

Course Syllabus[†], Fall 2016

SECTION INFORMATION

Section	Days	Time	Classroom	Instructor	Office hours
MGEC 611-001	T/Th	9-10:30	JMHH G65	Corinne Low corlow@wharton	M 3:30-5:00pm, and by appointment SHDH 1459
MGEC 611-002	T/Th	10:30-12	JMHH G65		
MGEC 611-003	T/Th	1:30-3	JMHH G65		
MGEC 611-004	T/Th	9-10:30	JMHH 350	Heather Schofield hschof@wharton	Th 3:00-4:30pm, and by appointment SHDH 1403
MGEC 611-005	T/Th	10:30-12	JMHH 350		
MGEC 611-006	T/Th	1:30-3	JMHH 355		
MGEC 611-007	T/Th	9-10:30	JMHH 255	Michael Sinkinson msink@wharton	W 2:00-3:30pm, and by appointment SHDH 1453
MGEC 611-008	T/Th	10:30-12	JMHH 255		
MGEC 611-009	T/Th	1:30-3	JMHH 255		
MGEC 611-010	T/Th	9-10:30	JMHH 250	Ben Lockwood Ben.lockwood@wharton	W 2:00-3:30pm, and by appointment SHDH 1409
MGEC 611-011	T/Th	10:30-12	JMHH 250		
MGEC 611-012	T/Th	1:30-3	JMHH 250		

READINGS

The principal readings for the course will take the form of short popular press articles, posted on Canvas. Each class session will have one to three articles assigned for reading in advance of class. For students who wish to supplement the lectures, the primary textbook is "Microeconomics", Doug Bernheim and Michael Whinston, 2nd Edition, McGraw-Hill [BW below]. It is not mandatory, but may be useful for students with no or little background in economics, or those who have not seen similar material in many years. The text is available at the bookstore.

Before each class, we expect all students to have read the assigned newspaper articles for that class to facilitate a classroom discussion on the lecture's lesson. PDF versions of the assigned articles are available under "Files\Reading" on Canvas.

[†] Updated August 31, 2016

TEACHING ASSISTANTS

Name	Email	Grades for...
Matt Passman	mattpa@wharton	010, 011
Chandan Damannagari	dchandan@wharton	005, 006
Varun Telaprolu	tvarun@wharton	007, 008
Alex Wittenberg	alexwitt@wharton	001, 012
Song Mu	musong@wharton	004, 009
Emir Okan	veokan@wharton	002, 003

TAs are responsible for holding office hours, teaching TA sessions, and performing grading. For the most part, we request that you not email TAs, and rather ask questions on the central Canvas site—this allows all students to benefit from your question, and prevents the TAs from having to answer the same thing several times.

Questions posted to Canvas on weekdays will be answered within 24 hours; questions posted on weekends will be answered by end of day on Monday. (Meaning, if you want an answer by 4pm on Wednesday so you can have time to finish your problem set due 4pm on Thursday, submit your question by 4pm on Tuesday. Questions posted about the problem set after 4pm the day before the due date may not be fully answered.)

TA office hour schedule:

	Monday	Tuesday	Wednesday	Thursday
12:30-1:00			Alex JMHH F94	
1:00-1:30				
1:30-2:00				
2:00-2:30				
2:30-3:00			Matt JMHH F96	
3:00-3:30				
3:30-4:00				
4:00-4:30				
4:30-5:00	Emir JMHH G94	Song JMHH F92	Varun JMHH 418	
5:00-5:30				
5:30-6:00			Chandan 2401 Walnut	
6:00-6:30				

TA office hours are a time to receive one-on-one help from TAs. This is essentially free “tutoring” time, when the TA can go through any concepts you might be struggling with. We do ask, however, that students not ask directly about the problem sets in office hours. Instead, please come prepared to ask for help with similar questions, or the general concept being covered by a certain problem. If you have clarifying questions on problem sets, please ask them on Canvas.

