

# Microeconomics and Public Policy II

PPHA 32400 Winter 2023

#### Instructors

Navin Kumar (navinkumar@uchicago.edu), Keller 2081 Office hours: Monday 2–4pm or by appointment via email

Sheng-Hao Lo (shenghaolo@uchicago.edu), Keller 2004

Office hours: Wednesday 10:30am-12:00pm or by appointment via email

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#### **Course Description**

This course is the second part of the microeconomic theory sequence that started with PPHA32300. We will cover monopolies, market power, the role of government regulation when the market fails, and strategic behavior of market participants. Also, the course introduces such concepts as intertemporal choice and attitude toward risk, which are critical in policy analysis. The more advanced topics include models of information asymmetry such as adverse selection and moral hazard, and auctions.

#### **Prerequisites**

РРНА32300 or instructor's permission. You should be comfortable with basic algebra and calculus.

## **Key Course Details**

- The syllabus, slides, and problem sets will be the same across all sections.
- *Lectures:* Live attendance is expected. For students who received exemptions accommodations from Student Affairs, we will provide video recording of a lecture.
- TA Sessions: All TA sessions will be joint across sections.
- *Grading:* See below. Grades will be based on problem sets and policy memo (25%), a midterm exam (35%), and a final exam (40%). Grades will be based on a curve, not specific numerical cut-offs.

## **Course Meetings**

All classes meet on Mondays and Wednesdays. Students are expected to participate in the session to which they are assigned. All times listed below are in Chicago time:

- Section 1 (Kumar): 9:00am-10:20am, Keller 1002
- Section 2 (Sonin): 9:00am-10:20am, Keller 1022
- Section 3 (Kumar): 10:30am-11:50am, Keller 1002

- Section 4 (Sonin): 10:30am-11:50am, Keller 1022
- Section 5 (Lo): 1:30pm-2:50pm, Keller 1002
- Section 6 (Sonin): 1:30pm-2:50pm, Keller 1022
- Section 7 (Lo): 3:00pm-4:20pm, Keller 1002

#### **TA Sessions**

TAs will hold weekly sessions, which will last for 80 minutes. In sessions, TAs will explain problem sets, demonstrate how to work with sample exercises, and review material from the previous week's lectures. Attendance at TA sessions is recommended. Students will sign up for specific TA sessions when they register for the course. Links for remote sessions will be posted on Canvas. All times listed below are in Chicago time:

• TBD

#### Communication

Primary communication from instructors to students will happen through posting of materials on Canvas, including postings to Announcements. Please note that you are responsible for reading all Canvas Announcements related to the course. To ensure receipt, you may wish to confirm that you have email notifications enabled for Canvas Announcements.

As there are many students in this sequence, emailing your instructor directly might not always be the most effective way to have an issue resolved. Questions regarding scheduling should be directed to the Head TA: TBD (TBD@uchicago.edu). Questions regarding course materials may be posted on Ed Discussion, a forum that is monitored by instructors and TAs during the business hours on weekdays.

#### **Textbooks**

The main textbook for this class is Austan Goolsbee, Steven Levitt, and Chad Syverson, *Microeconomics*, 3rd ed. You may use previous editions of this and other textbooks, but be careful – numbering of chapters, examples, and exercises may vary.

The material of this course is classic and is covered in several excellent textbooks. For example, you may use the following two.

- Jeffrey Perloff. Microeconomics, 8th ed.
- Hal Varian. Intermediate Microeconomics: A Modern Approach, 9th ed.

The advantage of Goolsbee-Levitt-Syverson and Perloff is that they both have a lot of real-world examples. Varian is a bare-bones theory textbook.

## **COVID-19 Policy**

While the COVID-19 pandemic is over, the times require us to be especially careful. Please abide by <u>all</u> <u>UChicago health policies</u>, including self-monitoring for symptoms and self-isolating when required to do so. Note that <u>the UChicago Protocol</u>, which addresses self-monitoring, testing, and isolating requirements, represents evolving guidance and is subject to change. *If you think you have COVID-19 symptoms*, err on the side of caution and do not come to class. Instead, request a video of this lecture. As soon as possible, reach out to the Harris academic advising team.

#### **Problem Sets**

There will be seven weekly problem sets. Deadlines for each problem set are as follows:

- Problem set 1 (Monopoly): 01/08
- Problem set 2 (Price discrimination): 01/15
- Problem set 3 (Strategic Analysis): 01/22
- Problem set 4 (Oligopoly): 01/29
- Problem set 5 (Investment): 02/12
- Problem set 6 (Asymmetric Information): 02/19
- Problem set 7 (Moral Hazard): 02/26

More instructions on homework submissions (PRELIMINARY):

- Each weekly problem set will have two parts one graded, the other ungraded. You must do both parts, but submit only the first one.
- Problem sets must be submitted individually via Gradescope.
- Problem sets should be submitted as typewritten PDF files. Use software like Word or LATEX to typeset your equations. Graphs should preferably typewritten as well.
- Late problem sets will not be accepted.
- you MUST correctly tag your pages on Gradescope prior to submission. Instructions for tagging pages are located in the "TA slides", found at the bottom of the "Modules" section of Canvas.
- Questions and concerns about grading should be first directed to the Head TA, TBD

## **Policy Memo**

You will complete one policy memo. It will not require any significant outside research; the emphasis is on clarity and high-quality writing. The memo will be a maximum of 2 pages (3,400 characters). However, this is a maximum rather than the target: there is no premium for length. The memo will be due on the week of February 24.

#### **Exams**

We will have one midterm exam on Wednesday, February 1 in class as well as the final exam (on the Exam Week, TBD). The midterm will cover material from the lectures preceding that date. The final will cover material from the entire quarter. TA sessions one week prior to the exams will serve as review sessions. You must obtain permission from the Dean of Students to take an exam at any time other than the scheduled hours.

