

# PPHA 46350 – Economics of Regulation Kathryn Ierulli kierulli@uchicago.edu

# Syllabus Winter 2024

## **Course Description**

This course is an analysis of characteristic inefficiencies of various market structures, evaluating options for welfare-improving public policy, and the strengths and weaknesses of different policy alternatives. We will characterize the market structure, market regulation, and the anticipated and unanticipated effects that regulatory policy initiatives have on markets, firms, and individuals.

Part I of the course introduces regulatory policies and market activities, and why government involves itself in markets in the first place. The standard explanation is that regulation occurs to correct inefficiencies in markets. Another explanation is capture theory, in which an industry controls the regulatory process to its own benefit. A more general theory includes the formation of interest groups and their motives to influence regulations, and how government chooses between the policies of competing interest groups.

Part II of the course examines models of regulation, based on the premise that there is a demand for and supply of regulation in certain markets. Why these markets differ from unregulated markets, and why the motives for consumers, producers, and regulators differ when regulation is the equilibrium outcome, is analyzed. Empirical implications of those differing regulatory models are compared with real-world observation of these markets.

Part III of the course examines special cases, with topics such as: markets where deregulation has taken effect, including regulation of labor markets, digital and platformed markets, and intellectual property, copyright, and patents.

#### **Course Goals**

Generally, the goals of this course are to understand theories about when and why governments regulate markets, what happens to consumers, producers, and the governmental agency when regulation takes effect, and how these outcomes align with the proposed purpose of the regulation. The economics of regulation is predominately empirical, but learning about models of regulation and testing them against empirical regularities are emphasized in this course.

More specifically, the goals of the course are knowledge of 1) characteristics of the types of markets that are regulated; 2) the effects of regulation (or deregulation) in those markets; and 3) models of regulator objectives and behavior, with implications of these models.

Close reading and analysis of examples of regulated markets are a tool for understanding real-world regulation in markets and will be emphasized in the latter parts of the course.

This course is a requirement for the Markets and Regulation certificate.

#### Classes

Class meetings: TTh 2 - 3.20, Keller 0021. TA session: Thursday, 3.30 - 4.30pm, Keller 0021. TA Ozzy Houck.

# Office hours TBA.

**Email** I encourage the use of email and try to respond in a timely fashion. Please put 'PPHA 46350' in the subject line of any email you send to me so that I may reply efficiently. You may also text me at 312.731.6107 for urgent matters. Please give me your name in the first text.

**In-class protocol** This is a lecture course with class discussion on specific days. It is in everyone's interest to have an engaged and participatory class. I will make the lecture slides available shortly before class, and if you like, you may print and take notes on them. However, an even better technique is to take notes by hand and go over the slides later. There is substantial neurological research that understanding new material is greatly facilitated by writing material down. See, e.g.:

https://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/ https://www.sciencenewsforstudents.org/article/handwriting-better-for-notes-memory-typing https://www.bbc.com/future/article/20191122-when-the-best-way-to-take-notes-is-by-hand

# **Grading and Exams**

## **Exam Dates**

- Midterm Exam Last class of 5<sup>th</sup> week
- Final exam -2 hours, finals week

Grading 4 Problem Sets worth 20%, Essays 20%, Midterm 30%, Final 30%.

All submitted through Canvas. The grade of Pass/Fail must be applied for by November 1. To earn a passing grade, students taking the course pass/fail must: complete and submit all assignments; take both midterm and final exams; and earn passing grades on each assignment and exam. Passes will be given for completed coursework at a C- or higher grade.

Students who wish to take the course pass/fail rather than for a letter grade must use the Harris Pass/Fail request form (https://harris.uchicago.edu/form/pass-fail) and must meet the Harris deadline, which is generally 9am on the Monday of the 5th week of courses. Students who take the course pass/fail must attend class meetings and turn in all assignments, achieving marks on assignments that are overall commensurate with at least a C- letter grade.

