

ECO351MW – Managerial Economics (34295)

Professor Sanford Marble
University of Texas at Austin
Fall 2012 in BRB 1.120

Professor contact:

Office hours: 4-5pm Mon & Wed., also by appointment
Office: BRB 3.134C (Economics Building)
Phone: (512) 475-7353
marble@austin.utexas.edu

Teaching Assistant: To be announced

Office hours:
Office:

This is an upper division course in applied economics with a major writing component. The applied economics part of the course is focused on the problem of creating sustainable business advantages in competitive markets. *Sustainable* competitive advantages are a natural business topic, since competition can be expected to quickly erode economic profits based on unsustainable advantages. The required text presents a range of economic approaches to this business problem. Then the text readings are roughly complementary to the business cases in the course pack, which study practical competitive situations that businesses have faced. Some examples of course topics are: product & service differentiation, pricing strategies, dealing with rapidly changing markets and business models, and competitive innovation. There is a Midterm exam in November covering the topics we have discussed in class.

The writing component of the course consists of a series of short papers and one longer project paper. The short papers are based on readings in eleven topic areas over the semester. In nine of these areas, a “focus question” about the associated business case, or other reading in the topic, provides the basis for a short (two-page) write-up. These short write-ups should be organized responses to the focus questions, using concepts we have developed in the course. Students should plan on writing and turning in at least six of these case write-ups over the semester. The longer course paper, or project, is essentially a business case study. Each course paper – and a class presentation of its findings – is to be the joint product of a group of three or four students.

Class meetings will consist of a mixture of lecture and discussion of the economic material in the text and discussions of the case readings. There are some readings in addition to the text and case histories, in the form of articles or short readings from books (which will usually be placed in the course Blackboard site.)

The course schedule (below) in the syllabus indicates when the readings will be covered in the course and gives due dates for the case write-ups and the course project, and the date of the midterm.

Text: *Competitive Solutions: The Strategist's Toolkit*, by R. Preston McAfee, Princeton University Press, 2005. In addition to this text you must purchase a course packet, which includes most of the readings beyond the text. Both the book and the packet are available at the University Co-op.

Your grade in the course will be based on five components: 1) the average of the best six grades on your two-page case write-ups (35%), 2) your course paper (30%), 3) a midterm (15%), 4) the presentation your group makes to the class on your paper (10%, to be graded by your peers in the class), and 5) class participation (10%). There is more detail on student assessment later in this syllabus.

Course Topics

Topic 1: Competition

Major Goal: Introduces Porter's 'Five Forces' analysis of competitive strategies and adds the element of complements.

Readings: “How to Keep Profit from Eroding”, Froeb and McCann (a handout, on Blackboard);

McAfee, Chapter 2; Porter, Michael, "What is Strategy?" *Harvard Business Review*, November 1996;

Case: *Intel Corp.—1968-2003*.

Case focus question: Why was Intel successful in the microprocessor business and unsuccessful in the DRAM business, which it invented?

Topic 2: Strategies - Differentiation

Major Goal: Introduce differentiation theory; integrate complements force with differentiation.

Readings: McAfee, Chapter 3 & 4;

Case: *Matching Dell*

Case focus question: Do you think Dell's declining share of the PC market in recent years has been due to the successful imitation of Dell's business model by competitors?

Topic 3: Strategies – Positioning

Major Goal: Understanding product positioning as a source of advantage and understanding the product life cycle theory.

Readings: McAfee, Chapter 5;

Case: *Airbus A3XX*

Case focus question: What critical assumptions about the future of the airline industry did Airbus make in deciding to develop the A3XX? How were these assumptions different from those made by Boeing? How have these assumptions held up since Airbus' development commitment was made?

Topic 4: Cooperation

Major Goal: Understanding the circumstances in which cooperation succeeds and when it will fail; along with means of establishing cooperation.

Readings: McAfee, Chapter 6;

Brandenberger and Nalebuff, "The Right Game: Use Game Theory to Shape Strategy," *Harvard Business Review*, 7-8/95, 57-71;
No short write-up for this topic.

Topic 5: Pricing

Major Goal: Understanding of price discrimination, yield management.

Readings: McAfee, Chapter 11; A handout on pricing in the airline industry.

Case focus question: Has yield-management proven to be a sustainable pricing strategy in the airline industry? If not, why not?

Topic 6: Auctions

Major Goal: Understanding competitive auctions as a means of setting prices, learning from competitors, and interpreting behavior.

Readings: McAfee, Chapters 12; Varian on Auctions.

