

E C O N O M I C S 4 3 5
I N D U S T R I A L O R G A N I Z A T I O N
A N D
A D V A N C E D P R I C E T H E O R Y

R E A D I N G M A T E R I A L S

Modern Industrial Organization, Carlton and Perloff [4rd ed.]

Additional articles and notes will be available through the web page:
<https://webct.csusm.edu>

A B O U T T H E C O U R S E

Industrial Organization (IO) is a branch of microeconomics that studies the behavior of firms across industries to understand various market structures and differences in pricing and product choices. IO provides an in-depth analysis of persistent market imperfections and the ways in which governments use regulation and antitrust policy to correct these. In this class students will gain a deeper understanding of economic models and how they describe particular market phenomena. Students will also learn how to apply these models to analyze various industries in the economy.

The course will begin with a review of the benchmark market structure of perfect competition. Monopoly is used to discuss the other extreme. We then move into strategic interaction between small numbers of firms and the basis of much IO analysis. For this we will use the basic (and not so basic) tools of game theory. Topics will include monopolistic competition, product differentiation, repeated interaction and collusion, entry deterrence and structure-conduct-performance analysis.

How to learn in this course

The method of instruction is for a large part class lectures. In class, I will guide you through the mathematical models used to describe different market structures. The lectures are mainly a guide to the subject area. While some non-text readings are required, there are also optional readings for you to expand your understanding of a particular area. The bare minimum is to read the text and required articles. The rest is up to you! The website contains links to almost all supplementary readings and occasional supplementary notes from lecture.

C O U R S E R E Q U I R E M E N T S

Your grade in this course will be determined by the following:

- (25%) First exam;
- (25%) Second exam;
- (30%) Comprehensive final exam;
- (10%) Problem sets
- (10%) Research paper

Attendance and Classroom Participation

Every student is expected to attend class and participate in class. If you miss class, you are responsible for obtaining class notes, assignments, etc. When possible, I post lecture notes on the class web page as a courtesy, but don't rely on them. You are expected to actively engage in class through asking and answering questions. To encourage this active learning, your participation in class is used to improve your assigned grade.

About the Midterm Exams and Final Exam

- All exams are **cumulative** of the material covered in the course.
- There are no makeup exams. Missed exams will result in a zero unless a valid excuse is provided **in advance**.
- In emergency cases only, you can obtain an excused absence from an exam, in which case your final exam grade will count towards 60% of your assigned grade.

About the Research Paper

You are required to write a research paper (approximately 5-7 pages plus graphs and tables) on the firm or industry of your choice. You will need to collect articles to research your paper, which can be from *The Economist*, *NY Times*, *Wall Street Journal*, or *Business Week* or other reputable papers or journals.

In the paper, you need to summarize the information you obtained from your articles, and describe the industry in question with reference to the models discussed in class. I am not looking for merely a description, but rather you to show that you are able to apply the models to gain a better understanding on the structure of the industry, conduct of firms and performance/efficiency implications. More information on this will be provided during the semester.

About the Problem Sets

Periodically, you will be assigned homework assignments to practice and review the tools and theory of IO. Problem sets are graded on a 0 through 5 point scale:

- 5 Perfect
- 4 Near perfect, some minor mistakes
- 3 Satisfactory work, some large mistakes
- 2 Some correct ideas

- 1 Some sign of intellectual thought
- 0 Not turned in or no sign of intellectual thought

No late assignments are accepted. No exceptions are made to this rule. If you miss a class, you can still turn in your assignment by emailing it to me or deliver the problem set to my office. Academic honesty is important. I encourage collaborative learning and discussion of course materials outside of class, however, each student must do his/her own work on written assignments and exams. This means that you are allowed to solve the problems with a study group, but when it comes time to write up your answers, this should be done on your own. You will learn much more from challenging yourself than from transcribing a classmate's problem set. I take honesty seriously. Cheating will be punished fully – no excuses!