**Problem Sets** Problem sets are due by midnight on the due date specified, submitted on Canvas. When you turn in a problem set write **only** your ID number(s) on your work – no names. Please submit typed problem sets, although some graphs and figures that are hand-drawn may be acceptable. Neat and readable work is a professional expectation, and if your work cannot be read, it cannot be given points.

- 4 problem sets are due:
- Problem Set 1 Wednesday of 3<sup>nd</sup> week
- •
- Problem Set 2 Wednesday of 4<sup>th</sup> week
- •
- Midterm Exam Thursday of 5<sup>th</sup> week
- •
- Problem Set 3 Wednesday of 7<sup>th</sup> week
- •
- Essay Wednesday of 8<sup>th</sup> week
- •
- Problem Set 4 Wednesday of 9<sup>th</sup> week

- •
- Final Exam 10<sup>th</sup> week, 2 4pm, Tuesday March 7
- The TA will review answers in TA session
- Problem sets are both a component of your grade, and a method to review and prepare for exams.

**Group work on problem sets** You may (it is not a requirement but is recommended) work in groups of 4 or fewer for problem sets.

**Essay** you individually write a brief essay (2 - 4 pages) about a case study we will discuss in class. This will be graded on your application of the models and tools of the course to that point.

**Regrade policy** If you have a question about your grade, either on problem sets, essays, or exams, please make an appointment with me, after asking the TA how they graded your work. If after meeting with the TA you maintain you deserve more credit (or less, though I very rarely see this) please turn in your graded work to me, along with a written paragraph *on paper* explaining your reasoning. The only substantial differences I have ever seen in grades totals were errors in adding up the score. But anything is possible.

Regrade requests via Canvas or Gradescope are not allowed. The deadline for requesting a regrade is 7 days from receipt of graded material.

Academic integrity You are expected to abide by the University's expectations regarding academic integrity. Please review this excerpt from the University's Student Manual, <a href="https://studentmanual.sites.uchicago.edu/Policies#Honesty">https://studentmanual.sites.uchicago.edu/Policies#Honesty</a>:

It is contrary to justice, academic integrity, and to the spirit of intellectual inquiry to submit another's statements or ideas as one's own work. To do so is plagiarism or cheating, offenses punishable under the University's disciplinary system. Because these offenses undercut the distinctive moral and intellectual character of the University, we take them very seriously.

Proper acknowledgment of another's ideas, whether by direct quotation or paraphrase, is expected. In particular, if any written or electronic source is consulted and material is used from that source, directly or indirectly, the source should be identified by author, title, and page number, or by website and date accessed. Any doubts about what constitutes "use" should be addressed to the instructor.

Most importantly, whenever you quote from any source material, be it published, digital, or AI, you must attribute this material to the source.

These expectations apply to exams and problem sets as well. Your submitted work represents your commitment that it is your own independent work, and that you have relied on no other individuals or resources, except as explicitly specified in the assignment instructions. If you have specific questions, contact me directly. For sourcing from ChatGPT as plagiarism, here is a discussion: http://www.nytimes.com/2010/08/02/education/02cheat.html

#### Large Language Models/AI

AI is recent enough that there is no standard universities have converged upon to set policies that broadly apply.

For the purposes of this course if you use any LLM you are required to precisely indicate the material generated, and to cite your source, just as when you cut and paste from the internet you cite the page your quote is from.

#### **Digital citations**

With respect to sourcing from digital documents, read this article and understand that if you copy from <u>unattributed</u> digital sources that is plagiarism:

http://www.nytimes.com/2010/08/02/education/02cheat.html

#### **General Resources**

- Harris Academic Support Programs and Handbook
- <u>University Learning Resources</u>

#### Harris School and UChicago Policies

- <u>Harris School Policies</u>
- <u>University General Policies</u>
- <u>University Academic Polices</u>

#### **Policy on Readings**

I will include in lecture slides which chapters in texts and which journal or newspaper articles inform the lecture material. You are responsible for any such articles, chapters, etc. referred to in class. In addition, the background reading list is quite comprehensive if you are pursuing a particular topic.

