

Economics 105
INDUSTRIAL ORGANIZATION & ANTITRUST POLICY

This course is an introduction to the field of Industrial Organization. We will analyze the economic causes and consequences of firms' strategic decisions, and discuss how the economic analysis relates to U.S. antitrust policy (past and present). The topics to be discussed include (but are not limited to) price discrimination, tacit collusion in oligopoly markets, strategic entry and exit, and the economics of innovation. Although we will frequently discuss real-life examples of these issues, the emphasis will be on understanding the relevant analytical tools and concepts.

Since much of modern Industrial Organization consists of studying the strategic interactions of competing firms, we will employ fundamental concepts of game theory in our analysis. These concepts will be introduced as part of the course. However, familiarity with intermediate microeconomics will be presumed, since Econ 100A-B (or 170A-B) are prerequisites for this course. Students should also be reasonably comfortable with basic calculus.

Lectures: Solís 104, Tuesdays and Thursdays from 2:20-3:40 PM

Office hours: Econ 312, Mondays 1:30-2:30 P.M. (Otherwise by appointment.)

Course web page: <http://econ.ucsd.edu/~asorensen/ec105.html>

Readings: The required reading for the course will be from the text Industrial Organization: Contemporary Theory & Practice, by Pepall, Richards, and Norman. This book should be available at the bookstore, and at least one copy should be available on reserve at the library. Readings about specific industries may also be required as part of the course. I encourage you to supplement your reading of the textbook with regular reading of a periodical that covers current events germane to the course; examples would include the *Wall Street Journal*, *New York Times*, or *The Economist*.

Required assignments and grading: Your grade in the course will be based on the following (percentage weight in final grade in parentheses):

(20%) Problem Sets. Four problem sets will be distributed at regular intervals during the quarter. Unless I indicate otherwise, you may work on these problem sets in small groups. However, each individual must turn in his or her own set of answers. (The purpose of this policy is to encourage discussion, NOT to facilitate division of labor arrangements. Working together on problems will help you learn the material, but if you simply copy each other's work the standard cliché applies: you're only hurting yourselves.) Late assignments will not be accepted.

(35%) Midterm Exam. This will be held in class, and is tentatively scheduled for Thursday, October 25.

(45%) Final Exam. This will be a comprehensive exam, and is scheduled for Monday, December 3, from 3:00-6:00 PM.

Tentative Course Outline

I. Introduction

PRN: Chapter 1

II. Production Technology and Market Structure

PRN: Chapter 2

III. Monopoly Pricing Strategies

1. Price Discrimination
2. Tying and Bundling
3. Multiproduct monopolies
4. Durable goods

PRN: Chapters 3-4

IV. Single-Period Oligopoly Models

1. Introduction to game theory
2. Cournot model
3. Bertrand model

PRN: Chapter 5

V. Collusion

1. Single-period cartels
2. Introduction to repeated games
3. Tacit collusion in repeated games
4. Detecting collusion

PRN: Chapter 7

VI. Strategic Entry and Exit

1. Predatory pricing
2. Limit pricing
3. Entry games

PRN: Chapter 6

VII. Product Differentiation

1. Spatial differentiation
2. Vertical (quality) differentiation

PRN: Chapters 4.1-4.2 and 5.4

VIII. Vertical Relations

1. Double marginalization
2. Exclusive dealing
3. Resale price maintenance

PRN: Chapter 9

IX. Innovation and R&D

1. Incentives to innovate
2. Patent lengths
3. Patent licensing

PRN: Chapter 11