

ECO105 Industrial Organization

UC San Diego, Fall 2005

Professor Michael Noel

324 Economics

Email: mdnoel@ucsd.edu

Office Hours: W3:00-4:30 (subject to change)

Teaching Assistant C.C. Chen

ccchen@dss.ucsd.edu

Office Hours: M10:00-11:30

The Course

Industrial Organization draws heavily on non-cooperative game theory to analyze the strategic behavior and interaction of firms in imperfectly competitive markets. Topics include pricing strategies, collusive behavior, entry decisions, entry deterrence, advertising, research and development, uncertainty, internal firm structure and merger activity.

Required Textbook

Pepall, L., G. Norman and D. Richards. Industrial Organization: Contemporary Theory and Practice, 3rd edition. Cincinnati, OH: Southwest College Publishing, 2004. ("PNR").

Grading

There will be one term test (40%) and a final exam (50%). Three or four exercise sets will be distributed during the term and graded (10%). Questions for the term test and exam will draw on these exercises.

Topics

I. Introduction

- Industry Structures and Welfare Analysis
- Structure-Conduct-Performance and the New I/O

PNR Chapter 1, Sections 1.1-1.3, 1.A, Chapter 2, Sections 2.1-2.3

II. Single Product Monopoly

- Uniform Pricing, Two Part Tariffs, and Price Discrimination

- Multiplant Monopolist
- Durable Goods and Leasing
- Quality Choice

PNR Chapter 5, Sections 5.1-5.5, Chapter 6, Sections 6.1-6.3

III. Multi-product Monopoly

- Pricing
- Spatial Models
- Tie-Ins and Bundling

PNR Chapter 7, Sections 7.1-7.5, 7.A, 7.B, Chapter 8, Sections 8.1-8.4, 8.A

IV. Oligopoly

- Intro to Game Theory and Nash Equilibrium
- Static Models of Oligopoly and Spatial Models
- Measures of Industry Concentration

PNR Chapter 3, Sections 3.1-3.2

PNR Chapter 9, Sections 9.1-9.6

PNR Chapter 10, Sections 10.1-10.4

PNR Chapter 11, Sections 11.1-11.4

V. Collusion and Cartels

- Repeated Games, Threats, and Subgame Perfect Nash Equilibrium
- Cartels, Undercutting, and Price Wars

PNR Chapter 14, Sections 14.1-14.3

PNR Chapter 15, Sections 15.1-15.3

VI. Entry and Strategic Investment

- Contestable Markets
- Capacity Expansion and Other Strategic Investments
- Brand Proliferation and Predatory Pricing

PNR Chapter 12, Sections 12.1-12.4

PNR Chapter 13, Sections 13.1-13.4

VII. Information

- Moral Hazard and Adverse Selection
- Competition, Entry and Strategy under Uncertainty

VIII. Mergers

Chapter 16

IX. Vertical Relationships

Chapter 17, Chapter 18, Chapter 19

X. Intellectual Property and Patents

Chapter 22, Chapter 23

Additional Topics TBA as Time Permits