If I refer to a paper in class, you should read the sections I recommend.

Required text: *Economics of Regulation and Antitrust*, 5<sup>th</sup> ed., Kip Viscusi, John M Vernon, and David E M Sappington Supplemental (optional) text: *Modern Economic Regulation*, Christopher Decker

# **Course Outline**

Week 1 Why regulate at all? Cost- benefit analysis, data on Federal regulations Viscusi, Ch 1-3

Week 2 Monopoly, natural monopoly Oligopoly Examples of collusion

• 'The FTC, Oligopoly, and Shared Monopoly' F M Scherer, Harvard Kennedy School read the breakfast cereal case

• Schmalensee, 'Entry Deterrence in the Ready to Eat Breakfast Cereal Industry' read Introduction and background, also final paragraph

Viscusi, Ch 4-5

- https://www.minneapolisfed.org/research/sr/sr468.pdf
- https://www.nytimes.com/2013/03/03/magazine/beer-mergers.html

#### Week 3-4

Models of the Economics of Regulation Viscusi, Ch 10

• Sam Peltzman, Toward a More General Theory of Regulation The Journal of Law & Economics, Vol. 19, No. 2, Conference on the Economics of Politics and Regulation (Aug., 1976), pp. 211-240

- Review of Economic Theories of Regulation, den Hertog, https://www.uu.nl/sites/default/files/rebo\_use\_dp\_2010\_10-18.pdf
- A Theory of Competition Among Pressure Groups for Political Influence, Gary S. Becker, Quarterly Journal of Economics
- R Kroszner and P Strahan, What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions, Quarterly Journal of Economics
- The Economic Theory of Regulation and Trucking Deregulation: Shifting to the State Level, Teske, Best, and Mindtrom, Public Choice

# Week 5

Alternatives to Regulation, Optimal Pricing Viscusi, Ch 11-12

# Week 6

Issues in Regulating Monopolies Over Time Viscusi, Ch 14

# Week 7

Why Regulate Competitive Markets? Two-sided markets Disney Case – class discussion

- Viscusi Ch 9
- Viscusi, Ch 15
- Rysman, Mark, *The Economics of Two-Sided Markets,* https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.23.3.125

# Week 8

Patents, Innovation, R&D Disney Case – essay due

- Landes and Posner, *The Optimal Duration of Copyrights and Trademarks*, Ch 8, The Economic Structure of Intellectual Property Law
- https://www.economist.com/leaders/2015/08/08/time-to-fix-patents
- https://techcrunch.com/2016/06/20/the-changing-trade-secret-and-patent-equilibrium

# Week 9

Networks, Digital Markets, Platforms

- Rysman, Mark, *The Economics of Two-Sided Markets,* https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.23.3.125
- Viscusi, Ch 9
- Decker, Ch 10

# **Harris Policies**

# **Disability Accommodations**

The University's policies regarding students with disabilities are available <u>here</u>. The University of Chicago is committed to ensuring equitable access to our academic programs and services. Students with disabilities who have been approved for the use of academic accommodations by Student Disability

Services (SDS) and need a reasonable accommodation(s) to participate fully in this course must follow the procedures established by the Harris School of Public Policy.

Timely notifications are required to ensure that your accommodations can be implemented. Currently registered students are asked to notify the Harris Student Disability Liaison, Eman Alsamara (ealsamara@uchicago.edu) of their access requests by the end of the first week of the quarter. The Harris Student Disability Liaison will work with the student and instructor to coordinate the implementation of student accommodations. *Harris students are not required to submit their accommodations letter to the instructor*. Students from other divisions in the University must submit their accommodations letter to Eman Alsamara (ealsamara@uchicago.edu) in the Harris Dean of Students Office.

