BEPP 250 – SPRING 2017

Managerial Economics

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 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 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 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. Also, you will finally be able to apply the tools you learned in calculus! To assist you in reclaiming a level of comfort in taking derivatives (which you surely had when you took calculus), the first recitation will review relevant mathematical methods, and there will be teaching assistants to assist you throughout the semester. 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.

Textbook: The textbook for this course is *Intermediate Microeconomics with Calculus* (Norton, 2014) by Hal R. Varian (who is currently Chief Economist at Google). 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).

Requirements: Your grade in the course is based on attendance (5%), problem sets (10%), a midterm exam (40%), and a final exam (45%).

Lectures: Come to class prepared and ready to ask questions. Make sure you have read the assigned readings prior to class. We use Canvas to distribute lecture slides prior to class. To ensure that everybody is prepared, instructors may cold call on you.

Lectures, recitations, and the textbook strongly complement each other. They are not substitutes so you are strongly advised to draw on all of these resources.

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Checking your smartphone, tablet, laptop, smartwatch, or any other device that connects you to the world outside of the classroom is not allowed unless an exception is made in association with some classroom activity. Violation of this rule will result in you being counted as absent for the class.

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 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 three penalty-free absences which require no explanation for you to use. This should cover religious holidays, illnesses, and other legitimate reasons for missing a class. Thus, if a student misses three or fewer classes, then s/he will receive a perfect attendance grade. After using up your three 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).

Recitations: Each student must register for a Friday recitation run by a graduate teaching assistant. Attendance at recitation is not mandatory buy it is highly recommended in the strongest terms. While lectures will emphasize concepts and applications, recitation will focus on problem-solving which is crucial for the exams. The recitations have been designed to engage in "active learning" which means you will work in groups to solve problems with the assistance of the graduate teaching assistants. Studies have shown this to be an effective method of learning and it should nicely complement lectures. When it comes to deciding whether to attend recitation, just consider it in cost-benefit terms. If attending recitation 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.

Problem sets: Problem sets will be posted on Canvas. They are to be turned in at class and will be returned either at class or recitation. 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.

We will also post a set of problem sets and exams from previous years on Canvas. These are for you to practice.

Questions: So, you have a question about the course – a concept, a deadline for a problem set, etc. You have many 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, the teaching assistants, and the instructors. You are encouraged to check Piazza for an answer to your question (for if you have that question, so might other students) and, if it is not there, to then post your questions on Piazza. If you would rather engage in a one-on-one discussion, you can email your query to one of the undergraduate teaching assistants. If the teaching assistant feels that discussion would be useful to other students, s/he will post it on Piazza while maintaining your anonymity. Of course, you can also go to the office hours of an undergraduate teaching assistant or of your instructor.

The undergraduate teaching assistants for the course are:

Tingting Bi	tbi@wharton.upenn.edu
Matthew Chen	mattchen@wharton.upenn.edu
Dan Kesler	dkesler@wharton.upenn.edu
Jeffrey Painter	painterj@wharton.upenn.edu
Alexander Pompetzki	apomp@wharton.upenn.edu
Sadhvi Venkatramani	sahdviv@wharton.upenn.edu

You should feel free to contact them by email with your questions at any time.

http://piazza.com/upenn/spring2017/bepp250?token=c7pydOfO3y9

Although there will be some overlap between Piazza and Canvas, please use Piazza for all questions and communications.

Office hours: The office hours of the undergraduate teaching assistants and the instructors will be posted on Canvas.

Exam dates: The midterm exam is scheduled for February 28, 2017, 6-8pm and the final exam is scheduled for May 1, 2017, 6-8pm. The final exam will focus on material after the midterm exam. Both exams are "closed book". We will provide you with a non-programmable calculator for the two exams.

Review sessions prior to both exams will be held at dates/times to be determined.

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)   Exams will be posted to Canvas for your review once they are graded. Please take at least 24 hours to carefully review your exam and the answer key which will also be posted to Canvas.
2)   If you do decide to submit your exam for a regrade, you must fill out the "Regrade Request" form which will also be placed in "files" on Canvas. You do not need to attach your exam. Additionally:
   a) For each part of the exam that you think was misgraded, 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 exam for a regrade (not just the question(s) you wish to have re-graded). Your score could go down or up as a result of regrading.
   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 midterm 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 (Beth Moskat, emoskat@wharton.upenn.edu). 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 main exam. You can only attend it if you have been excused from taking the main exam. As you can imagine, we can only organize one such make-up exam. (For

otherwise, where does it all end? A make-up for a make-up for a make-up …) If you miss both the midterm exam and the make-up midterm exam and have been given an excused absence for both, the weight originally assigned to the midterm 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).

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.

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.

Lectures	M/W	T/Th		Problem Set Due	Assigned Readings
			BEPP 250 Spring 2017 Schedule		
1	01/11	01/12	Introduction		1
	01/16	01/17	MLK Holiday – No classes		
2	01/18	01/19	Consumers: Preferences and Budget Constraint		2, 3.1-3.4
3	01/23	01/24	Consumers: Utility Maximization	PS#1 assigned	3.6, 4.1-4.5
4	01/25	01/26	Consumers: Demand		5.1-5.4, 15.1-15.2
5	01/30	01/31	Firms: Production	PS#1 due	19
6	02/01	02/02	Firms: Cost Minimization		21.1-21.2,21.4-21.6, 22
7	02/06	02/07	Firms: Profit Maximization and Supply	PS#2 assigned	23, 24.1-24.2
8	02/08	02/09	Competitive Equilibrium		14.1-14.7, 14.9-14.10, 16
9	02/13	02/14	Trading Pit Experiment	PS#2 due	
10	02/15	02/16	Monopoly	PS#3 assigned	25
11	02/20	02/21	Monopoly: Price Discrimination		26.1-26.6
12	02/22	02/23	Monopoly: Price Discrimination	PS#3 due	
13	TBD	TBD	Review Session and Q&A		
			MIDTERM EXAM, Tuesday, 2/28/17, 6:00-8:00 pm		
14	03/01	03/02	Public Goods Experiment		
			Spring Break 03/04/17 – 03/12/17		
15	03/13	03/14	Game Theory: Static Games		29.1-29.4, 30.1-30.2
16	03/15	03/16	Game Theory: Dynamic Games	PS#4 assigned	29.7-29.8
17	03/20	03/21	Imperfect Competition: Price Choice		28.9
18	03/22	03/23	Imperfect Competition: Quantity Choice and OPEQ Experiment	PS#4 due	28.5-28.6
19	03/27	03/28	Imperfect Competition: Collusion		28.10-28.11, 29.5-29.6
20	03/29	03/30	Imperfect Competition: Collusion	PS# 5 assigned	
21	04/03	04/04	Auctions		18.1-18.8
22	04/05	04/06	Auctions	PS#5 due	
23	04/10	04/11	Decision Making under Uncertainty	PS#6 assigned	12.1-12.7, 13.1
24	04/12	04/13	Decision Making under Uncertainty		
25	04/17	04/18	Asymmetric Information: Adverse Selection & Moral Hazard	PS#6 due	38.1, 38.3-38.4
26	04/19	04/20	Wrap Up: Developing a Business Plan		
27	TBD	TBD	Review Session and Q&A		
			FINAL EXAM, Monday, 05/01/17, 6:00-8:00 pm		

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