## Grading

Final grades in this course have three components: Problem sets and policy memo (25%), the midterm exam (30%), and the final exam (45%).

As all Harris core courses, this course is graded on a curve based on students' relative ranking across all sections. Final letter grades will be distributed as follows, with modest deviations permitted in cases where students on either side of a cutoff have nearly identical numerical scores:

Letter	Fraction of class
A	Top 1/8
A-	Next 1/4
B+	Next 1/4
В	Next 1/4
B- and below	Bottom 1/8

## **Regrade Requests**

If you would like to request a regrade for an assignment or an exam, you must do so in Gradescope within 7 days of receiving your grade. To submit a request, click on the question that you wish to submit a request for in Gradescope. Once a question has been selected, click the Request Regrade button in the bottom action bar. A textbox will appear allowing you to type an explanation of the request for the specific question that was chosen. In all cases, the entire question will be regraded; the regrade might result in a lower overall grade on the assignment or exam.

#### Time Management & Time Expectations

One of the most challenging adjustments for many students in their first year of graduate studies is time management. The homework assignments and policy memo may take several hours to complete. Starting working on your assignment well in advance ensures that you have ample time to complete the assignment and opportunity to seek help from your peers, TAs, instructors, and other course resources.

## **Instructor Office Hours (PRELIMINARY)**

The instructors will conduct office hours. You are encouraged to attend your instructor's office hours (rather than the other instructor's office hours). However, if your schedule precludes you from attending your instructor's office hours, you may attend the office hours of another instructor. More information, including time slots and zoom links for office hours, is available on the Canvas site.

#### **TA Office Hours**

In addition to classroom-style sessions, TAs will also offer office hours, where you can receive more individualized attention on a first-come, first-served basis. These office hours, should you partake of them, will supplement the main TA sessions, and will be served by TAs in rotation. All information will be posted on Canvas.

## **Tutoring Hours**

Harris school offers 10 hours of free tutoring for students enrolled in core classes. Harris Student Affairs will share information about how to access tutoring in Week 3 of the quarter. Any questions should be directed to HarrisStudentAffairs@uchicago.edu.

#### **Academic honesty**

All University of Chicago students are expected to uphold the highest standards of academic integrity and honesty. Among other things, this means that students shall not represent another's work as their own, use disallowed materials during exams, or otherwise gain unfair academic advantage. The Harris School's policies are available in the Harris Student Handbook Canvas site; <u>University of Chicago policies</u> also might be relevant.

## **Diversity and inclusion**

The Harris School welcomes, values, and respects students, faculty, and staff from a wide range of backgrounds and experiences. We believe that rigorous inquiry and effective public policy problem-solving requires the expression and understanding of diverse viewpoints, experiences, and traditions. There are University-wide principles and guidelines and ones developed at Harris.

# **Disability accommodations**

The University of Chicago has developed policies regarding students with disabilities. Students who have or need disability accommodations should communicate with the Harris' Dean of Students office to coordinate the implementation.

# Student mental health and other support

If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, remote or live counseling services are available.

# **Course Plan**

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Week	Lecture	Date	Day	Topic(s) covered	Reading(s)
1		Jan 2	M	Winter break	
	1	4	W	<b>Monopoly:</b> logistics, monopoly, market power and elasticity, deadweight loss	GLS 9.1-5, P 11, V 24
	2	-	F	<b>Regulating monopoly:</b> natural monopoly ( <i>Posted online, watch by 1/9</i> )	GLS 9.1 9.4, P 11.4 11.6, V 24.6
2	3	9	M	<b>Market power:</b> Price discrimination, types of price discrimination	GLS 10.1-4, P 12, V 25
	4	11	W	<b>Pricing strategies:</b> Two-part tariff, bundling	GLS 10.5-6, P 12.5-6, V 25.5-6
3		16	M	Martin Luther King day - No class	
	5	-		<b>Strategic analysis:</b> Simultaneous move games, application to trade ( <i>Posted online, watch by 1/18</i> )	GLS 12.1-2, P 14, V 28
	6	18	W	<b>Oligopoly:</b> oligopoly with quantity decisions, oligopoly with price decisions	GLS 11.1-4, P 13, V 27
4	7	23	M	Entry deterrence: Sequential games, entry deterrence, Stackelberg oligopoly	GLS 11.5 12.4-5, P 13 14.3, V 27 28.8
	8	25	W	Collusions: Cartels, sustaining a cartel	GLS 11.2 12.3, P 13.2, V 27.10-11 28.6
5	9	30	M	<b>Differentiation:</b> Monopolistic competition, product differentiation	GLS 11.6-7, P 13, V 25.7- 10
		Feb 1	W	Midterm exam, in-class	Lectures 1-8
6	10	6	M	<b>Intertemporal choice:</b> Intertemporal choice, evaluating investments	GLS 14.1-2, P 16.1-2 16.4, V 10
	11	8	W	<b>Uncertainity and risk:</b> variance, standard deviation, expected value, expected utility	GLS 14.5, P 17, V 12-13
7	12	13	M	Insurance: diversification, risk, insurance	GLS 14.4-5, P 17, V 12-13
	13	15	W	Adverse selection	GLS 16.1, P 19, V 37
8	14	20	M	Signaling and screening	GLS 16.4, P 19 V 37
	15	22	W	Moral hazard	GLS 16.2-3, P 20, V 37
9	16	27	M	Auctions: Auctions, mechanism design	P 14.4 18, V 36
	17	Mar 1	W	Coase theorm	GLS 17.3, P 18, V 34
		TBD		Final Exam	Lectures 1-17