Students who are facing extenuating circumstances at any point during the quarter should reach out to their Academic Advisor in the Dean of Students Office for support. If you feel you need accommodations on an ongoing basis, contact Student Disability Services. To contact SDS: website: <u>disabilities.uchicago.edu</u> phone: (773) 702-6000 email: <u>disabilities@uchicago.edu</u>.

#### Diversity and Inclusion

The Harris School welcomes, values, and respects students, faculty, and staff from a wide range of backgrounds and experiences, and we believe that rigorous inquiry and effective public policy problemsolving requires the expression and understanding of diverse viewpoints, experiences, and traditions. The University and the Harris School have developed distinct but overlapping principles and guidelines to insure that we remain a place where difficult issues are discussed with kindness and respect for all.

- The University's policies are available <u>here</u>. Specifically, the University identifies the <u>freedom of</u> <u>expression</u> as being "vital to our shared goal of the pursuit of knowledge, as is the right of all members of the community to explore new ideas and learn from one another. To preserve an environment of spirited and open debate, we should all have the opportunity to contribute to intellectual exchanges and participate fully in the life of the University."
- The Harris School's commitments to lively, principled, and respectful engagement are available <u>here</u>: "The Harris School of Public Policy welcomes and respects students, faculty, and staff from a wide range of backgrounds, experiences, and perspectives as part of our commitment to building an inclusive community. *Fostering an environment that encourages rigorous inquiry and effective public policy problem-solving requires the involvement and understanding of diverse viewpoints, experiences, and traditions*. As a leading public policy school, Harris holds diversity as a core value. That includes not only diversity of opinion, but diversity along a broad spectrum of factors, including race, ethnicity, national origin, gender identity, sexual orientation, ability status, religion, socio-economic background, and social or political belief. Recognizing the value of diversity and inclusion is essential to combating discrimination, addressing disparities, and cultivating ethical and clear-eyed policy leadership."

#### 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 un-allowed materials during exams, or otherwise gain unfair academic advantage.

- The University's policies regarding academic integrity and dishonesty are described <u>here</u>. It is worth explicitly stating the University's approach here: "It is contrary to justice, academic integrity, and to the spirit of intellectual inquiry to submit another's statements or ideas as one's own work. To do so is plagiarism or cheating, offenses punishable under the University's disciplinary system. Because these offenses undercut the distinctive moral and intellectual character of the University, we take them very seriously."
- The Harris School's student policies are available on the <u>policies page of our website</u>.
  The Academic Honesty and Plagiarism section expresses the main principles.

Note the above covers all sourcing of digital documents, including any citations.

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 un-allowed materials during exams, or otherwise gain unfair academic advantage. All students suspected of academic dishonesty will be reported to the Harris Dean of Students for investigation and adjudication. The disciplinary process can result in sanctions up to and including suspension or expulsion from the University.

These expectations apply to papers, exams, and problem sets as well.

# Your submitted work represents your commitment that it is your own independent work, and that you have relied on no other individuals or resources, except as explicitly specified in the assignment instructions.

If you have specific questions, contact me directly.

# Video and Audio Recordings

The University has developed specific policies and procedures regarding the use of video/audio recordings: these policies are explicitly described in the University's <u>student manual</u> as well as in the guidelines for instructors available <u>here</u>.

#### By attending course sessions, students acknowledge that:

- *i.* They will not: (i) record, share, or disseminate University of Chicago course sessions, videos, transcripts, audio, or chats; (ii) retain such materials after the end of the course; or (iii) use such materials for any purpose other than in connection with participation in the course.
- *ii.* They will not share links to University of Chicago course sessions with any persons not authorized to be in the course session. Sharing course materials with persons authorized to be in the relevant course is permitted. Syllabi, handouts, slides, and other documents may be shared at the discretion of the instructor.
- *iii.* Course recordings, content, and materials may be covered by copyrights held by the University, the instructor, or third parties. Any unauthorized use of such recordings or course materials may violate such copyrights.
- iv. Any violation of this policy will be referred to the Area Dean of Students.