Course Description
Industrial Organization studies the behavior of firms and the functioning of markets, as well as the role of public policy in promoting efficiency. This course will cover selected topics in industrial organization theory. Recommended textbooks include: (1) The Theory of Industrial Organization by Jean Tirole, MIT Press, (2) Industrial Organization by Oz Shy, MIT Press. A good source for references is the Handbook of Industrial Organization, Vol. 1, 2, and 3. HIO3 (2007, Mark Armstrong and Robert Porter edits) surveys the major developments in IO since Tirole.

Grading
Your grade will be based on homework and class participation (25%), a midterm exam (25%), group presentations (20%), and term paper and presentation (30%). You are encouraged to form study groups to discuss homework and lecture materials. More details about the research component will be discussed later.

Honor Policy
You may not access any old problem sets, old exams, answer keys without my explicit permission. When collaborating with others, do not copy answers from another student. Always cite any resources or individuals you consult to complete an assignment.

Course Schedule
The course materials are arranged by topics, each usually covered over several classes. Tirole remains the classic graduate IO textbook, and you are encouraged to read the entire book and work out the exercise problems there (even though we only cover a few parts of the book in the course). Several problem sets will be assigned, including short reviews for papers (each review is about two pages long, double spaced).

A tentative course schedule is listed below. Approximate number of lectures to cover each chapter is listed in parenthesis. There can be changes to this schedule during the semester, which will be announced in class. It is your responsibility to update information about the course according to announcements made in class.

Chapter 0. Introduction (0)
Readings:
• Tirole; Shy; HIO 1, 2, 3.

Chapter 1. Monopoly Pricing (3)

• Single- and multi-product monopoly pricing
• Price discrimination

Readings: Tirole Ch. 1

Chapter 2. Static Models of Oligopoly (6)

- Bertrand and Cournot competition
- Spatial competition
- Vertical differentiation

Readings: Tirole Ch. 5, Ch. 7


Chapter 3. Dynamic Models of Oligopoly (3)

- Dynamic price competition
- Competition in the airline industry
- Tacit collusion

Readings: Tirole Ch. 6.

• Chen, Y. “Paying Customers to Switch,” JEMS (1997).


• *V. Brian Viard. “Do switching costs make markets more or less competitive? The case of 800-number portability,” RAND (2007)


• Lei He, Myongjin Kim and Qi Hong Liu. “Carry-on Baggage Fee, Airline Pricing and Subcontracting,” working paper (2019)


Chapter 4. Entry and Exit (3)

• Natural monopolies

• Accommodated, deterred and blockaded entry

• Limit pricing and signal jamming

Readings: Tirole Ch. 8, Ch. 9.


• Bagwell, K. “A Model of Competitive Limit Pricing, JEMS (1992)
Chapter 5. Platforms and two-sided markets (4)

- Media markets
- Targeted advertising
- Ad blocking and ad skipping
- Search advertising
- Platform market design

Chapter 6. Other topics (2)

- Low price guarantees
- Consumer search
- Oligopolistic third-degree price discrimination

Readings: