## BEPP 250 – SPRING 2014 Managerial Economics

Welcome to BEPP 250! This course will introduce you to "managerial economics" which is the application of microeconomic theory to managerial decision-making. Microeconomic theory is a remarkably useful body of ideas for understanding and analyzing the behavior of individuals and firms in a variety of economic settings. The goal of the course is for you to understand this body of theory well enough so that you can effectively analyze managerial (and other) problems in an economic framework. While this is a "tools" course, we will cover many real-world applications, particularly business applications, throughout the course so that you can witness the usefulness of these tools and acquire the skills to use them yourself. We will depart from the usual microeconomic theory course by giving more emphasis to *prescription*: What should managers do in order to achieve some objective? This course deliverable is to be compared with *description*: Why do firms and consumers act the way they do? The latter will still be quite prominent in this course because only by understanding how other firms and customers behave can a manager determine what is best for him or her to do.

The first major task in the course is the development of the theory of supply and demand underlying the competitive model, which serves as the benchmark for evaluating other market structures. Outside of the purely competitive context, an understanding of demand is essential to many firm decisions including pricing, marketing, and product positioning. The concept of supply and the supply curve provides an invaluable framework for thinking about firm costs and investment decisions. After presenting the competitive model, we turn to other market structures more like those encountered by real-world firms such as monopoly and oligopoly. We then investigate the development and use of market power, as well as strategic interaction in both product markets and auctions. Finally, we examine what happens when there is asymmetric information and market externalities.

<u>Prerequisites</u>: Students need to have taken ECON 1 or ECON 10 or its equivalent. Also, you will finally be able to apply the tools you learned in calculus. In particular, students need to be comfortable with taking derivatives. To assist you in reclaiming that level of comfort (which you surely had when first taking calculus), your TA will dedicate the first recitation to reviewing relevant mathematical methods and will be available throughout the semester to assist with problem-solving. While there will be some adjustment in getting accustomed to actually applying calculus to real-world problems, it makes it significantly easier to learn the basic principles of microeconomic theory.

<u>Textbook</u>: The textbook for this course is <u>Microeconomics</u>, 2<sup>nd</sup> Edition (McGraw Hill) by B. Douglas Bernheim and Michael D. Whinston. This book comes with online access to Connect which is a very useful resource for materials and exercises. Though there is a textbook, the course is built around the lecture slides, which were specifically developed for BEPP 250 and will be made available to you prior to each class. The role of the textbook is to provide a secondary presentation of concepts and a source of additional applications and exercises. We realize how expensive textbooks are and have sought to give you the most options which range from a new copy of the 2<sup>nd</sup> edition to a used copy of either the 1<sup>st</sup> or 2<sup>nd</sup> edition and buying a subscription to Connect from McGraw-Hill.

The UPenn bookstore is selling the hardback edition with a Connect plus access code (ISBN # 978-007771631-8) and a less expensive loose-leaf edition with a Connect plus access code (ISBN # 978-0077716325). To register for Connect, go to the following section specific course URL (depending on your section):

http://connect.mcgraw-hill.com/class/e\_azevedo\_02 http://connect.mcgraw-hill.com/class/e\_azevedo\_02 http://connect.mcgraw-hill.com/class/u\_doraszelski\_03 http://connect.mcgraw-hill.com/class/u\_doraszelski\_04 http://connect.mcgraw-hill.com/class/j\_houde\_06 http://connect.mcgraw-hill.com/class/j\_houde\_07 http://connect.mcgraw-hill.com/class/j\_houde\_07 http://connect.mcgraw-hill.com/class/j\_harrington\_08 http://connect.mcgraw-hill.com/class/j\_harrington\_09 http://connect.mcgraw-hill.com/class/m\_abito\_10 http://connect.mcgraw-hill.com/class/m\_abito\_11

Select "register now" and enter your e-mail address. If you've used Connect previously or concurrently in a different course use that e-mail. If you purchased one of the options from the bookstore enter the Connect plus (includes e-book) registration code and complete the registration. You'll have access to the Connect assignments, the e-book and Learn Smart, an adaptive study tool, for 6 months. If you're comfortable with just an e-book, select the "buy online option" and select the Connect plus (includes e-book) option for \$125. You can enter "springstudent" in the promo code area and receive a 15% discount off the cost of Connect plus (includes e-book) only. If you purchased a used book select the "connect" (no e-book) option for \$60. If wish to test drive the software check out the "start free trial" option. You'll have access to the e-book and the assignments for 3 weeks at the end of which you'll need to enter the Connect code from the textbook package from the bookstore or purchase access to Connect (no e-book) for \$60 or Connect plus (includes e-book) for \$120. If you have any problems registering, you should contact McGraw-Hill's support group at 1-800-331-5094.