Case: *Olympian Competition: Bidding for Olympic Television Rights*

Case focus question: The broadcast rights for the Olympics have been auctioned off under many different auction rules. How have the changes in these rules affected the short run and the long run results of these auctions?

Topic 7: Business Model Evolution

Major Goal: Understanding the role that competition can play in the adaptation of businesses to technological change.

Readings: "On Open Source...", Lerner & Tirole – handout, Information Rules, Varian – two handouts

Case: *MySQL Open Source Database*

Case focus question: To what degree do you think the Open Source business model described in the MySQL case study will eventually supercede more traditional business models (such as that represented in the case study by Oracle)?

Topic 8: Competitive Innovation

Major Goal: Understanding the challenges facing innovation in large companies and the characteristics of technological innovation.

Readings: Christiansen's *Innovators' Dilemma/Innovators' Solution* - handouts

Case: *Reverse Engineering Google's Innovation Machine*

Case focus question: Please explain how Google uses technology to "engineer strategic opportunity" and then give your supported opinion as to whether this story is about a truly sustainable model of business innovation or not.

Topic 9: Real Options

Major Goal: Understanding the role that option theory can play in strategic management.

Readings: Dixit and Pindyck, "Options Approach to Capital Investment," *Harvard Business Review*, May-June 1995;

Real Options Calculations – a handout

Case: *Electronic Arts: The Blockbuster Strategy*.

Case focus question: How well has Electronic Arts dealt with the main elements of a successful implementation of the 'real-options' approach to competitive management?

Topic 10: Risk

Major Goal: Understanding risk management: measures of risk, risk as opportunity, strategic elements of risk.

Readings: McAfee, Chapter 10;

"Defining Risk", Glyn Holton; "Risk Intelligence, Learning to Manage What we Don't Know", D. Apgar - handouts

Case focus question: Traditionally we think of risk as having mostly negative implications for business. Please discuss the competitive advantages risk can offer to businesses.

Topic 11: Signaling & Bargaining

Readings: McAfee, Chapters 13 & 1

Course Schedule for ECO351MW Issues in Business Economics (34295) Fall 2012

Wk	Day	Date	Topic	Readings	Short Writeups Due	Important Dates
1	W F	8/29 8/31	1.Competition	Ch 9, Froeb & McCann (on Blackboard) Ch 2, McAfee		
2	M W F	9/3 9/5 9/7	2.Strategies-Differentiation	Ch 2, McAfee (cont) Michael Porter, "What is Strategy?", HBR Ch 3, McAfee Harvard Case: "Intel Corp.--1968-2003" Ch 4, McAfee (Location model) Harvard Case:"Matching Dell(B):1998-03	Intel	
3	M W F	9/10 9/12 9/15		Dell		
4	M W F	9/17 9/19 9/21	3. Strategies - Positioning	Ch 5, McAfee (Product Life Cycle) Harvard Case: "Airbus A3XX..."	Airbus	Project proposal due 9/17
5	M W F	9/24 2/17 2/19	4.Cooperation	Brandenburger & Nalebuff, "The Right Game.." Ch. 6, McAfee		
6	M W F	10/1 10/3 10/5	5.Pricing	Ch 11, McAfee Airline Industry reading (on Blackboard) Yield question discussion	Yield	
7	M W F	10/8 10/10 10/12	6. Auctions	Ch 12, McAfee Varian on Auctions (on Blackboard) Stanford Case"Olympian Competition:Bidding.."	Auction	
8	M W F	10/15 10/17 10/19	7. Business Model Evolution	"On Open Source, Lerner & Tirole (on Bb) Stanford Case: "MySQL Open Source..."	MySQL	First Draft of final project due on 10/19
9	M W F	10/22 10/24 10/26		Varian on the economics of network industries and on the pricing of Information goods (two articles on Bb) Two-sided business models, Tirole et al (Bb)		
10	M W F	10/29 3/24 3/26	8. Competitive Innovation	The Innovator's Dilemma (on Bb) Innovator's Solution (on Bb) Harvard Case: "Reverse Engineering Google's..."	Google	
11	M W F	11/5 11/7 11/9		Pharma Innovation, CBO (on Bb) Financial Industry innovation (on Bb)		
	Midterm					
12	M W F	11/12 11/14 11/16	9. Real Options	Dixit & Pindyck, "The Options Approach.." “Real Options Calculations” (on Bb) Harvard Case: "Electronic Arts..."	EA	
13	M W F	11/19 11/21 11/23	10. Risk	Defining Risk, Glyn Holton (on Bb) Intelligence...Apgar, p.7-64, 106-114	Risk	
Thanksgiving holiday						
14	M W F	11/26 11/28 11/30	11. Signaling & Bargaining	Chapters 13 & 14 in McAfee		Final Projects due 11/30
15	M W F	12/3 12/5 12/7	Student group presentation of final project			
	Student group presentation of final project					
	Student group presentation of final project					
16	M W F	12/10 12/12 12/14	Student group presentation of final project			
	Student group presentation of final project					
	Student group presentation of final project					