TA SESSIONS

Lecture time is scarce, and will thus be targeted at conveying the core concepts, motivating the intuition behind the concepts and their usefulness, providing an outline of how to solve problems, and class discussion. If you have not taken economics before, do not have a quantitative background, or find yourself struggling to understand the slides, you can go to TA sessions (also called "recitations") for more details on how to solve problems and step-by-step description of the math involved. This combination of lecture plus TA recitation sessions allows us to target lecture to the "median student," with recitation to supplement for students who find the pace too fast. While going to recitation is not mandatory, it will be extremely helpful if you struggle to understand the lecture materials. The TA will go through the problems solved in lecture more slowly, in greater detail, as well as doing supplementary problems when time allows. There will also be fewer students in each TA session, which will allow you to ask questions and receive more customized assistance.

You do not need to register for TA recitation sessions, but should plan to choose the one that fits your schedule and attend it regularly.

The "TA session week" goes Tuesday through Monday. TA sessions Tuesday-Monday will all cover the same lectures, and then the following Tuesday's TA session will cover the next lectures.

The TAs will also hold reviews for the final exam, which will be announced closer to the end of the quarter.

TA session schedule:

Day	Time	Room	TA
Tuesday	3:00-4:30pm	SHDH 107	Matt
Tuesday	4:30-6:00pm	SHDH 213	Chandan
Wednesday	3:00-4:30pm	SHDH 107	Alex
Wednesday	4:30-6:00pm	SHDH 213	Emir
Thursday	3:00-4:30pm	SHDH 107	Song
Monday	4:30-6:00pm	JMHH F60	Varun

Material covered:

Date	Day	Lectures covered
6-Sep	Tue	Lecture 1, 2 and 3
7-Sep	Wed	Lecture 1, 2, and 3
8-Sep	Thu	Lecture 1, 2, and 3
12-Sep	Mon	Lecture 1, 2, and 3
13-Sep	Tue	Lecture 4, Lecture 5
14-Sep	Wed	Lecture 4, Lecture 5
15-Sep	Thu	Lecture 4, Lecture 5
19-Sep	Mon	Lecture 4, Lecture 5
20-Sep	Tue	Lecture 6, Lecture 7
21-Sep	Wed	Lecture 6, Lecture 7

22-Sep	Thu	Lecture 6, Lecture 7
26-Sep	Mon	Lecture 6, Lecture 7
27-Sep	Tue	Lecture 8, Lecture 9
28-Sep	Wed	Lecture 8, Lecture 9
29-Sep	Thu	Lecture 8, Lecture 9
3-Oct	Mon	Lecture 8, Lecture 9
4-Oct	Tue	Lecture 10, Lecture 11
5-Oct	Wed	Lecture 10, Lecture 11
11-Oct	Tue (Thu schedule)	Lecture 10, Lecture 11
12-Oct	Wed (Mon schedule)	Lecture 10, Lecture 11

MATHEMATICAL REQUIREMENTS

In this class, you are required to be able to do algebra and calculus. If you struggle with these, you may consider investing in a graphing calculator (TI-89) that can take derivatives for you. To be successful in this class, you should:

1. Be able to graph an equation, especially a linear equation.
2. Be able to solve a system of two linear equations and two unknowns.
3. Be able to compute the derivative of a simple equation.
4. Know how to find the maximum or minimum of a function using derivatives.

If you struggle with any of the above, we suggest reviewing the Math for Business course, available on Canvas, in addition to attending the first recitation session.

GRADING POLICIES

1. We encourage students to work together with their learning teams to solve the problem sets. However, each student must write up and submit an individually generated problem set. If you need to collaborate with someone outside your learning team, please write their name on your problem set, e.g., "Additionally consulted: Susan C. Wharton." Working together with your learning team is a great way to build a community that will be with you throughout your Wharton experience, and to learn from one another's strengths.
2. Problem sets should be submitted to the section-labeled hanging folders just inside **1041 Steinberg Hall-Dietrich Hall** (i.e. the smaller door to the left of the main entrance to the 1400 suite). Please submit your problem set to the correct folder associated with your section. The door will be closed at 4 pm on the day of the deadline. Please be mindful that this is a working office. **Submissions will not be accepted once the door is closed, and submissions will not be accepted through any other method, including email.**
3. The exam is closed book, but a one page formula/note sheet is allowed along with a stand-alone (not a phone or a computer) calculator (details to be discussed in class).

