THE UNIVERSITY OF CHICAGO
HARRIS SCHOOL
OF PUBLIC POLICY

Principles of Microeconomics and Public Policy II

PPHA 32400
Winter 2024
Sections 1,2,3,4,5,6,7

Instructors

Navin Kumar (navinkumar@uchicago.edu), Keller 2081
Office hours: Wednesday 1:30–3:00pm or by appointment via email

Sheng-Hao Lo (shenghaolo@uchicago.edu), Keller 2004
Office hours: Thursday 10:30am–12:00pm or by appointment via email

Konstantin Sonin (ksonin@uchicago.edu), Keller 2021
Office hours: Thursday 2-3pm or by appointment via email

Head TAs will be Brian Curran (bcurran@uchicago.edu) and Daisy Lu (daisylu@uchicago.edu)

Course Description

This course is the second part of the microeconomic theory sequence that started with PPHA 32300. We will cover firm behavior, monopolies, market power, the role of government regulation when market fails, and strategic behavior of market participants. The more advanced topics include models of information asymmetry such as adverse selection and moral hazard, and auctions. We will apply the theoretical concepts studied in the class to anti-trust regulation in IT, health care reforms, regulation of fisheries and banks, and market design in telecommunications.

Prerequisites

ppha32300 or instructor's permission. You should be comfortable with basic algebra and calculus.

Key Course Details

- The syllabus, home assignments, and exams will be the same across all sections.
- Instructors' slides might differ slightly to reflect different teaching styles; they contain the same material.
- The exams, final and mid-term, will be primarily concerned with what was discussed in the lecture classes and home assignments.
- Both exams will be closed-book, but you will be allowed to use a couple of pages of notes.
- *Lectures:* Live attendance is expected. Video recordings will be provided after classes.
- *TA Sessions:* All TA sessions will be joint across sections.
- *Grading:* See below. 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 enrolled. 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

Please note that **the class will also meet on Friday, January 5**, using the same schedule. There will be no class on the Martin Luther King Jr. Day, Monday, **January 15**. Instead, a recorded lecture will be uploaded.

TA Sessions

TAs will hold weekly sessions, which will last for 80 minutes. In sessions, TAs will review material from the previous week's lectures and work through some sample exercises. 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:

- Section 1: Thursday 5:00pm-6:20pm, Keller 0021
- Section 2: Friday 9:00am-10:20am, Keller 0021
- Section 3: Friday 9:00am-10:20am, Keller 0023
- Section 4: Friday 10:30pm-11:50pm, Keller 0021
- Section 5: Friday 10:30pm-11:50pm, Keller 0023
- Section 6: Friday 1:30pm-2:50pm, Keller 0021
- Section 7: Thursday 3:00pm-4:20pm, Keller 0021
- Section 8: Friday 10:30am-11:50am, remote

 Please note that on Friday, **January 19**, there will be in-person TA sessions, yet they would follow the Monday lecture schedule, *not* the regular Friday schedule.

Communication

Primary communication from instructors to students should 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 harrismppmicroII@gmail.com. Questions regarding course materials should 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. Also, we will heavily rely on the Core's The Economy 1.0, which is available online free of charge. Both textbooks contain far more material than what we will be able to cover.

The material of this course is classic and is covered in several excellent textbooks. For example, you may use the following two (or their older editions).

- 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.

Home Assignments

There will be seven weekly home assignments. Deadlines for each assignment are set as follows:

- Home assignment 1 (Firm): 01/09
- Home assignment 2 (Monopoly): 01/16
- Home assignment 3 (Pricing): 01/23
- Home assignment 4 (Oligopoly): 02/06
- Home assignment 5 (Public Goods): 02/13
- Home assignment 6 (Asymmetric Information): 02/20
- Home assignment 7 (Signaling): 02/27

Homework submissions:

- Each weekly Home assignment will have two parts – one graded, the other ungraded. You must do both parts, but submit only the first one.
- Home assignments must be submitted individually via Gradescope.
- Home assignments should be submitted as typewritten pdf files. Use software like Word or LaTeX to typeset your equations, if needed. Graphs should preferably typewritten as well.
- **Late assignments will not be accepted.**
- You must **correctly tag your pages on Gradescope prior to submission.** Instructions for tagging pages are located in the "Assignments" section of Canvas.

Policy Memo

You will complete one individual 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 1 page (1,700 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 19. The memo will be graded for the writing quality by the Writing Center's graders; part of the grade will be assessment of your peers.

