

BEPP 250 – FALL 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.

Prerequisites: 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.

Textbook: The textbook for this course is *Intermediate Microeconomics* (Norton) by Hal R. Varian. It is available at the Penn Bookstore with its (free) package workouts. Should you order it independently, please pay attention to the ISBNs as they differ for the textbook with and without workouts (even though the price should be the same).

Aplia: We will also use the Aplia on-line companion to the textbook. Unfortunately, it requires a separate subscription. You will need it for 4 of the 6 pieces of homework to be produced during the semester. See attached sheet at the end of this syllabus for further details.

Lectures, recitations, the textbook, and Aplia strongly complement each other. They are no substitutes for each other. We will also use Canvas to keep you informed about deadlines and

make lecture notes available. Finally, we will use Piazza for class discussions outside the classroom.

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

Problem Sets: Notifications about the Aplia problem sets will be posted on Canvas. The “paper” problem sets will also be posted on Canvas. These will have to be handed in recitation and will be handed back to you at the next recitation. Both types of 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.

Exam dates: The midterm exam is scheduled for Thursday, October 16, 6-8PM. The final exam is scheduled for Thursday, December 16, 3-5PM. Both exams are “closed book”. We will provide you with a non-programmable calculator for the two exams.

Attendance: Attendance (and displaying your name tents) is mandatory and attendance will be recorded within 5 minutes of the start of each lecture. Lectures will have a seating chart so please be in your proper seat on time. 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 [Course Absence Report](#). 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).

Recitations: 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.

Ethics: You are expected to review and abide by the University of Pennsylvania’s Code of Academic Integrity. Violations of the code carry serious sanctions. 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.

Electronics: 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.

Re-grading Policy: Grading mistakes are rare, but they can occur. In the event that you believe your test has been graded incorrectly, please follow the steps below:

- 1) Go home from class and read the answer sheet posted on Canvas carefully. Take at least 24 hours to think about the answers before submitting a re-grade request.

- 2) If you do 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 mis-graded. 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 re-graded). 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 re-grade).

Missed exams: 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 the BEPP course administrator. We ask students 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 us of the conflict at least two weeks prior to the exam date.

A make-up exam is usually organized around the date of the main exam. You can only attend it if you have been excused for the main exam. We can only organize on such make-up exam. 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).

Students with disabilities: 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 Course Schedule and Key Dates
(The topic schedule is approximate and will be updated)

<i>Lecture</i>	<i>Date</i>	<i>Action</i>	<i>Session Topic(s)</i>	<i>Readings</i>
1	W Aug 27		Introduction	
2	W Sept 3		Consumers: Preferences	3.1-3.4, 14.1
3	M Sept 8		Consumers: Choice	2, 3.6, 4.1- 4.5, 9.8
4	W Sept 10		Consumers: Demand	5.1-5.4, 6.1- 6.3, 6.6, 15
5	M Sept 15	Homework 1 due	Firms: Production	19
6	W Sept 17		Firms: Cost	21, 22
7	M Sept 22		Firms: Profit-maximization	23
8	W Sept 24	Homework 2 due	Competitive Markets: Equilibrium	24.1-24.2, 16
9	M Sept 29		Trading Pit Experiment	
10	W Oct 1		Case: Alusaf Hillside Project	
11	M Oct 6		Uncertainty: Choice	13.1, 12.1- 12.4
12	W Oct 8		Uncertainty: Demand for Insurance	12.5-12.7
13	M Oct 13	Homework 3 due	Uncertainty: Competition and Selection	38.1-38.3
14	W Oct 15		Catch-up / review session	
	Thurs. Oct 16	MIDTERM 6-8PM	COVERS MATERIAL IN LECTURES 1 THROUGH 14	
15	M Oct 20		Monopoly: Pricing	25
16	W Oct 22		Monopoly: Price Discrimination	26.1-26.4
17	M Oct 27		Monopoly: Bundling	26.5-26.6
18	W Oct 29	Homework 4 due	Imperfect Competition: Game Theory	29.1-29.4, 30.1-30.4
19	M Nov 3		Imperfect Competition: Game Theory	29.7-29.8, 30.6
20	W Nov 5		Imperfect Competition: Price Choice	28.9
22	M Nov 10		Imperfect Competition: Quantity Choice	28.5
23	W Nov 12	Homework 5 due	Imperfect Competition: Collusion	28.10
24	M Nov 17		Imperfect Competition: Collusion	28.10
25	W Nov 19		Auctions	18.1-18.4
26	M Nov 24		Auctions	18.5-18.8
27	M Dec 1	Homework 6 due	Moral Hazard and the Agency Problem	38.4, 38.7- 38.8
28	W Dec 3		Regulation and Externalities	35
29	M Dec 8		Wrap-up	
	Th Dec 18	FINAL 3-5 PM	COVERS MATERIAL IN LECTURES 1 THROUGH 28	

The instructor will be Prof. Gilles Duranton for lectures 1-14 and Professor Jean-François Houde for lectures 15-28.