4. Each problem set is graded on a twenty-point scale across all problems in the problem set. Full points will be given for correct answers showing the derivations. Points will be subtracted for mathematical and logical errors. Zero points will be given for no answers OR correct answers without supporting derivation.
5. If you wish to dispute a grade on an assignment or an exam, you must do so by set deadlines. For problem sets, this deadline will be the Friday after the problem sets are handed back. For exams, the deadline will be announced, but will be no more than 1 week after the exams are available for pickup. In order to file a dispute, you must ante up 5% of the value of the assignment. If we conclude that your dispute is valid, you will receive the 5% back, but if not, we will keep it. We also reserve the right to re-grade all parts of a disputed assignment, not only the specific parts you wish to dispute. Finally, your dispute must be put into writing, attached to the original graded problem set or exam, and submitted to the same place that the homework assignments are submitted, by 4 pm on the dispute deadline. Again, **disputes will not be accepted beyond the deadline, which will be no more than 1 week after graded materials are available for review, and disputes will not be accepted through any other method.**
6. **Any evidence of cheating is sent immediately to the Dean.**
7. Your score for the course will be calculated according to the following table. Course grades will be “curved” by individual instructors.

Assessment	Due Date	% Of Grade
Problem Set 1	Sept 13 (4pm)	13%
Problem Set 2	Sept 27 (4pm)	13%
Problem Set 3	Oct 11 (4pm)	13%
MGEC 611 Exam	Oct 14 (9am)	50%
Attendance and Participation	–	11%

CLASSROOM POLICIES

1. Each student must sit in his or her assigned seat with name-card displayed.
2. You are expected to have read the assigned articles before class. We suggest that you briefly discuss them with your learning teams as well.
3. We will cold-call people. If this is an issue for you, please discuss it with your instructor.
4. If you would like to take notes electronically, tablets — but not laptops or smartphones — can be used in the classroom.
5. Wharton “concert rules” apply: be seated when class is scheduled to start and don’t leave the room unless absolutely necessary.

ATTENDANCE POLICIES

We will rely on the attendance app developed by the MBA Program Office (MBAPO) in conjunction with the seating chart to record attendance. Arriving FIVE or more minutes late for class is treated as an absence and absences will be excused only for the specific reasons listed on the MBAPO website (personal illness, personal or family emergency, and religious holidays for observant students).

If you were marked absent for class erroneously, you can log into SPIKE and enter an explanation. Please note that absences due to late check-in or forgetfulness cannot be removed or excused, per the MBA Program Attendance Policy for fixed core classes. However, the explanation will be taken into account when evaluating attendance data. Please review the full attendance policy here:

<https://mba-inside.wharton.upenn.edu/mba-program-attendance-policy/>.

HOW TO BE SUCCESSFUL IN THIS CLASS

This is a quantitative class, and the exams will test your ability to solve problems with the tools we learn, rather than your memorization of facts. Because of this, the best way to study is to go through the problems we do in class and redo the problem sets carefully on your own. Repetition, in particular of actually answering quantitative problems yourself, is very helpful.

We recommend going through the lecture notes between classes with a pen and paper, doing the example problems out long-form. Additionally, working through the problem sets is not merely busy-work for a grade — they are truly the best preparation for the exam!

If you are struggling, please go to office hours and TA sessions early in the term—do not wait until you are behind!

LIST OF LECTURES AND TOPICS

Note: please refer to each professors page in case of any changes to articles

Unit 1: The Context In Which Firms Operate

1. Aug 30: Course Introduction and Market Demand.
 1. Overview of the Course
 2. Reservation Prices and Demand
 3. Aggregating Demand Curves

Article: "TSA PreCheck Applications Soar Amid Long Lines at Airports", Lee Hale, NPR, 06/23/2016.