Exams

We will have one midterm exam on **Monday, January 29** in class as well as the final exam on **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 four components: home assignments (15%), policy memo (10%), the midterm exam (30%), the final exam (40%), and class participation (5%).

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 $1/4$
B	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

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 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; University of Chicago policies 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. For other forms of support, please consult Harris Academic Support Programs page, Student Wellness , and University Learning Resources.

Video Recording of Lectures

We will be recording and posting videos of lectures (but not necessarily all sections). Please follow Harris' and the University's policies on audio and video recordings and deletion.

CLASS PLAN

Lecture 1 (W, Jan 3) A Competitive Firm

What is a firm? Business decisions of a firm in the market. Fixed cost, variable cost, and the sunk cost fallacy.

CORE 6.1-6.3, GLS 6-8, Perloff 6-8, Varian 19-20

Lecture 2 (F, Jan 5*) Market Power

Why do some firms not take market prices as given? Legal sources of market power. Patents. Market power as a result of competition.

CORE 7.10, 8.10, GLS 9.1-5, Perloff 11, Varian 24

Lecture 3 (M, Jan 8) Monopoly

Economic analysis of monopoly. Why every firm wants to be a monopoly? Price discrimination.

CORE 7.6, GLS 9.1, Perloff 11.4, Varian 24.6

Lecture 4 (W, Jan 10) Anti-Trust Regulation

What is wrong with the monopoly? Why are monopolies regulated? Basics of anti-trust regulation. Recent cases in IT: Facebook, Google, Twitter.

GLS 9.6, Perloff 11.6, Varian 24.6

M, Jan 15: Martin Luther King Jr. Day, no lecture

Lecture 5 (Video on Canvas) Pricing Strategy

Versioning, block pricing, two-part tariffs, bundling, and other pricing strategies of firms with market power.

GLS 10.5-6, Perloff 12.5-6, Varian 25.5-6

Lecture 6 (W, Jan 17) Oligopoly

Markets with few players. Market power limited by competition.

GLS 11.1-4, Perloff 13, Varian 27

Lecture 7 (M, Jan 22) Strategic Analysis

Basics of game theory. Examples from the markets with few big players.

CORE 4.1, 4.3, 4.13, GLS 12.1-2, Perloff 14, Varian 28

Lecture 8 (W, Jan 24) Cartels and Competition Policy

Collusion in markets. Examples of regulatory interventions. Theory of long-term strategic interaction.

CORE 4.6, GLS 11.2 12.3, Perloff 13.2, Varian 27.10-11 28.6

M, Jan 29: <u>Mid-term Exam</u> in Class, covering lectures 1-8.

Lecture 9 (W, Jan 31) Public Goods

Definition and basic examples of public goods. Why public goods are not efficiently provided by the market? Free-riding problem.

CORE 4.6, 12.1, 12.5, GLS 17, Varian 36

Lecture 10 (M, Feb 5) Coasian Approach to Externalities

The tragedy of commons. Government interventions and market-based solutions. West Coast Fisheries as an example.

GLS 17.3, Perloff 18, Varian 34

Lecture 11 (W, Feb 7) Moral Hazard: Insurance

Definition of moral hazard. Applying strategic analysis to insurance, bank runs, and banking regulation to illustrate moral hazard issues in agents' behavior and government regulation.

CORE 10.2, 17.11

Lecture 12 (M, Feb 12) Moral Hazard: Commitment

The issue of central banks' independence as a motivation to study dynamic inconsistency and the role of commitment. Basics of extensive-form games.

Lecture 13 (W, Feb 14) Asymmetric Information: Markets

Inefficiencies caused by informational asymmetry. How markets work to aggregate and transmit information and improve allocative efficiency.

Lecture 14 (M, Feb 19) Asymmetric Information: Contracts

"What is a Firm?" revisited. Contracts as mechanisms to limit moral hazard and increase efficiency.

CORE 6.10, GLS 16.2-3, Perloff 20, Varian 37

Lecture 15 (W, Feb 21) Adverse Selection: Health Insurance

How asymmetric information might lead to a market unraveling. "Lemons" model and its application to the market of medical insurance. Basic economics of Obamacare.

CORE 12.6, GLS 16.1, Perloff 19, Varian 37

Lecture 16 (M, Feb 26) Signaling

Strategic information exchange to reduce informational asymmetries. Education as a market signal.

GLS 16.4, Perloff 19 Varian 37

Lecture 17 (W, Feb 28) Auctions

Perloff 14.4 18, Varian 36

Auctions as practical mechanism of information aggregation. Auctions in telecommunications.

Final Exam: Date TBD