

Industrial Organization

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Class Time: Thursday 6pm – 8:45pm
Office Hours: Following Class or by Appt.

This class examines how firms with market power behave and compete. We begin with an examination of the nature of the firm itself and firm behavior in competition and in monopoly. Price discrimination and business practices such as vertical restraints are examined, as well as product differentiation. Oligopolistic models are used to examine how markets are likely to evolve with horizontal merger, vertical merger, and with entry. Game theory is examined to examine specific aspects of collusion. We also investigate the role of innovation and the impact of patent law on business practices and competition. The impact on industry from public policies such as antitrust and regulation of natural monopoly will be discussed. The class emphasizes, in particular, the importance of information in analyzing markets and firms' decisions. Throughout the class a focus is placed on application and real-world examples – specific industries such as healthcare, electricity, and technology-driven industries are examined in more detail.

Course Requirements and Grades

It is assumed that students have already taken an introductory course in microeconomics and have working knowledge of the mathematics covered in the Mathematical Methods for Economists course. The class assumes that students are comfortable with basic calculus and optimization.

Grades will be based on performance on 8 weekly homework questions, two short papers (<8 pages), and a final exam.

- Course grade will be determined according to the following weights:
 - Problem Sets (7) 35%
 - Papers (2) 35%
 - Final Exam 30%
- Homework and Papers are to be handed to me by 6:30pm on each due date.
- Late homework will not be accepted – 8 problem sets will be assigned and your highest 7 homework grades will count.

- Late papers can be turned in at a penalty of 5 percentage points for every day the paper is late until 7 days following the due date, after which point papers will no longer be accepted.

Readings and Textbook

Readings will be posted on a weekly basis. I will identify 1, or at most 2 readings a week that are expected to be completed before class. No textbook is required for the course. However, you may desire to purchase a textbook for reference purposes. If so, I recommend these books (any edition):

- Tirole, The Theory of Industrial Organization
- Carlton and Perloff, Modern Industrial Organization
- Pepall, Richards, and Norman, Industrial Organization: Contemporary Theory and Empirical Applications

Electronics and Internet Access

It is assumed that students have internet access. I will use an e-mail distribution list to contact the class as needed and answer questions. I will post various materials on Blackboard including materials for reading and review. Despite that we all love electronic gadgets – all phones, pads, and other electronic devices should be in silent mode and remain unused during class (unless used actively to take notes).

Schedule

Class	Date	Expected Lecture Topics	Homework Due
1	May 12	Theory of the Firm; Competition and Monopoly	
2	May 19	Price Discrimination; Product Differentiation	HW 1
3	May 26	Oligopoly Models	HW 2
4	June 2	Mergers	HW 3
5	June 9	Collusion	HW 4
6	June 16	Monopolization; Vertical Integration	
7	June 23	Vertical Restrictions	Paper 1
8	June 30	Two-Sided Markets; Network Effects	HW 5
9	July 7	Energy Industry	HW 6
10	July 14	Adverse Selection and Healthcare	HW 7
11	July 21	Patents and Innovation	HW 8
12	July 28	Innovation	
13	Aug 4	Antitrust and Competition Policy	Paper 2
14	Aug 11	Final Exam	