Student Learning Objectives

1. *Display command of and interpret existing economic knowledge*
 - a. Understand and precisely explain the key economic concepts
 - b. Describe how economic concepts can be used
2. *Apply existing economic knowledge*
 - a. Understand and effectively employ relevant analytical and logical skills to solve problems
 - b. Reason systematically and understand the use of models
 - c. Reason quantitatively
 - d. Communicate effectively
3. *Develop lifelong learning skills*
 - a. Develop an appreciation for using economic concepts, skills and ways of thinking to answer questions one has about the world

THE COURSE MENU

This is an approximate ordering of events for this class with optional readings marked by '*'. Many of the articles are available on JSTOR (www.jstor.org) which can be accessed through university computers (library) or by accessing the library webpage and signing in using your student account. Other articles are linked directly through the class webpage.

1. Theory of the Firm, Costs, and Perfect Competition
 - Carlton and Perloff, Chapter 1, 2 (pp 19-22 and pp28-end only) and 3
 - Alchian, Armen A., and Demsetz, Harold. "Production, Information Costs and Economic Organization." *American Economic Review* 62 (1972).
 - *Adams, Walter and James Brock. "Agricultural Markets." *The Structure of American Industry*, 10th ed. (2001).
 - * "Antitrust Enforcement and the Consumer," from the DOJ webpage.
 - *Barzel, Yoram. "A Measurement Cost Theory of the Firm." *mimeo*, 2001.
 - *Coase, Ronald. "The Nature of the Firm." *Economica* (1937).
2. Monopoly and Monopsony
 - Carlton and Perloff, Chapter 4 (up to p107 only)
 - "Bully Buyers: How driving prices lower can violate antitrust statues." *Wall Street Journal* Jan 27, 2004.
 - *Posner, Richard. "The Social Costs of Monopoly and Regulation." *Journal of Political Economy* 83 (1975).
3. Oligopoly
 - Carlton and Perloff, Chapter 6 and Appendix 6A
 - Shy, Oz. "Chapter 2: Basic Concepts in Non-Cooperative Game Theory." *Industrial Organization*, MIT Press (2001). pp11-27
 - "The Joys of Oligopoly." *The Economist* 2001.
 - *Gibbons, Robert. "An Introduction to Applicable Game Theory." *Journal of Economic Perspectives* 11 (Winter 1997).
 - *Stigler, George J. "A Theory of Oligopoly." *Journal of Political Economy* 72 (1964).
4. Repeated Oligopoly and Tacit Collusion
 - Carlton and Perloff pp178-180
 - Shy, Oz. "Chapter 2:..." pp28-33
5. Product Differentiation and Monopolistic Competition
 - Carlton and Perloff, Chapter 7
 - *Spence, Michael. "Product Differentiation and Welfare." *American Economic Review* 66 (May, 1976).

- *Lancaster, Kelvin J. “A New Approach to Consumer Theory.” *Journal of Political Economy* 74 (April 1966).
6. Dominant Firm and Competitive Fringe
 - Carlton and Perloff, pp107-118
 - Klein, Benjamin “The Microsoft Case: What can a Dominant Firm do to Defend its Market Position?” *Journal of Economic Perspectives* 15 (spring 2001).
 - “The New Enforcers”, *The Economist*, 2000.
 7. Predatory Pricing, Limit Pricing, and Entry/Deterrence
 - Carlton and Perloff, Chapter 11 (up to p361)
 - *New York Times* Articles on Auction Houses (there are three).
 - *New York Times* Articles on Airline Predatory Pricing (there are three).
 - *Fudenberg, Drew, and Tirole, Jean. “The Fat Cat Effect, the Puppy Dog Play, and the Lean and Hungry Look.” *American Economic Review* 74 (May 1984).
 - *Aghion, Philippe, and Bolton, Patrick. “Contracts as a Barrier to Entry.” *American Economic Review* 77 (June 1987)

If time permits, we will cover the following topics:

8. Pricing With Market Power & Price Discrimination
 - Carlton and Perloff, Chapter 9 and pp302-319
 - *New York Times* Articles on Microsoft Tying (there are two).
9. Product Liability and the Role of Torts
 - Shavell, Steven. *Foundations of Economic Analysis of Law*
10. Durability, Network Externalities, and Technological Change
 - Carlton and Perloff, Chapters 15 and 16
 - *Liebowitz, S.J. and Margolis, S.E. “The Fable of the Keys.” *Journal of Law and Economics* 33 (April 1990).