

ECON 8400-002: Topics in Industrial Organization
Course Syllabus

University of Pennsylvania, Spring 2023
Tuesdays and Thursdays, 1:45-3:15 pm
Room: LERN 210

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Note: This syllabus is provisional and is subject to change.

Course description. The goal of this course is to prepare students to conduct original research at the frontier of empirical industrial organization. There will be lectures about prevalent topics in recent research such as asymmetric information, choice frictions, vertical relations, search, quality, pricing, platforms, auctions, and matching. Other lectures will be devoted to help students develop and present an original research idea.

Prerequisites. This course presumes knowledge of graduate-level microeconomic theory and econometrics. Students may find it helpful to have taken Econ 8450.

Requirements. The grade will be based on a referee report, an in-class presentation of a paper, and a research proposal. The grade for the research proposal will be based on a preliminary proposal, an in-class presentation, and a final writeup.

Course schedule

Date	Lecture (Tuesday)	Date	Lecture (Thursday)
		Jan 12	Pricing
Jan 17	Pricing	Jan 19	Pricing
Jan 24	Platforms	Jan 26	Platforms
Jan 31	Selection markets	Feb 2	Selection markets – Referee report
Feb 7	Vertical relations	Feb 9	Paper presentations
Feb 14	Paper presentations	Feb 16	Paper presentations
Feb 21	Paper presentations – Prel. proposal	Feb 23	Feedback
Feb 28	Feedback	Mar 2	Feedback
Mar 7	<i>Spring break</i>	Mar 9	<i>Spring break</i>
Mar 14	Quality	Mar 16	Quality
Mar 21	Auctions	Mar 23	Auctions
Mar 28	Search	Mar 30	Search
Apr 4	Choice frictions	Apr 6	Choice frictions
Apr 11	Proposal presentations	Apr 13	Matching
Apr 18	Proposal presentations	Apr 20	Proposal presentations
Apr 25	Proposal presentations		

Final proposal due May 9

Reading list. This list constitutes a tentative outline of the topics we will cover in class, including papers we will discuss (the list may change or expand as the term progresses).

1. Pricing

- Varian, Hal R. “Price discrimination.” *Handbook of Industrial Organization* 1 (1989): 597-654.
- Leslie, Phillip. “Price discrimination in Broadway theater.” *RAND Journal of Economics* (2004): 520-541.
- Hendel, Igal and Aviv Nevo, “Intertemporal Price Discrimination in Storable Goods Markets,” *American Economic Review*, 2013, 103 (7), 2722–51.
- DellaVigna, Stefano, and Matthew Gentzkow. “Uniform pricing in us retail chains.” *Quarterly Journal of Economics* 134.4 (2019): 2011-2084.
- Dubé, Jean-Pierre, and Sanjog Misra. “Personalized pricing and customer welfare.” Working Paper (2019).
- Williams, Kevin R. The welfare effects of dynamic pricing: Evidence from airline markets. Forthcoming, *Econometrica* (2021).
- Castillo, Juan Camilo. “Who Benefits from Surge Pricing?.” Working paper, 2020.
- Calvano, Emilio, et al. “Artificial intelligence, algorithmic pricing, and collusion.” *American Economic Review* 110.10 (2020): 3267-97.

2. Search

- Brown J. and A. Golsbee (2002), “Does the Internet Make Markets More Competitive? Evidence from the Life Insurance Industry”, *JPE*
- Diamond, Peter (1971) “A Model of Price Adjustment” *Journal of Economic Theory* 3 156-168.
- Ellison, Glenn and Sara Fisher Ellison “Search, Obfuscation, and Price Elasticities on the Internet,” *Econometrica* 77(2): 427-452.
- Hortacsu, Ali and Chad Syverson (2004), “Product Differentiation, Search Costs, and Competition in the Mutual Fund Industry: A Case Study of SP 500 Index Funds,” *The Quarterly Journal of Economics*, 119 (2), 403–456.
- Seim, Katja, Maria Ana Vitorino and David M. Muir (2017) “Drip Pricing When Consumers Have Limited Foresight: Evidence from Diving School Fees” *Working Paper*.
- Sorenson, Alan (2000) “Equilibrium Price Dispersion in Retail Markets for Prescription Drugs” *Journal of Political Economy* 108: 833-850.
- Stahl, Dale O. (1993) “Oligopolistic Pricing with Heterogeneous Consumer Search” *International Journal of Industrial Organization* 14: 243-268.

3. Platforms and network effects

- Katz, Michael L., and Carl Shapiro. “Network externalities, competition, and compatibility.” *American Economic Review* 75.3 (1985): 424-440.
- Weyl, E. Glen. “A price theory of multi-sided platforms.” *American Economic Review* 100.4 (2010): 1642-72.
- Rysman, Marc. “Competition between networks: A study of the market for yellow pages.” *Review of Economic Studies* 71.2 (2004): 483-512.

- Farronato, Chiara, and Andrey Fradkin. The welfare effects of peer entry in the accommodation market: The case of airbnb. Conditionally accepted, *American Economic Review*, 2020.
- Rosaia, Nicola. Competing platforms and transport equilibrium: Evidence from New York City. Working Paper, 2020.

