

BEPP 250 Honors, Spring 2015

Managerial Economics

This is a course on intermediate microeconomics. We will build a solid foundation on microeconomics and use it as a toolkit to solve problems in business, policy, and social science. These tools are based on creative application of three basic principles: people respond to incentives, individual behavior aggregates into equilibrium social behavior, and we can use normative criteria to compare different outcomes.

The course covers the most important models of consumer, firm, and market behavior. The goal of the course is both to master microeconomics and to apply the basic principles to real problems. 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.

BEPP 250 *honors* (but not regular) counts as a substitute for ECON 101 to take upper level econ courses because we will rigorously cover the key topics in microeconomics.

Grading

Grades in honors depend on attendance (5%), problem sets (10%), two midterms (25% each), and a final exam (35%). The curve is carefully set to make sure students taking honors are neither at an advantage nor at a disadvantage versus students taking the regular sections.

Problem Sets: There will be six problem sets due every other Wednesday. Problem sets must be dropped off at SHDH 1400 in a box close to Ms. Beth Moskat’s office. I will accept psets dropped off on the Thursday right after the due date, as long as they make it into the dropoff box during business hours when Beth is there. I will NOT accept psets any later than that. No leniency. So if you want to be absolutely sure drop them off before 2PM, otherwise you are at your own risk.

The midterm exams are scheduled for Wednesday, February 18 and April 1st, 6-8PM. The final exam is scheduled for Friday, May 8, 6-8PM. Exams are closed book and you cannot bring a calculator (nor will you need one). Exams will be VERY CONSISTENT with our problem sets, problems in lectures, and practice problems, so doing those is the BEST WAY TO PREPARE. Hopefully all caps is enough to clarify this point.

How to Learn

Recitation: Our graduate TA YinYin Yu will teach recitations on JMHH Mondays (G92) and Tuesdays (F86) 5-6pm and Fridays (G86) 11am-12pm and 1-2pm. Recitation will

cover a problem that is useful for preparing for the exams and be devoted to clarifying the content in the week's lectures. Recitation starts January 23rd.

Office Hours: Undergraduate TAs Barrett Block and Natalie Borowski will hold office hours Mondays and Tuesdays 6:00-7:30pm (JMHH F55). Professor Azevedo has office hours Mondays 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. OH starts January 26th.

Piazza: 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.

<https://piazza.com/upenn/spring2015/bepp250h/home>

Extra Problems: Besides the problem sets we will post additional practice problems on Canvas. Some of these problems are more basic, and designed to make sure you are prepared for the exam. We also have challenge problems that apply economics to real-world issues. The exams will look like the problem set problems and the practice problems, not like the challenge problems. Doing problem sets and practice problems is the best way to prepare.

Textbook: The textbook for this course is *Intermediate Microeconomics with Calculus: A Modern Approach* by Hal Varian. 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, Barrett Block <blockp@wharton.upenn.edu>, Natalie Borowski <borowski@wharton.upenn.edu>, Yinyin Yu <yinyiny@sas.upenn.edu>. If your question is related to course rules, please read the syllabus before contacting one of them. If your question is about exception to the rules, there are no exceptions.

In the interest of fairness, and minimizing the number of emails received by Professor Azevedo, 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 and Readings

Background readings are optional. Their goal is to help us learn about business and policy applications. Background readings will not be on the exam. The textbook is also optional. But it will be easier to follow class if you read the corresponding textbook chapter in advance.

January 14 – Intro

“A young economist wins a prize for his work on the economics of news and opinion”
The Economist, April 2014:

<http://www.economist.com/news/finance-and-economics/21601289-young-economist-wins-prize-his-work-economics-news-and>

“The economist who revealed how media bias works” *Quartz*, April 2014

<http://qz.com/202391>

“What does it mean to “think like an economist?”” *Quora.com*

<http://www.quora.com/What-does-it-mean-to-think-like-an-economist>

January 19 - Holiday

January 21 - Comparative statics

Varian Chapters 1, 15.5-6, 16.1-5

“Venezuelans’ fears grow amid falling oil prices” *Financial Times*, December 2014.

<http://www.ft.com/intl/cms/s/0/aaa13660-795e-11e4-a57d-00144feabdc0.html#axzz3L4B5abUm>

“How Crude Oil’s Global Collapse Unfolded” *Wall Street Journal*, December 2014.