## Additional Readings:

Corts, Kenneth S. and Wells, John R., "Alusaf Hillside Project," Harvard Business School, Case 9-704-458, 15 December 2003.

Stewart, James B. "How an antitrust investigation into Christie's and Sotheby's became a race to see who could betray whom," *The New Yorker*, October 15, 2001.

<u>Requirements</u>: Grades in this course depend on attendance (5%), problem sets (10%), a midterm exam (35%), and a final exam (50%).

<u>Problem Sets</u>: The problem sets will be posted on Canvas on the day that they are assigned and the solutions will be posted on or shortly after the due date. Problem sets are due in lecture; see the schedule below for due dates. **Please be sure to write your recitation (not lecture) section # on the top of your problem set**. Your problem set will be graded by the TA who runs the recitation in which you've registered and graded problem sets can be picked up at your recitation. These problem sets are designed to give you practice working on the material and to prepare you for the exams. Only through practice with the concepts taught in this course can you become proficient with them. While problem sets are graded pass/fail based on apparent effort and not accomplishment, we strongly advise that you take them very seriously. Think of them as an investment that will pay off when it comes to taking exams.

The midterm exam is scheduled for Thursday, February 27, 6-8PM. The final exam is scheduled for Tuesday, May 13, 6-8PM. Both exams are "closed book" though you may bring a non-programmable calculator. (If you have any doubt as to whether your calculator is "non-programmable" then have a TA evaluate it prior to the day of an exam.)

<u>Attendance</u>: Attendance (and displaying your name tents) is mandatory and attendance will be recorded within 5 minutes of the start of each class. The class will have a seating chart so please be in your proper seat on time. Exams will be based on the material covered in lectures. While the textbook is a useful complement to the lectures, it is definitely not a substitute so you really do want to attend class. In grading attendance, each student has a credit of two excused absences. This should cover religious holidays, illnesses, and other legitimate reasons for missing a class. Thus, if a student attends at least 24 out of the 26 lectures then s/he will receive a perfect attendance grade. After using up your two excused absences, all subsequent absences are unexcused and thus will lower your attendance grade. If you do miss a class, you are encouraged to report and explain it using <u>Course Absence Report</u>. CAR is solely for information purposes and its use cannot hurt you (in particular, it will not affect your course grade) and could help you (by keeping Academic & Advising well-informed of any possible problems; remember, they are there to support you).

<u>Ethics</u>: You are expected to review and abide by the University of Pennsylvania's Code of Academic Integrity. Violations of the code carry serious sanctions. Among such violations is the altering of exams after the exams are returned. In the spirit of discouraging any temptation to engage in such unethical practices, copies of midterm and final exams will be made before they are returned to students. The faculty will turn all cases of code violations over to the Office of Student Conduct and reserve the right to impose additional sanctions, including a failing grade for the assignment / exam and the course.

<u>Recitations</u>: Each student must register for a Friday recitation run by a TA. The TA for your recitation will grade your problem sets and is your primary resource for addressing questions on course material. While attendance at recitation is not mandatory, it is highly encouraged. Just consider it in cost-benefit terms. If attending recitations allows you to answer just one question on an exam that you would not have been able to answer otherwise, it would be time well-spent in terms of delivering a higher course grade.

<u>Electronics</u>: Checking your smartphone, tablet, laptop, smartwatch, or any other device that connects you to the world outside of this classroom is not allowed unless an exception is made in association with some classroom activity.

<u>Re-grading Policy</u>: It is our experience that grading mistakes are rare, but we realize that they do occur. In the event that you believe your test has been graded incorrectly, please follow the steps below:

- 1) Go home from class and carefully read the answer sheet posted on Canvas. Take at least 24 hours to think about the answers before submitting a re-grade request.
- 2) If you decide to submit a request, submit it in writing on a separate piece of paper and attach that sheet to your exam. **Do not write on the exam.** Additionally:
  - a) For each part of the exam that you think was mis-graded, give a written explanation of your view.
  - b) You must ante up one exam point for each part of the exam that you think was misgraded. You get that point back only if your complaint is judged to have merit. Otherwise, you lose the point.
  - c) You must submit the entire original exam (not just the question(s) you wish to have regraded). Your score could go down or up as a result of re-grading.
  - d) We reserve the right to re-grade the whole exam (even questions not requested for a regrade).

