Course Syllabus

MBA 603-002 | Managerial Economics and Decisions of the Firm | Fall, 2012

Class Location and Meeting Time: University Hall 1200, Fairfax Campus
Tuesday and Thursday 1:30 to 2:45 PM

Instructor: Robert Johnston
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Fairfax Office hours: Tues. & Thurs. 12:00 to 1:00 pm, Wed. 6:00 pm to 7:00 pm, and by appointment

Blackboard Course Website:
At the suggestion of my students from prior semesters, both the course lecture items and the case supporting materials sections of the site are organized by class dates. Individual cases assignments are posted on this site as well as some additional resources that may be helpful in resolving the case assignments.

Course Prerequisites: Admission to the MBA or MSA or MSRED program.

Course Materials:

- **Cases:** Harvard Business School Publishing cases as noted in the course schedule and topics below. These are available directly from HBS Publishing. The link below is to the HBS Publishing web site for the cases I have selected for this course. http://cb.hbsp.harvard.edu/cb/access/14281721 This link is also on the home page of the course web site. These cases are not available in the University bookstore.

- **Pricing Simulation:** The Universal Rental Car On Line Pricing Simulation from HBS Publishing is also available at the above website.


Course Objectives:

1. To provide MBA students an introduction to how managerial economics principles and practices are used in actual decision making within the firm.
2. To provide MBA students a set of economics analysis tools for managerial accounting, operations management, financial management, marketing management and strategic management problems and issues they will be asked to address later in the MBA programs.
3. To provide an opportunity to critically evaluate and use managerial economic models within a case analysis framework and a simulation.
4. To gain an understanding of how managerial economics may be employed within the firm as a source of potential competitive and strategic advantage.

Learning Goal Type for Accreditation: Analytical Decision Making
<table>
<thead>
<tr>
<th>Dates</th>
<th>Topic Coverage</th>
<th>Discussion Cases and Simulation by Topic &amp; Date</th>
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<tbody>
<tr>
<td>Tuesday 28 August</td>
<td>Course Introduction</td>
<td><strong>Porter’s Five Forces</strong>&lt;br&gt;The Five Competitive Forces that Shape Strategy</td>
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<tr>
<td>Tuesday 4 September</td>
<td>Demand and Supply</td>
<td><strong>Porter’s Five Forces</strong>&lt;br&gt;McDonald’s: Is China Lovin’ It?</td>
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<td>Tuesday 11 September</td>
<td>Quantitative Demand Analysis (Introduction to Regression)</td>
<td><strong>Demand Forecasting</strong>&lt;br&gt;Airbus A3XX: Developing the World’s Largest Commercial Jet (Introduction) <strong>A-Rod: Signing the Best Player in Baseball</strong></td>
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<tr>
<td>Tuesday 18 September</td>
<td>Dealing with Uncertainty (Decision Tree Analysis)</td>
<td><strong>Demand Forecasting with Regression Analysis</strong>&lt;br&gt;Compass Martine Services, LLC: Valuing Ships</td>
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<td>Thursday 20 September</td>
<td>Production Planning and Cost</td>
<td><strong>Demand Forecasting and Pricing</strong>&lt;br&gt;Metabical: Pricing, Packaging and Demand Forecasting for a New Weight-Loss Drug</td>
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<tr>
<td>Tuesday 25 September</td>
<td>Cost Analysis with Alternatives</td>
<td><strong>Pricing</strong>&lt;br&gt;Clean Edge Razor: Splitting Hairs in Product Positioning</td>
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<td>Thursday 27 September</td>
<td>Dealing with Uncertainty (Monte Carlo Simulation)</td>
<td><strong>Pricing</strong>&lt;br&gt;The London 2012 Olympic Games</td>
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<td>Tuesday 2 October</td>
<td>Dealing with Uncertainty (Monte Carlo Simulation)</td>
<td><strong>Pricing</strong>&lt;br&gt;Virgin Mobile USA: Pricing for the Very First Time</td>
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<td>Thursday 4 October</td>
<td>Dealing with Uncertainty (Monte Carlo Simulation)</td>
<td><strong>Production Processes and Costs</strong> Genentech Capacity Planning</td>
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<tr>
<td>Thursday 11 October</td>
<td>Introduction to Universal Rental Car Simulation</td>
<td><strong>Production Processes and Costs</strong> Husky Injection Molding Systems</td>
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<tr>
<td>Tuesday 16 October</td>
<td>Economic Order Quantity</td>
<td><strong>Uncertainty</strong>&lt;br&gt;Merck and Company: Evaluating a Drug Licensing Opportunity</td>
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<tr>
<td>Thursday 18 October</td>
<td>Economic Order Quantity</td>
<td><strong>Uncertainty</strong>&lt;br&gt;Avalanche Corporation</td>
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<td>Thursday 25 October</td>
<td>Simulation</td>
<td><strong>Universal Rental Car Simulation (On line, outside of class)</strong></td>
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<td>Tuesday 30 October</td>
<td>Universal Rental Car Debrief</td>
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<td>Thursday 1 November</td>
<td>Profit Planning and Valuation</td>
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<td>Tuesday 6 November</td>
<td>Overbooking at Global Airlines</td>
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<td>Thursday 8 November</td>
<td>Delivering Doors in a Window: Supply Chain Management at Hundustan Aeronautics Ltd.</td>
<td><strong>Uncertainty in Production Processes</strong>&lt;br&gt;Delivering Doors in a Window: Supply Chain Management at Hundustan Aeronautics Ltd.</td>
</tr>
<tr>
<td>Tuesday 13 November</td>
<td>Profit Planning and Valuation</td>
<td><strong>A-Rod: Signing the Best Player in Baseball</strong></td>
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Pricing Simulation: Universal Rental Car