<http://www.wsj.com/articles/tracing-oil-price-plunge-back-to-texas-1418404579>

January 26 - Consumer theory (Basics)

Varian Chapters 2 and 4

“The Economic Way of Looking at Life” Gary S. Becker, Nobel Prize Lecture, 1992.

http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1992/becker-lecture.pdf

“Britain’s Ministry of Nudges” Katrin Bennhold, *The New York Times*, Dec 2013.

<http://www.nytimes.com/2013/12/08/business/international/britains-ministry-of-nudges.html?pagewanted=all>

January 28 - Consumer theory (Choice)

Varian Chapter 5

“Spotify Launches Site Explaining Business Model, Offering Artist Services in Response to Skepticism” Jenn Pelly, *Pitchfork*, December 2013.

<http://pitchfork.com/news/53205-spotify-launches-site-explaining-business-model-offering-artist-services-in-response-to-skepticism/>

“Revenue Streams Is Spotify the music industry’s friend or its foe?” John Seabrook, *The New Yorker*, November 2014.

<http://www.newyorker.com/magazine/2014/11/24/revenue-streams>

Problem set 1 due

February 2 - Review and Firms

Varian Chapter 19

The Wealth of Nations, book I Chapter 1

<http://www.econlib.org/library/Smith/smWN.html>

February 4 - Firm: cost minimization

Varian Chapter 21

“U.S. Textile Plants Return”, *The New York Times*, Stephanie Clifford, Sept 2013

<http://www.nytimes.com/2013/09/20/business/us-textile-factories-return.html?pagewanted=all>

February 9 - Firm: cost curves

Varian Chapters 22

“Tesla to gamble on Nevada electric car plant”; *Financial Times*, Richard Waters
September 3, 2014

<http://www.ft.com/intl/cms/s/0/7236bd5c-33a6-11e4-ba62-00144feabdc0.html#axzz3MBmW1T65>

“Tesla’s High-Stakes Gamble”, *The Economist*, Babbage, Science & Technology, 9/22/14

<http://www.economist.com/blogs/babbage/2014/09/difference-engine-1>

February 11 - Firm: supply

Varian Chapters 23 and 24

“Energy Boom Can Withstand Steeper Oil-Price Drop, *The Wall Street Journal*,
By Russell Gold, Erin Ailworth and Benoit Faucon, October 30, 2014

<http://www.wsj.com/articles/energy-boom-can-withstand-steeper-oil-price-drop-1414627471>

“After years of bad headlines the industry finally has some good news”,
The newspaper industry - The Economist, December 8, 2012

<http://www.economist.com/news/business/21567934-after-years-bad-headlines-industry-finally-has-some-good-news-news-adventures>

Problem set 2 due

February 16 - No class to prep for midterm

February 18 - Midterm

6-8pm

February 23 - Welfare and Efficiency

Varian Chapter 14

“This Is How Uber’s ‘Surge Pricing’ Works, *Time*, Dan Kedmey December 15, 2014

<http://time.com/3633469/uber-surge-pricing/>

“Troops take over Venezuelan TOILET PAPER factory to ensure country gets supplies because of chronic shortage”, *Daily Mail*, September 21, 2013

<http://www.dailymail.co.uk/news/article-2427867/Troops-Venezuelan-TOILET-PAPER-factory-chronic-shortage.html>

“Despite Riches, Venezuela Starts Food Rationing”, ‘Government Rolls Out Fingerprint Scanners to Limit Purchases of Basic Goods’; ‘How Is It Possible We’ve Gotten To This Extreme’, *The Wall Street Journal*, Sara Schaefer Munoz, 10/25/2014

<http://www.wsj.com/articles/despite-riches-venezuela-starts-food-rationing-1414025667?KEYWORDS=venezuela+price+controls>

February 25 - Taxation

Varian Chapters 16.6-16.8

“Despite Crushing Costs, Iraqi Cabinet Lets Big Subsidies Stand”; *New York Times*, James Glanz, August 11, 2005

<http://www.nytimes.com/2005/08/11/international/middleeast/11subsidies.html?pagewanted=all&module=Search&mabReward=relbias%3Ar%2C%7B%221%22%3A%22Rl%3A8%22%7D>

“Thai Farm Subsidy Creates Rice Mountain”; *The Financial Times*, Emiko Terazono July 12, 2013

<http://www.ft.com/intl/cms/s/0/644225ee-e3f5-11e2-b35b-00144feabdc0.html#axzz3MBmW1T65>

“Rice Mountain Set To Grow Even Higher”; *The Financial Times*, Emiko Terazono November 7, 2013

<http://www.ft.com/intl/cms/s/0/f14d531c-479d-11e3-b1c4-00144feabdc0.html#axzz3MBmW1T65>

