BEPP 250 – SPRING 2015

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, 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 with Calculus* (Norton) 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: Grades in this course depend on attendance (5%), problem sets (10%), a midterm exam (40%), and a final exam (45%).

Problem Sets: Problem sets will be posted on Canvas. These are to be turned in at recitation and will back handed back to you at the next recitation. 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. 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 pay off when it comes to taking exams.

Exam dates: The midterm exam is tentatively scheduled for March 4th, 6-8PM. The final exam will focus on material after the mid-term exam. 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. While attendance at recitation is not mandatory, it is highly encouraged. While lectures will focus on 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 TA. Studies have shown this to be an effective method of learning and 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.

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 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 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. 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 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.

Schedule of Lectures

Lectures	M/W	T/Th	Topic
Lecture #1	01/14	01/15	Introduction
MLK Holiday	01/19	01/20	NO CLASS
Lecture #2	01/21	01/22	Consumers: Preferences
Lecture #3	01/26	01/27	Consumers: Choice
Lecture #4	01/28	01/29	Consumers: Demand
Lecture #5	02/02	02/03	Firms: Production
Lecture #6	02/04	02/05	Firms: Cost
Lecture #7	02/09	02/10	Firms: Profit-maximization
Lecture #8	02/11	02/12	Competitive Markets: Equilibrium
Lecture #9	02/16	02/17	Trading Pit Experiment
Lecture #10	02/18	02/19	Monopoly: Pricing
Lecture #11	02/23	02/24	Monopoly: Price Discrimination
Lecture #12	02/25	02/26	Monopoly: Bundling
Lecture #13	03/02	03/03	Review/Q&A
Lecture #14	03/04	03/05	MID-TERM EXAMINATION
Spring Break	03/7 - 03/15	03/7 - 03/15	
Lecture #15	03/16	03/17	Imperfect Competition: Game Theory
Lecture #16	03/18	03/19	Imperfect Competition: Game Theory
Lecture #17	03/23	03/24	Imperfect Competition: Quantity Choice
Lecture #18	03/25	03/26	Imperfect Competition: Price Choice
Lecture #19	04/01	04/02	Imperfect Competition: Collusion
Lecture #20	04/03	04/04	Imperfect Competition: Collusion
Lecture #21	04/08	04/09	Uncertainty: Choice
Lecture #22	04/13	04/14	Uncertainty: Demand for Insurance
Lecture #23	04/15	04/16	Auctions
Lecture #24	04/20	04/21	Auctions
Lecture #25	04/22	04/23	Moral Hazard and the Agency Problem
Lecture #26	04/27	04/28	Moral Hazard and the Agency Problem
	04/29	-	NO CLASS
			FINAL EXAMINATION