Universal Rental Car is an online simulation that covers 12 months of operations of a Florida rental car firm with multiple locations. The firm’s management needs to establish prices for both business and tourist customers and does face competition in its markets. You will each individually representing the management of Universal Rental Car in making these decisions. You will be competing against the others students in the class in terms of your overall success in managing Universal pricing strategy. This simulation will represent 10% of your semester grade.

From October 11th through October 15th there will be an introductory trial run of the simulation with a single location that you may elect to practice on the get an understanding of how the simulation functions. The trial runs will not be part of your course grade. The week of October 18th to October 25th the simulation will be run again with multiple locations. It will be this multiple locations simulation that will represent 10% of your semester grade.

Grades

The table below details the individual items and their respective weights that will be used for your semester grade.

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<thead>
<tr>
<th>Item</th>
<th>Weight</th>
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<tbody>
<tr>
<td>First Case Assignment Report</td>
<td>17.5%</td>
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<tr>
<td>Second Case Assignment Report</td>
<td>17.5%</td>
</tr>
<tr>
<td>Third Case Assignment Report</td>
<td>17.5%</td>
</tr>
<tr>
<td>Fourth Case Assignment Report</td>
<td>17.5%</td>
</tr>
<tr>
<td>Universal Rental Car Simulation</td>
<td>10.0%</td>
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<tr>
<td>Case Class Discussion Participation</td>
<td>20.0%</td>
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<tr>
<td><strong>Total</strong></td>
<td>100.0%</td>
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Course Introduction Slides

The PowerPoint course introduction slides posted on the course website for the first class meeting (28 August 2012) do provide additional details regarding the course organization, topics, and case specifics.

Textbook and Chapter References by Topic

The textbook by Michael Bayne, *Managerial Economics and Business Strategy*, is a well-regarded managerial economics text with a solid treatment of most managerial economics topics. Its focus is as a textbook, not a resource for helping students with the details of a case analysis problem. We will not review individual sections of this book and I have not assigned end of chapter problems from it. It is expensive; you may wish to consider a used and/or prior edition to a new purchase.
The Use of Cases in this Course

Case Approach
The case approach of instruction in MBA programs is based upon three key assumptions. First, students learn and retain more in an “active” case environment than in a more “passive” lecture/recitation environment. Second, that graduate students are capable of being able to sort through relatively complex business problems and develop supportable solutions to these problems. Third, students develop insight into management issues from the discussion of cases by their fellow students. This approach assumes that students will learn and retain what they have learned by analyzing and seeking to resolve an actual problem. This course will focus on how actual firms have used managerial economics principles and methods to address managerial decisions.

Case Assignments and Class Discussion
As per the outline above, there are a number of class discussion cases we will use during the semester. You will each be given an assignment to prepare the analysis (see case analysis reports section below) for four different cases. Individual case assignments are detailed in the case assignment link on the course webpage. Each of these four case assignments will represent 17.5% of your final grade in the course.

Just attending and listening is not sufficient. For each class where we discuss a case, I do record a class participation mark for all students following the class. In addition to the students assigned the responsibility for a case, I expect everyone will have carefully reviewed the case in advance of class and contribute to the class discussion. Participation in the class case discussion will be 20% of your semester grade. I will post on the course website when we have completed ½ and ¾ of the cases average individual student class participation marks, as well as the class average and standard deviation. These will be posted under the grade book section.

Submission of Case Reports
Case analysis reports must be turned in no later than the class session when the case is presented and discussed in class. It is unfair to the other students in the class assigned a case to submit an assigned case report following the class discussion and presentation. There will be zero credit for late case analysis reports.

