

BEPP 250: Managerial Economics

Spring 2020

Course description

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, 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 a manager do in order to achieve some objective? That course deliverable is to be compared with *description*: Why do firms and consumers act the way they do? The latter will still be 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 a valuable 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, the challenges created by imperfect and asymmetric information are investigated which have significant implications for behavior and market performance.

Prerequisites: Students need to have taken ECON 1 or ECON 10 or its equivalent. To assist you in reclaiming a level of comfort in taking derivatives and solving algebraic equations, the first lecture will review relevant mathematical methods. While it may take some time to become accustomed to applying calculus to real-world problems, it actually makes it significantly easier to learn the basic principles of microeconomic theory.

Resources

The recommended textbook for this course is *Intermediate Microeconomics with Calculus: A Modern Approach* by Hal R. Varian. The latest edition is available at the Penn Bookstore but you can use a different edition.

Details on required reading for the course (e.g. business cases) will be announced closer to the lecture. Lecture slides, recitation worksheets, problem sets and exam review materials will be provided to you through Canvas.

If you have a question about the course—a concept, a deadline for a problem set, etc—there are several resources available to you to get the answer. To start, the primary venue for resolving questions will be Piazza. This system is designed to getting you help fast and efficiently from classmates and TAs. You are encouraged to check Piazza for an answer to your question and, if it is not there, to then post your questions on Piazza.

Instructors and Undergraduate TAs will also be holding weekly office hours for one-on-one discussion. Contact details and office hours will be posted on Canvas and announced during the introductory lecture.

Grading

Your grade in the course will consist of **participation (5%), problem sets (5%), and three exams (30% each)**.

Participation: Your participation grade is composed of three parts. Attendance in lectures and recitations are each worth 2%. Attendance during lectures will be recorded using Wharton apps. ***Falsely reporting that you are attending class is an honors violation.*** Attendance during recitations will be recorded by the TA.

In order to avoid the difficult task of assessing what is and what is not an appropriate excuse for missing class while recognizing that there are legitimate reasons for missing class, each student is given a credit of **six penalty-free absences** (three for lectures and another three for recitations) which require no explanation for you to use. This should cover religious holidays, illnesses, school-related activities, and other reasons for missing a class. After using up all of your penalty-free absences, all subsequent absences 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).

The remaining 1% of your participation grade will be for volunteering to answer a question during the recitation. You need to answer a question at least once throughout the semester. The purpose of this exercise is to promote a collaborative learning environment. Recitations will have an active-learning format where you will be given a worksheet consisting of around three questions. For each question, you will be given time to answer on your own after which the TA will request for a volunteer to discuss the answer. In answering the question, it is not enough to simply write on

the board. You need to explain to the class what you're doing and make sure the other students are on board. We encourage you to volunteer even if you are unsure of the answer. The TA and other students are there to assist if you have doubts about your solution. It is often more useful to see where other students have difficulty than to simply see the solution written in front of you.

Problem sets: Problem sets will be posted on Canvas. Problem sets are designed to give you practice working on the material and to prepare you for the exams. Though problem sets will largely (though not exclusively) be graded on apparent effort (rather than accomplishment), we strongly advise that you take them very seriously. Think of them as an investment that will yield a return when you take an exam.

You will submit your Problem Set through Canvas by the specified deadline. Late submissions will not be accepted. There are several apps that allow you to take pictures of your work and save it as a pdf file. You can ask the undergrad TAs for advice on which app to use or if you are facing any technical/logistical issues.

Exams: There will be three exams each worth 30% of your grade. The dates for the first two are already in the course schedule. The last exam will be held during finals week and we will announce the date once the registrar assigns it. All exams are “**closed book**”. We will provide you with a non-programmable calculator for all the exams.

Other important items

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.

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. 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 all exams. 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, 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 actual exam. You can only attend it if you have been authorized by the BEPP course administrator. As you can imagine, we can only organize one such make-up exam. If you miss both the actual and make-up exams, and have a valid excused absence for both, the weight originally assigned to the exam will be shifted to the remaining exams equally. 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 Spring 2020 Course Schedule

Lecture	M/W	T/R	TOPIC	Problem Set	Recitation (F)
	1/15	1/16	Math refresher		
	1/20	1/21	<i>MLK Holiday – No classes</i>		
1	1/22	1/23	Introduction		R1 (Math)
2	1/27	1/28	Consumers: Choice and Preference		
3	1/29	1/30	Consumers: Utility Maximization		R2
4	2/3	2/4	Consumers: Demand		
5	2/5	2/6	Firms: Production	PS1 due	R3
6	2/10	2/11	Firms: Cost Minimization		
7	2/12	2/13	Firms: Profit Maximization and Supply		R4 (Review)
8	2/17	2/18	<i>Review Session for Midterm Exam 1</i>	PS2 due	
		2/20	MIDTERM EXAM 1 (6-8 P.M.)		
8	2/24	2/25	<i>Trading Pit Experiment</i>		
9	2/26	2/27	Competitive Equilibrium		R5
10	3/2	3/3	Monopoly: Market Power		
11	3/4	3/5	Monopoly: Price Discrimination	PS3 due	R6
	3/9	3/10	<i>Spring break</i>		
	3/11	3/12	<i>Spring break</i>		
12	3/16	3/17	Monopoly: Price Discrimination		
13	3/18	3/19	<i>Review Session for Midterm Exam 2</i>	PS4 due	R7 (Review)
		3/24	MIDTERM EXAM 2 (6-8 P.M.)		
14	3/25	3/26	Game Theory: Static Games		R8

15	3/30	3/31	Imperfect Competition: Price Choice		
16	4/1	4/2	Imperfect Competition: Quantity Choice		R9
17	4/6	4/7	<i>OPEQ Experiment</i>	PS5 due	
18	4/8	4/9	Game Theory: Dynamic Games		R10
19	4/13	4/14	Imperfect Competition: Cooperation and Collusion		
20	4/15	4/16	Decision Making under Uncertainty		R11
21	4/20	4/21	Decision Making under Uncertainty		
22	4/27	4/23	Special Topics in Microeconomics	PS6 due	R12 (Review)
23	4/29	4/28	<i>Review Session for Final Exam</i>		
FINAL	TBD		FINAL EXAM (FINALS WEEK)		