me in advance if you expect to be absent.

VI. Course Grade Determination

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Problem Set 1:</td>
<td>10%</td>
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<tr>
<td>Problem Set 2:</td>
<td>10%</td>
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<tr>
<td>Individual homeworks (lowest homework score dropped)</td>
<td>15%</td>
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<tr>
<td>Participation in online threaded discussions:</td>
<td>10%</td>
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<td>Final test:</td>
<td>45%</td>
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<td>Instructor’s evaluation: attendance, participation, preparedness etc.</td>
<td>10%</td>
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Schedule of Assignments

Listed below are the assignments and corresponding due dates. I reserve the right to make changes in assignments as I think that are necessary. Any and all changes will be announced in class.

**Due date**

<table>
<thead>
<tr>
<th>Assignment</th>
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<tbody>
<tr>
<td>Tuesday August 4:</td>
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<tr>
<td>Introduction to Managerial Economics</td>
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<tr>
<td>Text, Chapters 1 and 2</td>
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<tr>
<td>Problems: Chapter 1: # 2, 5, 6, 8, 10</td>
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<tr>
<td>Problems: Chapter 2: # 1, 4, 5, 6, 8</td>
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<td>As you find necessary: Math review problems (see below)</td>
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Thursday August 6:  
*Demand, Supply, and Markets*  
Text, Chapters 2 and 3  
Problems: Chapter 3: #2, 4, 5, and 13  
Reading: “Rent Control in NYC”

Tuesday August 11:  
*More on Supply and Demand*  
Text: Chapter 3

Thursday August 13:  
*The Firm: Production and Cost*  
Text: Chapter 5 and Problems # 4, 6, 13, and 17

Tuesday August 18:  
*The Nature of Industry and An Introduction to Market Structures*  
Text: Chapter 7 and Chapter 8  
Chapter 7 Problems: Problems # 2, 13, 15, 16  
Readings: “Beer and Baby Food”  
“Maytag Whirlpool Merger”  
“Sharp Takes a Gamble on a TV Factory”  
Chapter 8 Problems: # 1, 6, 9, 15; Typo in #15: unit cost depreciation for 15,000 PCs is $133.33 not $150.

Thursday August 20:  
*More on Market Structures: Perfect Competition, Monopoly, and Monopolistic Competition*  
Finish Chapter 8  
Readings: “Starbucks” and “Nation of Second Guesses”  
Problem Set 1 due (problems through Chapter 7 only)  
In class “Practice Midterm” (approx. 75 minutes).

Tuesday August 25:  
*Market Structure: Oligopoly*  
Chapter 9 – read chapter only.  
Reading: “Price-Fixing Makes Comeback after Supreme Court Ruling”  
*Introduction to Game Theory*  
Chapter 10 Problem 1  
Reading: “Game Theory Thomas Schelling”

Thursday August 27:  
*Game Theory and Strategy*  
Chapter 10 Problems 6, 11, 16

Tuesday September 1:  
*Pricing Practices of the Firm - Part 1*  
Chapter 11 and Problem # 3, and # 4  
“Varian – Differences in Drug Prices”

Thursday September 3:  
*Pricing Practices of the Firm - Part 2*  
Chapter 11 and Problems # 5, 7, 16

Tuesday September 8:  
*Risk, Imperfect Information and Managerial Decision-making*  
Chapter 12 and Problems # Problems # 1, 2, 12  
Reading Assignment: “Production Under Risk and Imperfect Information”  
Problem Set 2 (from Chapter 8 on) due by the start of class.

Thursday September 10:  
Final test
Several EMBA students have asked “Is there a lot of math in the course?” and also “Is the math is hard?” The answers are (1) Yes and (2) I hope not but that depends on you. Mathematics and graphs are important tools in economic analysis. In our class no calculus is used, though it appears here and there in the text. But we do use a lot of high school algebra. For some students, that’s big trouble since they may not have used or studied algebra since high school and high school was a long time ago. If that’s your case, then before the course begins, you would be wise to review some algebra, perhaps by checking out a book on the subject from your local library or examining online algebra resources such as those found at www.algebra.com and www.purplemath.com. A student from a previous class recommends Practical algebra, A Self-Teaching Guide by Peter Selby & Steve Slavin, 2nd ed., Wiley.