“Thailand To End Rice Subsidy Scheme”; *The Financial Times*, Michael Peel February 11, 2014

<http://www.ft.com/intl/cms/s/0/564b9c44-92f6-11e3-8ea7-00144feab7de.html?siteedition=intl#axzz3MBmW1T65>

March 2 - Market Efficiency

“The Age of Milton Friedman”; *Journal of Economic Literature*, Andrei Shleifer, Harvard University, March 2009

http://scholar.harvard.edu/files/shleifer/files/jel_2009_final.pdf

Separate and Unequal, “The Price of Inequality”; *The New York Times*, Joseph Stiglitz August 3, 2012

<http://www.nytimes.com/2012/08/05/books/review/the-price-of-inequality-by-joseph-e-stiglitz.html?pagewanted=all>

“The Inequality Puzzle” *Democracy, a Journal of Ideas*, Thomas Piketty,
Issue #33 Summer 2014
<http://www.democracyjournal.org/33/the-inequality-puzzle.php?page=all>

March 4 - Monopoly pricing

Varian Chapter 25

One on One: Susan P. Crawford, Author of ‘Captive Audience’; *Bits Blog NY Times*,
Brian X. Chen, February 19, 2013
http://bits.blogs.nytimes.com/2013/02/19/one-on-one-susan-p-crawford-author-of-captive-audience/?_r=5

“Competition Is For Losers”; *The Wall Street Journal*, Peter Thiel,
September 12, 2014
<http://www.wsj.com/articles/peter-thiel-competition-is-for-losers-1410535536>

Comcast, “This is what a monopoly looks like”; *Vox*, Updated by Timothy Lee,
September 17, 2014
<http://www.vox.com/2014/9/17/6225869/comcast-this-is-what-a-monopoly-looks-like>

Problem set 3 due

March 16 - Price discrimination

Varian Chapters 26.1-26.6

“How Suppap Kirtsaeng’s Textbooks Idea Led to Supreme Court”, *Bloomberg*,
Greg Stohr, October 26, 2012
<http://www.bloomberg.com/news/2012-10-26/how-supap-kirtsaeng-s-textbooks-idea-led-to-supreme-court.html>

On Orbitz, “Mac Users Steered to Pricier Hotels”; *The Wall Street Journal*,
Dana Mattioli, August 23, 2012
<http://www.wsj.com/articles/SB10001424052702304458604577488822667325882>

“Four tips for scoring the best online deals this holiday season”; *Google-BetaBoston*,
A Boston Global Site, Janelle Nanos, January 28, 2014
https://www.google.com/search?q=Four+tips+for+scoring+the+best+online+deals+this+holiday+season+_+BetaBoston&oq=Four+tips+for+scoring+the+best+online+deals+this+holiday+season+_+BetaBoston&aqs=chrome..69i57.492j0j4&sourceid=chrome&es_s m=91&ie=UTF-8

A/B Testing: Why Is a Financial Times Subscription So Expensive? *Wired*,
Andy Cush, May 3, 2012
<http://www.wired.com/2012/05/opinion-salmon-ft-ab-testing/>

March 18 - Price discrimination

Varian Chapters 26.1-26.6

“Why a \$150 million *Star Wars* game is going free”; *Money-CNN*, Ken Sweet
August 10, 2012

<http://money.cnn.com/2012/08/10/technology/star-wars-free-play/>

“A hospital in Zimbabwe charged women \$5 for each scream during childbirth”;
The Washington Post, Max Fisher, July 11, 2013

<http://www.washingtonpost.com/blogs/worldviews/wp/2013/07/11/a-hospital-in-zimbabwe-charged-women-5-for-each-scream-during-childbirth/>

“The Other Big Winner in the WhatsApp Deal: Your Wallet”; *Bits Blogs NY Times*,
Farhad Manjoo, February 20, 2014

<http://bits.blogs.nytimes.com/2014/02/20/the-other-big-winner-in-the-whatsapp-deal-your-wallet/>

“The Best Day to Buy Airline Tickets”; *The Wall Street Journal*, Scott McCartney
October 22, 2014

<http://www.wsj.com/articles/the-best-day-to-buy-airline-tickets-1413999377>

March 23 - Game theory

Varian Chapter 29

“How Game Theory Helped Improve New York City’s High School Application Process”;
New York Times, Tracy Tullis, December 5, 2014

<http://www.nytimes.com/2014/12/07/nyregion/how-game-theory-helped-improve-new-york-city-high-school-application-process.html?module=Search&mabReward=relbias%3Ar>