Grading Norms and Weights
I review all the case reports on a given case prior to assigning case grades. Grading is relative with the “best” case report receiving the highest mark and the poorest report the lowest mark. I do use + and – grades in addition to letter grades. An A or A+ grade is only assigned if the report is of a quality I would send to a consulting client.

The overall class GPA for sections of core MBA courses that I have taught at GMU is usually within a range of 3.40 to 3.60.

Class Case Presentation
The analysis of these cases is much more effective if someone has carefully worked through the numerical analysis and is prepared to lead everyone through this part of the case. I will designate two or more students to present their analysis of the case to the class. At a minimum you should be prepared to take the class through your Excel file analysis. You may also wish to present some of your analysis in Power Point if you feel this will help the rest of the class better understand your
approach to the problem. You must not miss the class session when you are assigned the responsibility to present your analysis to the class. If you should miss this session, you will receive zero credit for the case assignment.

I do encourage you to collaborate with other students assigned for your presentation of the same case. It is a more effective use of class time if you collectively present your power point analysis of the case and then individually present your quantitative analysis. This type of collaborate is acceptable. You will each need to separately prepare your individual case analysis reports.

**Case Analysis Reports**

All of these case analyses reports should be concise and similar in style and content to a report intended for a firm's senior management. The case analyses must be computer printed. I do expect that you will begin with an executive summary that includes your recommendation. I will grade these reports and return them to you. A suggested outline for a case analysis report follows:

1) Executive Summary (including your recommendation)
2) A Statement of the Problem(s) you see the firm or decision maker facing
3) Methodology or Techniques (those that you believe are best for this problem and that you recommend employing)
4) Data Requirement or Sources (those necessary to employ your recommended technique)
5) Key Assumptions (those you had to make to conduct your analysis)
6) Analysis
7) Conclusions and Concerns

As the case analysis reports are to be prepared as business reports, there is not a formal limit on the length of the reports. As a business report, they do need to be effectively prepared and certainly the length will vary with the complexity of the case.

I do have two specific requirements for these reports:
* Begin the report with an executive summary that contains your recommendation.
* Include page numbers.

These case analysis reports should be prepared on your own. You should not include the analysis of someone else in your case report. You do need to turn in a printed copy of your case report on the day it is due. Under exceptional circumstances I do accept emailed reports (such reports should be formatted for printing.)

**Consultation Regarding a Case**

You may discuss a case and your thoughts regarding how you might organize your analysis with other students in the class. However, you should not collaborate and/or share your work with other students or anyone else. The work you submit should be your own. Using someone else’s work in the analysis and preparation of your case report is not acceptable.

I am available to consult with you regarding your analysis of a specific case. This consultation is more effective if you have begun the analysis and I am able to see how you are approaching the problem. Some students prefer to come in with their analysis. Others email me their Excel file and after I have taken a look we discuss their analysis by telephone or email. When you email me an Excel file, I need to two things from you. First, please tell me which worksheets you would like me to review. I would prefer not to receive just your file without an indication of what you are concerned about. Second, I do expect that you will link the data in your various worksheets so I can more quickly follow where data came from in a given cell.

If you email me regarding a case, I will do my best to respond within 24 hours except on weekends. During a weekend it may be 48 hours before I am able to get back to you. I will be unable to assist you with a case during the 24 hour period prior to it being due. Please be sure to include in your email the title of the case you are working on.

**Other Matters**

**Attendance:**
Class participation is an important part of the learning process and with a case based course it is vital. It is important that you attend class for two basic reasons. First, in the weeks leading up to a case assignment, we will be discussing and
reviewing the issues, approaches, and methodologies that will be applicable to the case. Second, with a case approach, all students are expected to contribute to the discussion of the case issues. Unless you are in class you cannot contribute.

**Software requirements:**
You will need a recent, licensed version of Excel (2003, 2007 or 2010) for this course. If you are using a Mac, please make sure your version of Excel if fully supported. For many class sessions at least some of the presentation materials will be in Excel. Further, the detailed quantitative exhibits within the cases have been saved as Excel files and posted to the course website. You may download these directly. All of the case analysis is much easier to conduct in Excel than with a calculator. Some of the case assignments will be extraordinary time consuming if not impossible without Excel.

**Additional resources:**
If you own a laptop computer or might borrow one, it will be helpful to bring it to the class lecture sessions. Working through the models presented during the lectures does provide an opportunity to ask questions that may occur. You will need access to a computer for this course.

**Honor Code:**
I expect you to follow the University’s honor code as presented in the University’s publications. I consider it to be inappropriate and a violation of the University's honor code, to (i) use someone else’s work, including spreadsheet models, and submit them as your own or (ii) to use a purchased case solution.

*Revised: 20 July 2012*