<u>Policy for Missing an Examination</u>: Students are expected to attend the mid-term and final examinations. A missed exam will be assigned zero points, unless the student has a medical or personal emergency or some unavoidable school-related conflict that is recognized and excused by a student's instructor. In all cases, a student must make a request for an excused absence to his or her instructor (by email) prior to the regularly scheduled exam. The instructor may ask the student to provide appropriate documentation. Conflicts with other exams will be dealt with on a case-by-case basis. In case of a conflict between exams, a student is required to notify the instructor of the conflict at least two weeks prior to the exam date.

For those students who miss the mid-term exam scheduled for February 27<sup>th</sup> and have been given an excused absence by the student's instructor, they will be allowed to take the make-up mid-term exam that will occur on March 3<sup>rd</sup>. If you miss the make-up exam without having received an excused absence (for the make-up exam) then you will receive zero points. If you miss both the mid-term exam and the make-up mid-term exam and have been given an excused absence for both, the weight originally assigned to the mid-term exam will be shifted to the final exam which means the final exam will determine 85% of your final grade.

For those who miss the final exam and have an excused absence, there will be a make-up final exam in September (or earlier if at all possible).

<u>Students with Disabilities</u> Requests for academic accommodations need to be made during the first two weeks of the semester, except under unusual circumstances, to arrange reasonable accommodations. Students must register with Student Disabilities Services (SDS) for disability verification and for determination of reasonable academic accommodations.

BEPP 250 - SPRING 2014					
Lecture	M-W Class	T-Th Class	Торіс	<b>Problem Set Deadlines</b>	Assigned Readings
1	1/15/2014	1/16/2014	Introduction		BW - 1, 2, 3
2	1/22/2014	1/23/2014	Consumers: Preferences		BW - 4
3	1/27/2014	1/28/2014	Consumers: Choice		BW - 5.1-5.2
4	1/29/2014	1/30/2014	Consumers: Demand		BW - 5.3-5.5, 6.1
5	2/3/2014	2/4/2014	Firms: Production	Problem Set #1 is due	BW - 7.1-7.4, Corts
6	2/5/2014	2/6/2014	Firms: Cost		BW - 8
7	2/10/2014	2/11/2014	Firms: Profit-maximization		BW - 9.1-9.4
8	2/12/2014	2/13/2014	Competitive Markets: Equilibrium	Problem Set #2 is due	BW - 9.5, 14, 15.1, 15.3
9	2/17/2014	2/18/2014	Uncertainty: Choice		BW - 11.1-11.2
10	2/19/2014	2/20/2014	Uncertainty: Demand for Insurance		BW - 11.3
11	2/24/2014	2/25/2014	Uncertainty: Competition and Adverse Selection	Problem Set #3 is due	BW - 21.1-21.3
12	2/26/2014	2/27/2014	Review/Q&A (attendance is not mandatory)		
	2/27/2014	2/27/2014	Mid-term Examination, 6:00-8:00pm		
13	3/3/2014	3/4/2014	Trading Pit Experiment		
14	3/5/2014	3/6/2014	Monopoly: Pricing		BW - 17.1-17.5
	3/10/2014	3/11/2014	SPRING BREAK		
	3/11/2014	3/13/2014	SPRING BREAK		
15	3/17/2014	3/18/2014	Monopoly: Price Discrimination		BW - 18.1-18.4
16	3/19/2014	3/20/2014	Monopoly: Bundling		BW - 18.5
17	3/24/2014	3/25/2014	Imperfect Competition: Game Theory	Problem Set #4 is due	BW - 12.1-12.4
18	3/26/2014	3/27/2014	Imperfect Competition: Game Theory		
19	3/31/2014	4/1/2014	Imperfect Competition: Price Choice		BW - 19.1-19.2, 19.4
20	4/2/2014	4/3/2014	Imperfect Competition: Quantity Choice		BW - 19.3
21	4/7/2014	4/8/2014	Imperfect Competition: Collusion	Problem Set #5 is due	BW - 10.1, 19.5
22	4/9/2014	4/10/2014	Imperfect Competition: Collusion		Stewart
23	4/14/2014	4/15/2014	Auctions		BW - 12.5
24	4/16/2014	4/17/2014	Auctions		
25	4/21/2014	4/22/2014	Moral Hazard and the Agency Problem	Problem Set # 6 is due	BW - 21.4
26	4/23/2014	4/24/2014	Regulation and Externalities		BW - 20.1-20.3
27	4/28/2014	4/29/2014	Wrap-up		
	5/13/2014	5/13/2014	Final Examination, 6:00-8:00pm		