This course sequence provides a graduate-level introduction to Industrial Organization (IO). It is designed to provide a broad introduction to topics and industries that current researchers are studying as well as to expose students to a wide variety of techniques. It will start the process of preparing Ph.D. students to conduct thesis research in the area.

**Lectures:** Monday/Wednesday 1:30-3:20, KGH 1410

**Course Web Page:** see Canvas

Grading will be based on several problem sets and a final exam. The final is scheduled for Thursday, December 9 at 9am.

We will not discuss all of the papers on the reading list, but *we expect you to read all of the papers that we discuss in detail in class.*

The plans for how the course will be run are described below. However, we may modify various aspects, depending on campus restrictions, as well as feedback we receive from you and our own evaluations. We always welcome feedback on how to improve the course, and your feedback is especially welcome this year.

All lectures and office hours will be conducted in person.

We will post copies of the slides used during lectures before the topics are covered in class. You may find it useful to download or print out hard copies of the lecture slides before attending lectures in order to review the material in advance and/or to take notes during the lecture. The slides contain material that will be covered in class, as well as supplemental material, some of which will be covered in class. As far as the exam is concerned, you are only responsible for the material covered in class.
The following abbreviations are used for journal titles:

AER  American Economic Review
AEJ: Micro American Economic Journal: Microeconomics
BJE  Bell Journal of Economics
EMA  Econometrica
IER  International Economic Review
IJIO  International Journal of Industrial Organization
JE  Journal of Econometrics
JEH  Journal of Economic History
JEL  Journal of Economic Literature
JEMS  Journal of Economics & Management Strategy
JEP  Journal of Economic Perspectives
JET  Journal of Economic Theory
JIE  Journal of Industrial Economics
JLE  Journal of Law and Economics
JPE  Journal of Political Economy
QJE  Quarterly Journal of Economics
QME  Quantitative Marketing and Economics
REStat  Review of Economics and Statistics
REStud  Review of Economic Studies
RIO  Review of Industrial Organization
RJE  RAND Journal of Economics
I. General References


II. Static Models of Oligopoly Price/Quantity Competition

Tirole, chap. 5, Section 2.1 (pp. 96–100); Sections 7.1, 7.2, 7.5 (pp. 279–88, 296–300).


1. The Cournot Model


2. Price Competition with Product Differentiation


3. Introduction to the Antitrust Laws and Horizontal Merger Policy


M. Whinston, Lectures on Antitrust Economics, MIT, 2006, Chapters 1 and 3.


III. Entry


**IV. Dynamic Models**

Tirole, Chapter 6.

**1. Collusion with Observable Demand Variation**


**2. Multimarket Contact**


**3. Collusion with Capacity Constraints**


4. Collusion with Unobservable Demand Variation (Imperfect Monitoring)


5. Collusion with Private Types


6. Staggered Price Setting


7. Collusion and Antitrust Enforcement


8. **Switching Costs**


V. **Empirical Studies of Pricing**

1. **Tests of Market Power**


2. Common Ownership


3. Monopsony Power


4. Repeated Interaction


5. Collusion


VI. Production, Technology and Industry Structure

1. Estimation


F. Wolak, “An Econometric Analysis of the Asymmetric Information, Regulator-Utility
2. Analysis of the Evolution of Markups in the Long-Run


J. Brand, “Differences in Differentiation: Rising Variety and Markups in Retail Food Stores,” mimeo, University of Texas at Austin, 2021.


VII. Demand Estimation in Differentiated Products Industries

1. Pricing and Demand Models


2. Welfare and Hedonic Prices

Hedonic Price Regressions and Price Indices


*Welfare Measures Computed from Estimated Demand Systems*


J. Hausman, “Valuation of New Goods Under Perfect and Imperfect Competition,” in Bresnahan and Gordon (eds.) *The Economics of New Goods*, Chicago: NBER, 1996, including comment by Bresnahan (in the same volume) and reply to comment (and reply to reply).


**VIII. Additional Topics in Demand Estimation**


IX. Pass-Through


X. Identification