4. Vertical Relations

- Gregory S. Crawford and Ali Yurukoglu (2012), “The Welfare Effects of Bundling in Multichannel Television Market”, *American Economic Review*
- K. Ho and R. Lee (2009), “Insurer Competition in Health Care Markets”, *American Economic Review*

5. Quality

- Bronnenberg, B. JP Dubé, M. Gentzkow and J. Shapiro (2015), “Do Pharmacists Buy Bayer? Informed Shoppers and the Brand Premium”, *QJE*
- Dafny, L. and D. Dranove (2008), ““”Do Report Cards Tell Consumers Anything They Don’t Already Know? The Case of Medicare HMOs.” *The Rand Journal of Economics*
- T. Gilligan (2004) “Lemons and Leases in the Used Business Aircraft Market” *JPE*
- Hotz, J. and M. Xiao (2011) “The Impact of Regulations on the Supply and Quality of Care in Child Care Markets”, *American Economic Review*
- Jin, G.Z. and P. Leslie (2003), “The effect of information on product quality: evidence from hygiene report cards”, *QJE*

6. Auctions

- Milgrom, Paul R., and Robert J. Weber. “A theory of auctions and competitive bidding.” *Econometrica* (1982): 1089-1122.
- Hortacsu, Ali, and Isabel Perrigne. “Empirical Perspectives on auctions.” Handbook of Industrial Organization (2021).
- Hendricks, Kenneth, and Robert H. Porter. “An empirical study of an auction with asymmetric information.” *American Economic Review* (1988): 865-883.
- Guerre, Emmanuel, Isabelle Perrigne, and Quang Vuong. “Optimal nonparametric estimation of first-price auctions.” *Econometrica* 68.3 (2000): 525-574.
- Hortaçsu, Ali, and Steven L. Puller. “Understanding strategic bidding in multi-unit auctions: a case study of the Texas electricity spot market.” *RAND Journal of Economics* 39.1 (2008): 86-114.
- Asker, John. 2010. “A Study of the Internal Organization of a Bidding Cartel.” *American Economic Review*, 100 (3): 724-62.
- Budish, Eric, Peter Cramton, and John Shim. “The high-frequency trading arms race: Frequent batch auctions as a market design response.” *Quarterly Journal of Economics* 130.4 (2015): 1547-1621.

7. Selection Markets

- Adams, Einav and Levin (2009) “Liquidity Constraints and Imperfect Information in Subprime Lending”, *American Economic Review*
- Bundorf, K, J. Levin and N. Mahoney (2012) “Pricing and Welfare in Health Plan Choice”, *American Economic Review*

- Einav, L. A. Finkelstein, and M. Cullen (2010) “Estimating Welfare in Insurance Markets using Variation in Prices”, *QJE*
- Einav, L. Jenkins, and Levin (2012) “Contract Pricing in Consumer Credit Markets”, *Econometrica*
- Cardon, J. and I. Hendel (2001) “Asymmetric Information in Health Insurance: Evidence from the National Medical Expenditure Survey”, *The RAND Journal of Economics*
- A. Cohen and L. Einav (2007) “Estimating Risk Preferences from Deductible Choice”, *American Economic Review*
- Handel, B, I. Hendel and M. Whinston (2015) “Equilibria in Health Insurance Exchanges: Adverse Selection versus Reclassification Risk”, *Econometrica*
- Handel, B, I. Hendel and M. Whinston (2017) “The Welfare Effects of Long Term Contracts”,

8. Choice Frictions

- Abaluck, J. and J. Gruber (2011), “Choice Inconsistencies among the Elderly: Evidence from Plan Choice in the Medicare Part D Program”, *American Economic Review*
- Handel, B (2013), “Adverse selection and inertia in health insurance markets: When nudging hurts”. *American Economic Review* 103 (7), 2643–2682.
- Handel, B. and J. Kolstad, (2015) “Health Insurance for Humans: Information Frictions, Plan Choice, and Consumer Welfare” *American Economic Review*
- Honka, E. 2015 “Quantifying Search and Switching Costs in the US Auto Insurance Industry”, *RAND Journal of Economics*
- Bhargava, S, G. Loewenstein, G and Sydnor, J (2015). “Do Individuals Make Sensible Health Insurance Decisions? Evidence from a Menu with Dominated Options”

9. Matching

- Agarwal, Nikhil, and Eric Budish. Market Design. No. w29367. National Bureau of Economic Research, 2021. (Forthcoming as a chapter in the *Handbook of Industrial Organization*)
- Roth, Alvin E. “The economist as engineer: Game theory, experimentation, and computation as tools for design economics.” *Econometrica* 70.4 (2002): 1341-1378.
- Agarwal, Nikhil. “An empirical model of the medical match.” *American Economic Review* 105.7 (2015): 1939-78.
- Waldinger, Daniel. “Targeting in-kind transfers through market design: A revealed preference analysis of public housing allocation.” *American Economic Review* (2021).
- Kapor, Adam J., Christopher A. Neilson, and Seth D. Zimmerman. “Heterogeneous beliefs and school choice mechanisms.” *American Economic Review* 110.5 (2020): 1274-1315.