Some of the mathematical skills that are VERY useful and VERY important in this class are (1) being able to graph equations and functions (2) understanding the concepts of the slope, the y-intercept, and the equation of a line, (3) being able to solve one linear equation in one unknown, (4) being able to solve two linear equations in two unknowns, and (5) finding areas of rectangles and triangles.

As a skill refresher, try the problems below. If you have difficulty with the problems below, you should begin right now to acquire and review some algebra materials. In our first class meeting, we will spend some time reviewing these math tools and we’ll go over a few of the problems below. You will need graph paper for several of the problems.

1. In each of the three cases below, graph the equation. Clearly label points on your graph.
   (A) \( Y = 10+5X \) \( \text{ (B) } 5X+2Y=40 \) \( \text{ (C) } Y = 10X – X^2 \)

2. Here are two points (written in coordinate form (x,y)) that are points on a line: (0,20) and (2,14).
   (A) Graph the line. \( \text{ (B) } \) What is the y-intercept of this line?
   (C) What is the slope of this line? \( \text{ (D) } \) Write the equation of the line.

3. Solve for X in each case below.
   (A) \( 8X + 12 = 44 \) \( \text{ (B) } 48 - 3X = -27 \) \( \text{ (C) } (2/3)X = (1/2) \)

4. Find the absolute value of X in each case below.
   (A) \( X = 40 \) \( \text{ (B) } X = -14 \) \( \text{ (C) } X = -1.5 \)

5. Find the solution to these two linear equations in two unknowns, X and Y.
   A) \( Y = 100 + 2X \) and \( Y = 475 - 3X \) \( \text{ B) } Y=60-5X \) and \( Y=20+3X \)
   C) On the same graph, graph each of the equations in part (A) above.
   D) On the same graph, graph each of the equations in part (B) above.

Selected Answers:
2:(B): 20 2(C): -3 2(D): \( Y=20-3X \) 3:(A): \( X=4 \) 3(B): \( X=25 \) 3(C): \( X=3/4 \)
4:(A): 40 4(B): 14 4(C): 1.5 5:(A): \( X=75, Y=250 \) 5(B): \( X=5, Y=35 \).
Partial Answers to Selected Textbook End-of-Chapter Problems

Chapter 1:  8. (b) $80,000

Chapter 2:  1. (b) increase (c) decrease  
2. (a) P=40, Q=10 ; (b) 3 (c) 15, $45

Chapter 3:  13. $40,000

Chapter 5:  4.  a. TFC = 50 b. TVC =8,250 c. TC = 8,300 d. AFC = 5 e. $825  
            f. 830 g. 2,125  
            13. when profits are maximized, they will be $150.

Chapter 7:  2. (a) 3,719 (b) 100% (c) likely to be challenged

Chapter 8:  1. (a) 7  
2. (a) Q=3, P=70
3. Chastise the manager. Profits are maximized when MR = MC

Chapter 10:  6. (b) 0,15 and 10,10 (c) 10,10 only

Chapter 11:  3. (b) $16  
7. (a) $225,000 (b) $200,000 (c) $330,000 (d) $375,000
16. charge different prices on weekdays and weekends. Those prices are … and …

Chapter 12:  12. Make her an offer because expected benefits of additional search are 5% of 50K or $2,500 while the costs of another search are $5,000.
Definition: Managerial economics is a stream of management studies which emphasises solving business problems and decision-making by applying the theories and principles of microeconomics and macroeconomics. It is a specialised stream dealing with the organisation’s internal issues by using various economic theories. Economics is an inevitable part of any business. All the business assumptions, forecasting and investments are based on this one single concept. Content: Managerial Economics. Nature. Types. Managerial Economics refers to the application of economic theory and the tools of decision science to examine how an organisation can achieve its aims or objectives most efficiently. Managerial decision-making problems arise in an organisation when they seek to achieve some objective subject to constraints. Managerial Economics can be defined as amalgamation of economic theory with business practices so as to ease decision-making and future planning by management. Managerial Economics assists the managers of a firm in a rational solution of obstacles faced in the firm’s activities. It makes use of economic theory and concepts. It helps in formulating logical managerial decisions. The key of Managerial Economics is the micro-economic theory of the firm.