<http://www.npr.org/2016/06/23/482166446/tsa-precheck-applications-soar-amid-long-lines-at-airports>

Textbook: BW Chapters 2.1, 14.2 section on "Market Demand", 14.5

2. Sept 1: Equilibrium and Elasticity
 1. Supply and Market Equilibrium
 2. Welfare: Consumer and Producer Surplus

3. Understanding Consumer Demand: Price elasticity, income elasticity, and cross-price elasticity

Article: "A Deeper Look at Uber's Dynamic Pricing Model", Bill Gurley, Above the Crowd, 3/11/2014. <http://abovethecrowd.com/2014/03/11/a-deeper-look-at-ubers-dynamic-pricing-model/>

Article: "These elegant charts show why Uber's hated surge pricing is actually a good thing", James Cook, Business Insider, 9/18/2015. <http://www.businessinsider.com/a-case-study-from-uber-shows-why-surge-pricing-is-actually-a-good-thing-2015-9>

Textbook: BW Chapters 2.3, 2.4

3. Sept 6: Government Interventions: Taxes and other Regulation
 1. How interventions affect a market equilibrium
 2. Incidence of interventions
 3. Externalities, and why governments intervene.

Article: "Philadelphia City Council Approves Sweetened Beverage Tax", Mike Esterl, WSJ, 6/16/2016. <http://www.wsj.com/articles/philadelphia-city-council-approves-sweetened-beverage-tax-1466104155>

Article: "A Price Tag on Carbon as a Climate Rescue Plan", Justin Gillis, The New York Times, 5/30/2014. <http://www.nytimes.com/2014/05/30/science/a-price-tag-on-carbon-as-a-climate-rescue-plan.html>

Textbook Reference: BW Chapter 15.1, 15.2, 20.1, 20.3

Unit 2: Production Decisions and Pricing

4. Sept 8: Production and Supply Curves
 1. Types of costs firms face
 2. Production functions
 3. Solving for the optimal ratio of inputs
 4. Solving for a variable cost function

Article: "Meet Amazon's busiest employee – the Kiva robot", Donna Tam, CNET, 11/30/2014. <http://www.cnet.com/news/meet-amazons-busiest-employee-the-kiva-robot/>

Article: "There's some serious cost-cutting going on at ESPN - and it should make everyone nervous", Myles Udland, Business Insider, 7/10/2015, <http://www.businessinsider.com/cost-cutting-is-coming-to-espn-2015-7>

Textbook: BW Chapters 2.2, 7.2, 7.3 (through p. 223), 8.1-8.6

5. Sept 13 Producing in Perfectly Competitive Industries
1. What do we mean by a “perfectly competitive” market?
 2. Profit maximization by perfectly competitive firms
 3. Market outcomes in perfectly competitive markets
 4. Short Run vs. Long Run decision-making

Article: “Aboard a cargo Colossus,” Danny Hakim, New York Times, Oct. 3, 2014. <http://www.nytimes.com/2014/10/05/business/international/aboard-a-cargo-colossus-maersks-new-container-ships.html?partner=rss&emc=rss&r=0>

Article: “Gourmet Cupcakes Are An Awful Business”, Max Nisen, Business Insider, 4/18/2013. <http://www.businessinsider.com/gourmet-cupcakes-business-strategy-2013-4>

Textbook: BW Chapter 9 (in particular 9.3), 14.3, 14.4

PROBLEM SET 1 DUE SEPT 13

6. Sept 15: Producing with Market Power: Monopoly
1. What is market power?
 2. Marginal Revenue and choosing how much to produce (“setting price”)
 3. Sources of Market Power: patents, licenses, etc.
 4. The Inverse-Elasticity Pricing Rule

Article: “Drug Goes from \$13.50 a Tablet to \$750, Overnight,” Andrew Pollack, New York Times, Sept. 20, 2015. <http://mobile.nytimes.com/2015/09/21/business/a-huge-overnight-increase-in-a-drugs-price-raises-protests.html?referrer=>