Student Assessment

The final grade has five components:

Case Write-Ups	35%
Final Paper	30%
Midterms	15%
Final Paper Presentation	10%
Class Participation	10%

The substantial writing component part of this course is satisfied by the Case Write-Ups and the Final Paper. The requirements for these and for the other components of the course grade are described below, along with additional guidelines for writing the course paper

Case Write-Ups

Each student will *individually* prepare at least 6 of the 9 possible case write-ups. These are a **maximum** of two type-written, **double-spaced** pages and answer a specific question about the case. They must be handed in during the relevant class to count. You will be provided with writing feedback on these write-ups. Altogether these count for 35% of your grade. **The case question for each case can be found on this syllabus.** Note that your write-up should be focused on (be a response to) the case question from the syllabus. The responsiveness of your write-up to the question is an element in the grading of these short papers.

Final Paper Presentations

- The course paper can be written cooperatively, in groups of up to four students. Each group will manage a presentation and discussion of their paper. This presentation will be peer-graded (graded by the class) for 10% of each student's grade.
- Group members will usually receive the same grade for their presentation so that they can efficiently allocate their group resources (Note, however, that obvious free riding may result in a lower grade for an individual, depending on comments by the students who are evaluating a presentation.)
- Non-group members (the rest of the class) receive participation assessment on the basis of their evaluations of the presentations. You will be asked to grade all the final paper presentations other than your own, confidentially.
- We will allocate a minimum of 35 minutes per paper.
- The goal of the group should be to convince the class that their analysis and major conclusions are accurate and correct.
- Class participants should approach presentations like cases.
- Groups should start with a brief (*e.g.* 5 minutes) summary of their paper's major finding(s) and methods.
- Groups face one major concern: sparking a discussion if one doesn't start automatically. This is often a concern for the best papers because they are sufficiently convincing that no one will have any issues to discuss. In this case, presenters are free to turn the tables and ask questions of the class -- run the discussion like a case and ask questions. For example, "we faced the following issue ... how would you go about resolving it?"
- Everyone should be professional at all times: all criticism should be constructive.

Midterm (15%)

The midterm will focus on the main ideas that have been developed in class from the readings.

Final Paper Project

You will find a group (**maximum four persons**) and choose a topic early in the course with the objective of jointly preparing a paper on this topic. An initial project proposal and a first draft must be finished by the dates listed on the schedule. The T.A. and professor will provide comments, criticisms and suggestions for further work, and you will prepare a substantially-revised final version of your paper. Submission dates are listed on the schedule and are not negotiable. The final project is a 10 page (either single-spaced or 1.5 spaced, 12 point font) analysis of a competitive situation or industry practice. The due date is on the syllabus. This is a hard deadline.

The joint final project accounts for 30% of your grade.

Instructions for Final Project

- Maximum of four people per project.
- No extra credit for smaller groups.
- A one-page proposal is due in the second week of class (see the schedule page.) This can be provided by email (Word or PDF format) or handed in during class.
- An important aspect of business communication is the elimination of the extraneous. Supporting exhibits are not counted in the page total. Using a few well-chosen exhibits is a better strategy than many irrelevant exhibits. It is important to provide references for facts you rely on in the analysis.
- The paper's focus should be on analysis, with industry description provided to support that analysis. A common mistake is too much description, too little analysis.
- Do not choose a situation from a case reading from this or another class. Do not revise a paper you wrote for another course as a project without discussing it with me -- it would have to be a new paper to be approved.
- This project is intended for you to perform hands-on strategic analysis. If you were handed a project to analyze a strategic situation by the CEO of your company, what would you hand back?
- Paper must be handed in or emailed to me by 5PM on the deadline day, in either MS Word or PDF format.

Class Participation

Class participation counts for 10% of your grade. Participation means more than attendance, although obviously you aren't participating if you aren't in attendance. While I do not plan to take role, I may occasionally pass around a sign-up sheet or ask for a short, written in-class response to a simple question from our reading or discussion in order to offer credit for attendance.

