Rose-Hulman Institute of Technology / Department of Humanities & Social Sciences Fall Quarter 2013 – 2014 / SV351, Managerial Economics (EMGT531, Economics for Technical Managers) Section 1: 9^{th} hour (3:25 – 4:20), Olin O – 201

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Course Description and Readings

Managerial economics combines microeconomic theory and statistical analysis to provide a framework for analysis of business decision making. Some of the questions addressed in managerial economics include:

- How do we evaluate firm performance?
- What markets will/should a firm enter?
- How can a firm best analyze its economic opportunities in different markets?
- What mix of inputs and production technology should a firm use in its production?
- How should a firm price its products?
- What competitive and industry features place constraints on the firm?
- How should operations of a business firm be governed and controlled?

The course assumes a basic understanding of fundamental economic concepts. SV151, Principles of Economics, or its equivalent, is a prerequisite. The course also assumes familiarity with certain statistical concepts related to distributions and hypothesis testing. Additionally, a working knowledge of MS Excel spreadsheets will be extremely helpful.

Textbook: Mark Hirschey, <u>Managerial Economics</u>, 12th ed., Thomson/Cengage (2009).

Other Readings: Selected Harvard Business School Cases studies and Notes. These will be listed

on Moodle for selected days, and may be purchased online at

www.hbr.org/case-studies

Student Learning Outcomes

After completing this course, successful students should be able to:

- Evaluate the economic performance of a business, and analyze the factors that influence a firm's ability to generate and sustain economic profits.
- Evaluate and analyze the sources and implications of risk and incorporate risk analysis into business decision-making.
- Explain and analyze the nature of production processes and their relationship to cost behavior.
- Describe the determinants of demand for a product or service and use statistical methods to estimate and analyze demand for a product or service.
- Describe and incorporate business forecasts into discussions of corporate strategies.
- Explain how market conditions (market structure) impose constraints on business strategy and pricing.
- Demonstrate a basic comprehension of the important issues related to corporate governance.

Course Organization

The course is divided into four parts with nine class sessions in each part, followed by student presentations of business case studies during the final week of the term. Each of the four parts of the course will be comprised of six lecture/discussion days, an "in-class lab" day, a day devoted to an assigned problem set, and a day for a written examination. The four parts of the course, and subsidiary topics are:

Value Maximization and Profit Management

- Economic theory of the firm
- Valuation of firms and profits
- Interpretation of accounting statement information
- Economic treatment of risk

Demand Management and Forecasting

- Review of basic demand and supply topics
- Multiple regression and OLS estimation using MS Excel
- Demand estimation techniques
- Simple business forecasting techniques

Production and Cost Management

- Theory of production and cost
- Engineering economics (time value of money)
- Capital budgeting
- Cost of capital

Organizational Management and Pricing

- Industry analysis
- Pricing
- Organizational structure
- Financial structure

General Course Policies

- This syllabus provides a *basic* schedule and outline for the course. Students should consult the course page on Moodle for a comprehensive and up-to-date schedule, and for important links to course material.
- Grades for the course will be assigned according to the following criteria and scale:

Grade Component	Weight
Four exams	60%
Team case study and presentation	20%
Attendance and Participation	10%
Reading Quizzes	10%

Score	Grade	
90% or better	A	
80% to 89%	В	
70% to 79%	С	
60% to 69%	D	
Less than 60%	F	

• Grades of B+, C+, or D+ may be assigned at the professor's discretion.

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- With a written explanation, <u>approved in advance</u> by the professor, or in the case of preapproved Institute-sponsored events, a make-up exam may be scheduled. Alternatively, a missed exam may result in the other examinations being weighted more heavily. All unexcused absences from exams will result in a failing grade for the exam.
- Late assignments will not be accepted, or will only be accepted for partial credit. Completion of the team case study project is required in order to receive a passing grade for the course.
- Any academic misconduct will result in a failing grade for the course.
- There will be <u>no individual</u> extra credit opportunities.
- The participation grade will be based on class attendance, in-class participation, presentation of problem set solutions, and outside contact. There are specific deductions for absences and lack of preparation on problem sets:
 - Excessive absences or tardiness may result in forfeiture of some or all participation credit, and may result in failure of the course. Specifically, students with two unexcused absences will forfeit 25% of available participation credit. Students with four unexcused absences will forfeit 50% of the available participation credit. Students with six unexcused absences will forfeit all participation credit. Students with 8 unexcused absences will receive a failing grade for the course. See the Institute's Academic Rules and Procedures for the Faculty's policy on class attendance.
 - Problem sets will be reviewed in class on four designated days, and completed problem sets will be turned in completion credit with the exams. On days designated for problem set discussion, students will be called on randomly to post their solution to a problem (partial or complete) on the board, and to explain the solution or lead a discussion of the problem. Students may pass when called on two times during the quarter before losing participation credit. For example, if a student is called on to post a solution for a problem from problem sets 1 and 2 and passes on both opportunities, and then is called on a third time and is unprepared, that student will lose 25% of their participation credit.
- The professor reserves the right to amend these general course policies.

Team Case Study Project

Teams of three students will write a business case study focusing on the economic aspects of an individual firm's business strategy, and present their case study to the class during the final week of the term. The purpose of this project is to allow students to integrate and apply course material to an in-depth analysis of one business firm, to provide an opportunity for students to engage in independent business research, and to provide students with a team-building opportunity.

Organization: Final papers should include ...

