BEPP 250, Fall 2017 Managerial Economics

This is a course on intermediate microeconomics. Microeconomics is a scientific approach to social science base on three principles: individuals respond to incentives, individual behavior aggregates into equilibrium social behavior, and we can use normative criteria to find desirable outcomes.

The goals of the course are to master microeconomics, and to apply microeconomics to problems in business, policy, and social science. Have you wondered "How should Uber set prices?", "How does trade with China affect American manufacturing?", "Why are Playstation games expensive while Sony sells the console at cost?", "Should income tax rates for millionaires be 75%?", "Should Spotify start charging per song?", "Why does Apple manufacture the iPhone and designed iOS while Google built Android but not phones?" If you have, then you came to the right syllabus.

Staff

• Undergraduate TAs:

Angelica Zhou (angezhou@wharton.upenn.edu) Thursday, 3 - 4:30 PM JMHH – F94

Daniel Kessler (<a href="mailto:decoration-decorati

- Graduate TAs: Jeremy Yoo (<u>jeyoo89@gmail.com</u>) and Hong Yu Xiao (<u>hongxiao@wharton.upenn.edu</u>)
- Program Coordinator: Beth Moskat (emoskat@wharton.upenn.edu)
- Professor: Eduardo Azevedo (eazevedo @wharton.upenn.edu)

Grading

Grades in depend on attendance (5%), problem sets (10%), two midterms (25% each), and a final exam (35%).

Problem Sets: There will be six problem sets. See the schedule for due dates.

Exams: See the schedule below for dates. Exams are closed book. You do not need a calculator and do not have to bring one. Exams will be consistent with our problem sets, problems in lectures, and practice problems, so doing those is the best way to prepare.

How to Learn

<u>Recitation</u>: Recitations are taught by our graduate TAs, and will cover problems and the class content of the week. This is the schedule:

- BEPP 250-201 Friday, 10-11:00 a.m.
- BEPP 250-202 Friday, 11-12:00 a.m.
- BEPP 250-203 Friday, 12-1:00 p.m.
- BEPP 250-204 Friday, 1-2:00 p.m.

<u>Office Hours</u>: Undergraduate TAs will hold office hours on <u>Tuesday 1 - 3:00 PM JMHH</u> F86 and <u>Thursday 3 - 4:30 PM JMHH F94</u>. Additional office hours TBA. Professor Azevedo has office hours Tuesdays 3-5pm at SHDH 1455. You are very welcome to come to office hours to get help with problem sets, the material, and preparing for exams.

<u>Piazza</u>: You are highly encouraged to use our Piazza site when you have questions. Our undergrad TAs will devote a few hours a week to answering questions on Piazza, and we expect this to be a lively community to discuss the material. Piazza link TBA.

<u>Problems:</u> The exam will be consistent with the problems done in class, problem sets, and extra problems. Make sure that you master these problems, and you will be prepared for the exam.

<u>Textbook</u>: The textbook for this course is *Intermediate Microeconomics with Calculus: A Modern Approach* by Hal Varian. Any edition is fine, so feel free to get the cheapest one that you can find. The book is optional because the class slides and problems have everything you need to know. But both this book and Varian's book without calculus have pretty good explanations of the topics, so you may want to get them.

Contact and No Excuses Policy

If you have a question about the content, go to Piazza first. Our undergrad TAs will be actively helping people students, and we expect our Piazza community to be active and helpful to everyone. Remember, your question is probably someone else's question too.

After Piazza, your primary point of contact for any course-related matters are your TAs, Angelica Zhou, Daniel Kessler, Hong Yu Xiao, and Jeremy Yoo. For administrative matters you can contact the program coordinator Beth Moskat. If your question is related to course rules, please read the syllabus before contacting one of them.

In the interest of fairness, Professor Azevedo will strictly observe the rules in the syllabus. There will be no leniency about missed problem sets, absences, bumping up grades, etc.

Schedule

DATE	TOPIC	PROBLEM SET DUE
TUESDAY, AUGUST 29, 2017	Intro	
THURSDAY, AUGUST 31, 2017	Comparative statics	
TUESDAY, SEPTEMBER 5, 2017	Consumer Theory 1	
THURSDAY, SEPTEMBER 7, 2017	Consumer Theory 2	
TUESDAY, SEPTEMBER 12, 2017	Review and Firms	1
THURSDAY, SEPTEMBER 14, 2017	Firm Theory: cost minimization	
TUESDAY, SEPTEMBER 19, 2017	Firm Theory: cost curves	
THURSDAY, SEPTEMBER 21, 2017	Firm Theory: supply	
TUESDAY, SEPTEMBER 26, 2017	Consumer Surplus and the Invisible Hand	2
THURSDAY, SEPTEMBER 28, 2017	Midterm prep - no lecture	
TUESDAY, OCTOBER 3, 2017	Midterm (during normal class time)	
THURSDAY, OCTOBER 5, 2017	Fall term break - no lecture	
TUESDAY, OCTOBER 10, 2017	Commodity Taxation	
THURSDAY, OCTOBER 12, 2017	International Trade	
TUESDAY, OCTOBER 17, 2017	Inequality and Income Taxation	
THURSDAY, OCTOBER 19, 2017	Monopoly pricing	3
TUESDAY, OCTOBER 24, 2017	Price discrimination	
THURSDAY, OCTOBER 26, 2017	Price discrimination	
TUESDAY, OCTOBER 31, 2017	Game theory	
THURSDAY, NOVEMBER 2, 2017	Game theory	4
TUESDAY, NOVEMBER 7, 2017	Midterm prep - no lecture	
THURSDAY, NOVEMBER 9, 2017	Midterm (during normal class time)	
TUESDAY, NOVEMBER 14, 2017	Game: Opeq	
THURSDAY, NOVEMBER 16, 2017	Cournot Oligopoly	
TUESDAY, NOVEMBER 21, 2017	Bertrand Oligopoly	
THURSDAY, NOVEMBER 23, 2017	Thanksgiving - no lecture	
TUESDAY, NOVEMBER 28, 2017	Strategy: network effects	5
THURSDAY, NOVEMBER 30, 2017	Auctions	
TUESDAY, DECEMBER 5, 2017	Externalities	
THURSDAY, DECEMBER 7, 2017	Adverse selection	6
WEDNESDAY, DECEMBER 20, 2017	Final Exam (3PM-5PM)	

Other Important Information

<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. Students need to be comfortable with taking derivatives.

Attendance: 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. 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).

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. 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>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.

Re-grading Policy: 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 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).

<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. If you have a conflict, contact Beth Moskat in advane.

<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.