Each of you is responsible for the material in the readings and students are encouraged to participate in class discussions. I may occasionally cold call if no one volunteers. Quality of class participation is more important than quantity. In asking questions or contributing to a discussion, do not be afraid to make mistakes when you have prepared for class. Everyone is well aware that, to come up with a good idea, it generally takes ten bad ideas.

Finally, the grades for the in-class presentations of final papers by each group are based on evaluations by the other students in the class. Thoughtful, organized evaluations will earn more points than simple *pro forma* comments.

The Honor Code

Students enrolled in this class are expected to adhere to the terms of the university's honor code. One thing this means is that where individual and original work is required, as in the case write-ups, a student's work must be his or her own.

Students may not discuss a case or receive notes on a case that has not yet been discussed in class with students who have taken the class previously.

Suggestions & Notes on the Final Paper Project

You should choose a topic immediately. We are on a very tight time schedule.

All papers must be strategy papers. This means they have to be about firms. But there is a great deal of flexibility in the choice of topic.

- First, choose an industry, based on interest in the industry. Examples of industries range from advertising to zoos, and include digital watches, private jets, diapers, over-the-counter cold and flu formulas, photographic film, automobiles, airlines, football, romance novels, dating services, banana production, or pre-stressed concrete, computer printers, pagers, business schools, used cars sold over the web, movie theaters.
- Having chosen the industry, you will need a question or issue on which to focus. Such questions could be broad (What strategies are most likely to sustain profitability?) or narrow (Should firm X build a new plant? Where?). Good questions encourage you to think strategically, and thus should include the likely responses of rival firms to any hypothetical actions. Plan to include your question in the topic proposal.
- A different approach is to choose a story about the behavior of a firm from a newspaper or other source, and research this story. For example, the defense contractor Lockheed-Martin announced a friendly takeover of Northrop-Grumman, and then later dropped the plan after the Department of Justice filed an antitrust complaint. This story contains a dozen potential paper topics. How is the defense industry organized? Why did they want to merge? Why did the DOJ want to block the merger?

I *strongly* encourage you to choose a topic in which you are interested rather than one that looks easy. Topics that look easy can be treacherous and unpleasant if they are boring.

Tools and analysis

When you have collected a great deal of information and begun to rough out your topic, run through this list of tools and insure that either they are used well, or aren't relevant.

- Industry analysis/five forces
 - This is relevant 99% of the time
 - entry barriers, rivalry usually, but not always, the most significant
- Complements
- Differentiation
 - Is one dimension enough?
- Cooperation
- Pricing and market segmentation
- War of attrition, intense rivalry, market supporting at most one firm
- First mover advantages and disadvantages
- Organizational design and incentives
- Product life cycle
- Option value of investment, delay
- Other risk management strategies

Paper Writing Strategy

1. *Collect Information*

Once you have chosen a topic, you should go out and collect a lot of information. An obvious starting place is the web. Much of the information on the web, unfortunately, is unreliable; I would like you to attempt to verify anything you find there. There is a service available at the library called EconLit which will identify economics papers by topic. Many of the articles you find this way will be difficult to read due to their mathematical content; however, the *Journal of Economic Perspectives* and *Journal of Economic Literature* generally do not have a great deal of mathematics.

In addition, papers in the *American Economic Review* and the *Journal of Political Economy* tend to have extensive, readable introductions. Industrial organization journals include *Rand Journal of Economics*, *Journal of Industrial Economics*, *International Journal of Industrial Organization*, and *Journal of Economics and Management Strategy*. Unfortunately, IO journals tend to be very technical. Occasionally good, readable IO papers may be found in *Economic Inquiry*.

For any given industry, there are usually several books that describe the industry. In addition, it is useful to interview people who work in a relevant industry. Prior to interviewing, however, you should carefully think about what you wish to learn and write questions down, to be sure you learn what you need to learn.

Newspaper and magazine articles provide an important source of timely information -- become familiar with Lexis or other periodical search engines at the library.

2. Draw a Conclusion

This is probably the single hardest part of the job you face. After completing part 1, you are confronted with a huge mass of information. What will you write about?

The best strategy is to draw a conclusion--find a point to make in your paper. The main point of your paper is called a thesis. Such points might be:

- The banana industry attempts to create brand names as a method of decreasing demand elasticity, with mixed success.
- Free agency would destroy professional football.
- The Department of Justice should lose its antitrust case against Microsoft.
- Dry-cleaners can price discriminate against women because of imperfect information.
- The hub-and-spoke airline routing system evolved to minimize transportation costs, but has produced significant market power for airlines.

