ECO105 Industrial Organization

UC San Diego, Winter 2004

Professor Michael Noel
324 Economics
Email: mdnoel@ucsd.edu
Office Hours: TBA

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, 2nd edition. Cincinnati, OH: Southwest College Publishing, 2002. ("PNR")

Grading

There will be one term test (40%) and a final exam (60%). Problem sets will also be distributed on a roughly bi-weekly basis.

Topics

I. Introduction
- Industry Structures and Welfare Analysis
- Structure-Conduct-Performance and the New I/O
PNR Chapter 1, Sections 1.1-1.6, 1.A

II. Single Product Monopoly
- Uniform Pricing, Two Part Tariffs, and Price Discrimination
- Multiplant Monopolist
- Durable Goods and Leasing
- Quality Choice
PNR Chapter 3, Sections 3.1-3.5

III. Multi-product Monopoly
- Pricing
- Spatial Models
- Tie-Ins and Bundling
PNR Chapter 4, Sections 4.1-4.4, 4.A,B,C

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

PNR Chapter 2, Section 2.1, 2.4-2.5
PNR Chapter 5, Sections 5.1-5.5

V. Collusion and Cartels
- Repeated Games, Threats, and Subgame Perfect Nash Equilibrium
- Cartels, Undercutting, and Price Wars
PNR Chapter 7, 7.1-7.6

VI. Entry and Strategic Investment
- Contestable Markets
- Capacity Expansion and Other Strategic Investments
- Brand Proliferation and Predatory Pricing
PNR Chapter 6, Sections 6.1-6.7

VII. Information
- Moral Hazard and Adverse Selection
- Search Models
- Competition, Entry and Strategy under Uncertainty

VIII. Mergers

IX. Vertical Relationships

Additional Topics TBA as Time Permits