Article: “Competition Is for Losers”, Peter Thiel, WSJ, 9/12/2014. <http://www.wsj.com/articles/peter-thiel-competition-is-for-losers-1410535536>

Textbook: BW Chapter 17.1-17.3

7. Sept 20: Pricing in vertical markets
1. How market structure at different levels affects the final goods market
 2. Double markups and how to avoid them
 3. Implications of forms of downstream/retail competition
 4. Optimal contracts to overcome vertical market distortions

Article: “New Made-to-Order Mattress Startup Will Make You a Personalized Bed at Half the Price,” Sage Lazzaro, Observer.com, 08/04/2015. <http://observer.com/2015/08/new-made-to-order-mattress-startup-will-make-you-a-personalized-bed-at-half-the-price/#ixzz3hynXQMOF>

Article: "Sticker shock: Why are glasses so expensive?", Lesley Stahl, CBS News, Oct 7 2012.

<http://www.cbsnews.com/news/luxottica-eyewear-why-are-glasses-expensive/>

Textbook: PR Appendix to Chapter 11, available on study.net.

Unit 3: Game Theory Fundamentals

8. Sept 22: Simultaneous move games
1. Overview of MGEC 612
 2. Game theory as a framework for thinking about strategy
 3. The elements of a game and different types of games.
 4. Simultaneous move games: drawing a game board, dominant strategies, dominated strategies, and Nash Equilibrium

Textbook: BW Chapter 12.1-12.2, 12.3 (through p. 406), 12.4 (through p. 417)

Video: "Golden Balls" 1: <https://www.youtube.com/watch?v=p3Uos2fzIJ0>

Video: "Golden Balls" 2: <http://www.youtube.com/watch?v=S0qjK3TWZE8>

9. Sept 27: Sequential and repeated games
1. Sequential games, the game tree, and backwards induction.
 2. Credible and non-credible threats.
 3. Changing the game structure to change the outcome.

Textbook: BW Chapter 12.4 (from p. 418), 12.5

Article: "Best Buy Holiday Pricing Will Match Rivals Even After Items Are Sold", Mae Anderson, Associated Press, 11/21/13.

http://www.huffingtonpost.com/2013/11/21/best-buy-will-match-price_n_4319427.html

Article: "Game Theory offers a better way forward in Britain's EU drama"

<http://theconversation.com/game-theory-offers-a-better-way-forward-in-britains-eu-drama-61226>

PROBLEM SET 2 DUE SEPT 27

10. Sept 29: Repeated and Infinite Game
1. Finitely-Repeated simultaneous move games.
 2. Review of time-value and discounting principles
 3. Strategies in repeated interactions
 4. Application: Price Wars
 5. Mixed strategies and wars of attrition

Textbook: BW Chapter 19.5

Article: "\$1 Pizza Slice is Back After a Sidewalk Showdown Ends Two Parlors' Price War", Matt Flegenheimer, The New York Times, September 5 2012.

<http://www.nytimes.com/2012/09/06/nyregion/two-manhattan-pizza-parlors-end-price-war.html>

Article: "Silicon Valley Tech Giants Struck Deals on Hiring, Say Documents", Jeff Elder, The Wall Street Journal, April 20 2014.

<http://online.wsj.com/news/articles/SB10001424052702304626304579509700352730842>

11. Oct 4: Bidding and Selling in Auctions

1. Common issues in auction design and format
2. Bidding functions in different auctions
3. The winner's curse
4. Considerations when running or bidding in auctions

Textbook: Varian Chapter 17

Video:

<https://www.youtube.com/watch?v=PjOHTFRaBWA>

Article: "Google shares took off, but the IPO didn't", Ari Levy, CNBC, Aug 19 2014.

<http://www.cnbc.com/2014/08/19/es-took-off-but-the-auction-didnt.html>

12. Oct 11: Course Review and Optional Topics

PROBLEM SET 3 DUE OCT 11

MGEC 611 EXAM – FRIDAY, OCTOBER 14, 9am-11am