Finding a thesis in a giant pile of information is often quite difficult. You can adopt some other author's thesis and attempt to support it with additional information. If you disagree with an author's thesis, you can choose the opposite thesis and attempt to prove that. If that doesn't produce a topic on which you wish to write, try putting your notes and materials away, and just write a stream-of-consciousness about what you have learned from your reading. Some of what is written this way will make no sense, but you may find "diamonds in the rough," nuggets of thought-provoking inspiration which will form the core of an argument.

3. Organize your facts

Once you have a thesis, cull through your information to select relevant information. Even in this electronic age, index cards remain a useful way of organizing facts. Some information may be useful as background toward understanding the question, as direct support of the thesis, as indirect support, or as contrary information. Do not throw away contrary information. The object is to be accurate, which means assessing all of the relevant information.

It will occasionally occur that the point you set out to make appears to be false, and that the evidence convinces you of the contrary view. This is fine; it requires revising your thesis, but it also means that you learned something significant.

4. Write

While electronics isn't much of a help to organization of materials, it is a massive help to writing. For most people, the best strategy is to write then repeatedly revise until the material flows smoothly, there are no extraneous asides, and the paper reads clearly. Cooperation also helps--if someone will read your paper and tell you what they found confusing, you know where to focus your efforts at revising. (A trade is a good way to arrange such external reading.)

Don't expect perfect prose, complete with salient quotations and proper grammar, to flow out in paragraph form. Ideas come in pieces and the evidence is scattered throughout your research materials. Get something written and then set about making it better.

5. Criteria for Evaluating the Paper

The following questions are designed to help you improve your draft.

A. Clarity

- Are the thesis and argument stated clearly in the introduction? The introduction should tell the reader what you will accomplish with the paper.
- Does the reader know what question you have set out to answer, and how you intend to answer it?
- Throughout the paper, are the connections between ideas and evidence made clear?

B. Organization

- How does each paragraph relate to and develop the argument?
- Do ideas and evidence follow each other in a linear sequence?

C. Argument and Evidence

- Is the argument supported by different types of evidence? Have you provided sources? Facts, references to authorities, statistics, examples, quotes, summaries?
- How does your argument take into account specific arguments by experts on the topic?
- How well are counter-arguments addressed? It is important that you include not just the evidence for your argument, but the evidence against it as well.

D. Documentation

- Are a variety of sources used? Journal articles, contemporary scholarly books, newspaper articles, primary texts, interviews with people in relevant businesses?
- Are the size and form of quotes appropriate? Remember that quotes are generally used only in two circumstances. First, when they express an idea extremely well. Otherwise you should paraphrase the source with a reference. Secondly, to be fair to someone whose opinion you oppose.
- Are your sources authoritative and scholarly? A high school text, tourist guide or fictional novel will not generally produce the level of scholarship desired.

E. Quality of Writing

- Are the style and tone of the paper appropriate?
- Are transitions from idea to idea smooth and easy to follow?
- Check spelling and grammar.
- Does the paper have a logical structure?

The desired structure has the form "introduction, argument, conclusion." The introduction sets out the issues, provides motivation and background, and provides an overview of the paper. The middle section, which is the longest and may need to be divided into several sections, makes your point. The conclusion sums up, and perhaps handles some of the potential criticisms. When possible, make the paper flow linearly, so that each paragraph starts where the previous paragraph stops.

F. Insight and Interest

- Do you show that the subject is worth thinking about? Is the paper properly motivated?
- Does your paper keep the reader's interest? (If possible, get a friend to read your paper, and ask the friend to identify parts that are confusing, boring, tedious, or poorly written.)
- Does the paper fit into a strategy course?
- Does it use strategic theory to help the reader understand the facts?
- Does it use facts from an industry to help us understand how firms succeed under strong competition?

Finally, here are some books that belong on the strategist's bookshelf:

- Besanko, Dranove, and Shanley, *Economics of Strategy*, Wiley, 2000.
- Brandenberger and Nalebuff, *Co-Optition*, Doubleday, 1997.
- Dixit and Nalebuff, *Thinking Strategically*, Norton, 1991.
- McMillan, *Games, Strategy and Managers*,
- Milgrom and Roberts, *Economics, Organization and Management*,
- Porter, *Competitive Strategy*, Free Press, 1980.
- Porter, *Competitive Advantage*, Free Press, 1985.
- Saloner, Shepard and Podolny, *Strategic Management*,
- Schelling, *The Strategy of Conflict*, 1960.
- Varian and Shapiro, *Information Rules: A Strategic Guide to the Network Economy*, Harvard, 1998