

Principles of Microeconomics and Public Policy II

PPHA 32400 Winter 2025 Sections 1, 2, 3, 4, 5, 6, 7

Instructors

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Office hours: Thursday 2-3pm or by appointment via email.

Head TAs will be Kisoo Kim (kisoo@uchicago.edu) and Peizan Sheng (peizan@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

PPHA 32300 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 always contain the same material.
- The exams, final and midterm, 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 2 page cheat sheet
- TA Sessions: All TA sessions will be joint across section
- Grading: See below. Grades will be based on a curve, not specific numerical cut-offs.

Course Meetings

All classes meet on Mondays and Wednesdays; times listed below are in Chicago time:

- Section 1 (Kumar): 9:00-10:20am, Keller 1002
- Section 2 (Sonin): 9:00-10:20am, Keller 1022
- Section 3 (Kumar): 10:30-11:50am, Keller 1002
- Section 4 (Sonin): 10:30-11:50am, Keller 1022
- Section 5 (Kwon): 1:30-2:50pm, Keller 0001
- Section 6 (Sonin): 1:30-2:50pm, Keller 1022
- Section 7 (Kwon): 3:00-4:20pm, Keller 0001

There will be no class on the Martin Luther King Jr. Day, Monday, **January 20**. Instead, a recorded lecture will be uploaded on Canvas.

Attendance Policy

Students are expected to participate in the session to which they enrolled and attend all classes. This is required by the Harris attendance policy and will be strictly enforced. Every absence beyond the first two reduces the course grade by one percentage point.

Attendance will be taken at the beginning of each class. If you are late to class, then ask the instructor after the class to mark your attendance. Signing in attendance on behalf of others is a serious violation of the Harris academic dishonesty policy.

The instructor might add up to 2 percentage points for active and productive class participation.

Classroom Electronics Policy

As in all core classes, Harris forbids the use of screens in the classroom, with exceptions for SDS accommodations and for handwritten note-taking on tablets laid flat on students' desks.

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

Textbooks

We do not have one main textbook for this class. You can use any of the textbooks mentioned below, including their previous editions, 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. All these textbooks

contain far more material than what we will be able to cover.

- Austan Goolsbee, Steven Levitt, and Chad Syverson, Microeconomics, 3rd ed.
- 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): 01/13
- Home assignment 2 (Monopoly): 01/20
- Home assignment 3 (Pricing): 02/29
- Home assignment 4 (Oligopoly): 02/03
- Home assignment 5 (Public Goods): 02/12
- Home assignment 6 (Asymmetric Information): 02/26
- Home assignment 7 (Signaling): 03/10
- Each weekly home assignment will have two parts one graded, the other ungraded. You must do both parts, but submit only the first one (i.e., the part which will be graded).
- Home assignments must be submitted individually via Gradescope.
- Home assignments should be submitted as typewritten pdf files. Use any software like Word or LATEX to typeset your equations, if needed.
- Assignments are due at noon Chicago time on their respective due dates.
- 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 be due on the week of February 19. It will not require any significant outside research; the emphasis is on the use of Micro 2 material. The memo will be a maximum of 1.5 page (2,500 characters with spaces); this length is not a target: there is no premium for length.

Exams

We will have one midterm exam on **Monday**, **Feb 3** in class as well as the final exam on **March 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.

Communication

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

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.

Grading

Final grades in this course have four components: home assignments (15%), policy memo (15%), the midterm exam (30%), and the final exam (40%).

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 Grade | 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. 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. 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 Canvas.

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 will supplement the main TA sessions, and will be served by TAs in rotation. All information will be posted on Canvas.

Tutoring

Harris school offers 10 hours of free tutoring for students enrolled in core classes. Student Affairs (<u>HarrisStudentAffairs@uchicago.edu</u>) will share information about how to access it in Week 3 of the quarter.

Class Plan

Lecture 1 (M, Jan 6) A Competitive Firm

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

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

Lecture 2 (W, Jan 8) 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.

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

Lecture 3 (M, Jan 13) Monopoly

Economic analysis of monopoly. Why every firm wants to be a monopoly? Price discrimination. *Readings*: CORE 7.6, GLS 9.1, Perloff 11.4, Varian 24.6

Lecture 4 (W, Jan 15) 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.

Readings: GLS 9.6, Perloff 11.6, Varian 24.6

M, Jan 20: Martin Luther King Jr. Day, no lecture

Lecture 5 (Video on Canvas) Tariffs

Lecture 6 (W, Jan 22) Pricing Strategy

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

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

Lecture 7 (M, Jan 27) Oligopoly

Markets with few players. Market power limited by competition. Reminder of game theory. *Readings:* CORE 4.1 4.3 4.13, GLS 11.1-4, 12.1-2, Perloff 13-14, Varian 27-28

Lecture 8 (W, Jan 29) Cartels and Competition Policy

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

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

M, Feb 3: Midterm Exam in Class, covering lectures 1-8.

Lecture 9 (W, Feb 5) Public Goods

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

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

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

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

Readings: GLS 17.3, Perloff 18, Varian 34

Lecture 11 (W, Feb 12) 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. *Readings:* CORE 10.2 17.11

Lecture 12 (M, Feb 17) 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.

Readings: will be posted on Canvas.

Lecture 13 (W, Feb 19) Asymmetric Information: Markets

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

Readings: will be posted on Canvas.

Lecture 14 (M, Feb 24) Asymmetric Information: Contracts

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

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

Lecture 15 (W, Feb 26) 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.

Readings: CORE 12.6, GLS 16.1, Perloff 19, Varian 37

Lecture 16 (M, Mar 3) Signaling

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

Readings: GLS 16.4, Perloff 19, Varian 37

Lecture 17 (W, Mar 5) Auctions

Auctions as practical mechanism of information aggregation. Auctions in telecommunications. *Readings:* Perloff 14.4 18, Varian 36

Final Exam: March 12

Academic integrity

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 <u>University-wide</u> <u>principles and guidelines</u> and ones developed at <u>Harris</u>.

Disability accommodations

The University of Chicago has developed <u>policies regarding students with disabilities</u>. 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, <u>remote or live</u> <u>counseling services are available</u>. For other forms of support, please consult <u>Harris Academic Support Programs</u> page, <u>Student Wellness</u>, and <u>University Learning Resources</u>.

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 <u>recordings</u> and <u>deletion</u>.