“Gaming the System”; *Economix Blog*, *New York Times*, Catherine Rampell,
February 14, 2013

<http://economix.blogs.nytimes.com/2013/02/14/gaming-the-system/?module=Search&mabReward=relbias%3Ar>

March 25 - Game theory

Varian Chapter 29

“Judo Strategy: The Competitive Dynamics of Internet Time”; *Harvard Business Review*,
David B. Yoffie, Michael A. Cusumano, January 1999 Issue

<https://hbr.org/1999/01/judo-strategy-the-competitive-dynamics-of-internet-time/>

Problem set 4 due

March 30 - No class to prep for midterm

April 1 - Midterm

6-8pm

April 6 - Ajinomoto Game

April 8 - Cournot

Varian Chapters 28.1, 28.2, 28.5-28.8, 28.10

“As Competition Wanes, Amazon Cuts Discounts”; *The New York Times*, David Streifeld, July 4, 2013
<http://www.nytimes.com/2013/07/05/business/as-competition-wanes-amazon-cuts-back-its-discounts.html?pagewanted=all>

April 13 - Bertrand

Varian Chapter 28.9

“It is Not junk: a blog about genomes, DNA, evolution, open science, baseball and other important things – Amazon’s \$23,698,655.93 book about flies”;
Michael Eisen org blog, April 22, 2011
<http://www.michaeliseisen.org/blog/?p=358>

“Holiday Price War Rages in Real Time”; *The Wall Street Journal*, Dana Mattioli, November 23, 2012
<http://www.wsj.com/articles/SB10001424127887323713104578137301825621378>

April 15 - Strategy: network effects

Varian Chapters 36.4-36.7

“Tesla Motors Offers Open Licenses to Its patents”; *The Wall Street Journal*, Mike Ramsey, June 12, 2014
<http://www.wsj.com/articles/tesla-motors-says-it-will-allow-others-to-use-its-patents-1402594375>

“Facebook Net Triples, Sales Up 72%; Social Network Also Continues to Build Its User Base”; *The Wall Street Journal*, Reed Albergotti, April 23, 2014
<http://www.wsj.com/articles/SB10001424052702303380004579519623221180410>

Problem set 5 due

April 20 - Auctions

Varian Chapters 18.1-18.3, 18.6-18.8

“Learning to play the game: American economists said that auctions would be the most efficient way to allocate the radio spectrum. But was the bidding rigged?”;
The Economist, May 15, 1997
<http://www.economist.com/node/149797>

“4 Crazy Moments in Auction Theory History”; *Mind Your Decisions blog*, July, 22, 2014
http://mindyourdecisions.com/blog/2014/07/22/4-crazy-moments-in-auction-theory-history/#.VKWwDlRf_IQ

April 22 - Externalities

Varian Chapter 35

“Hours to Go, Just to Get to Work: Indonesians Cope With Infuriating Traffic and Inefficient Transit, *The New York Times*, Joe Cochrane, August 5, 2013
<http://www.nytimes.com/2013/08/05/world/asia/hours-to-go-just-to-get-to-work.html>

“Q. and A.: Chip Jacobs on Struggling With Smog in Los Angeles and Beijing”;
Sinosphere blogs – *New York Times*, Bree Feng, December 4, 2014
<http://sinosphere.blogs.nytimes.com/2014/12/04/q-and-a-chip-jacobs-on-struggling-with-smog-in-los-angeles-and-beijing/?module=Search&mabReward=relbias%3Ar>

April 27 - Adverse selection

Varian Chapter 38.1

“For Obamacare, Some Hurdles Still Ahead”; *The New York Times*, Eduardo Porter,
August, 8, 2013

<http://www.nytimes.com/2013/08/08/business/economy/for-obamacare-some-hurdles-still-ahead.html?pagewanted=all&module=Search&mabReward=relbias%3Ar>

April 29 - Review

Problem set 6 due

May 5 – Final

6-8pm

Other Important Information

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.

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. 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).

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.

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: 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).

Policy for Missing an Examination: 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 his or her instructor (by email) prior to the regularly scheduled exam. The instructor may ask the student 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 the instructor of the conflict at least two weeks prior to the exam date.

For those students who miss the mid-term exam scheduled for February 27th and have been given an excused absence by the student's instructor, they will be allowed to take the make-up mid-term exam that will occur on March 3rd. If you miss the make-up exam without having received an excused absence (for the make-up exam) then you will receive zero points. 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.

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.