- A description of the chosen firm, with some historical background
- An analysis of the firm's economic returns. This analysis should draw on both accounting and market data to provide a picture of absolute and relative (comparative) performance. This will be the focus of in-class lab #1.
- An analysis of the competitive environment in which the firm operates. This analysis should include considerations of market structure, as well as basic industry or market analysis using a framework such as Porter's five forces or SWOT analysis.
- Details about challenges that the firm faces, such as technological constraints, strategic
 interaction, pricing strategies, forecasting problems, issues of corporate governance, or regulatory
 restrictions.
- An appraisal of the firm's strategy and execution during a chosen period.

Resources: Teams may draw upon these and other sources ...

- COMPUSTAT
- Annual reports and 10-Ks. These are often available on a firm's website under an "Investor Relations" or similar link.
- Public reports about the firm in the business press. Search archives for publications such as The Wall Street Journal, FinancialTimes, etc. Well-known on-line sources such as CNN, CNBC, CBS Marketwatch, or Bloomberg also may be useful. Highly focused commentary or industry sites (such as blogs) may also be useful, but be careful in judging the objectivity and validity of information available on such sites. In all cases, provide authorship information and stable urls in the bibliography.
- Firm-specific and industry data and analysts' reports. Such data and reports are available via sites such as Yahoo finance (http://finance.yahoo.com/), or Google finance (http://www.google.com/finance#).

Formatting Guidelines for Paper:

- The written case should be 2,000 to 2,500 words in length, exclusive of tables, charts or other addendums. It should be submitted both in paper form and electronically via a .docx or .pdf email attachment to the professor.
- The paper should have (in this order) a title page, an optional contents page, text pages, bibliography page(s) and pages containing numbered figures and tables. Within the text pages, section headings are optional, but are encouraged for longer papers.
- Do not insert figures or tables into the text pages. Following the text and bibliography, include all numbered figures first (Figure 1, Figure 2, etc.), and then numbered tables (Table 1, Table 2, etc.). Each figure and table should be on a separate page, with possible exceptions for very small figures or brief tables, in which case two figures or two tables may be combined on one page. Include attribution details and any necessary explanatory comments with each figure or table.
- All pages after the title page and optional contents page should be numbered continuously, beginning with page 1 for the first page of text and ending with the last page of tables. These page numbers should be centered at the bottom of each page.

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- The paper should be typed in 11 point font, double spaced, with 1.25 inch left and right margins and 1 inch top and bottom margins. Do not include extra lines between paragraphs.
- For in-text citations use a parenthetical citation format. Refer to any article in the *Journal of Economic Perspectives* for illustrations of this citation format.
- If in-text reference notes are used (not to be confused with citations), they should be in the form of bottom-of-page footnotes rather than end-notes.

Guidelines for In-Class Presentation:

- The presentation should be 15-minutes in length.
- Teams should be prepared to answer questions for 5 minutes after the completion of their presentation.
- All team members should participate in the presentation.
- Teams should use PowerPoint or similar visual support, but should be judicious in limiting the number of slides that they employ, and careful not to make their slides overly complicated.

Deadlines:

- Assignment of teams: Tuesday, September 10.
- Choice of subject firm to be approved by professor by Friday, September 20.
- Consultations with the professor will be scheduled for the week of October 21.
- Written drafts for review on Monday, November 4.
- In-class presentations will be scheduled for November 11 15.
- Final cases are due (1 paper copy and electronic files of the paper and the PowerPoint presentation) to the professor by noon on Monday, November 18.

<u>Overall Course Organization and Preliminary Schedule</u>
This calendar presents an overall picture of the organization of the course and scheduled topics, activities, and exams. The definitive source for such information will always be the Moodle course site.

Monday	Tuesday	Wednesday	Thursday	Friday
2 SEP	3 SEP	4 SEP	5 SEP 1.1: Abnormal Profits	6 SEP 1.2: Theory of the Firm
9 SEP 1.3: Value Maximization	10 SEP 1.4: Accounting Statements	11 SEP	12 SEP 1.5: Risk I	13 SEP 1.4: Risk II
16 SEP LAB 1: COMPUSTAT	17 SEP PROBLEM SET 1	18 SEP	16 SEP EXAM 1	16 SEP 2.1: Demand Review I
23 SEP 2.2: Demand Review II	24 SEP 2.3: Demand Estimation I	25 SEP	26 SEP 2.4: Demand Estimation II	27 SEP 2.5: Business Forecasting I
30 SEP 2.6: Business Forecasting II	1 OCT LAB 2: DEMAND EST.	2 OCT	3 OCT PROBLEM SET 2	4 OCT EXAM 2
7 OCT 3.1: Production Theory	8 OCT 3.2: Cost Estimation	9 OCT	10 OCT 3.3: Eng. Economics I	11 OCT 3.4: Eng. Economics II
14 OCT 3.5: Capital Budgeting	15 OCT 3.6: Cost of Capital	16 OCT	17 OCT	18 OCT
21 OCT LAB 3: CAP BUDGET	22 OCT PROBLEM SET 3	23 OCT	24 OCT EXAM 3	25 OCT 4.1: Industry Analysis
28 OCT 4.2: Pricing I	29 OCT 4.3: Pricing II	30 OCT	31 OCT 4.4: Org. Structure	1 NOV 4.5: Corporate Governance
4 NOV 4.6: Financial Structure	5 NOV LAB 4: TBD	6 NOV	7 NOV PROBLEM SET 4	8 NOV EXAM 4
11 NOV TEAM PRESENTATIONS	12 NOV TEAM PRESENTATIONS	13 NOV	14 NOV TEAM PRESENTATIONS	15 NOV TEAM PRESENTATIONS