

Department of Economics
University of Colorado, Boulder

Economics 8757-002
Industrial Organisation 2
Fall 2007

Syllabus

Professor: Martin Byford
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Lectures: TR 9.30-10.45 Economics 5
Office Hours: 2-5 Tuesday
Course Website: CULearn

Course Description

This course provides an introduction to the theoretical foundations of industrial organization. We will cover topics that explore the themes of efficiency, strategic behavior and market power in markets. The aims of this subject are three fold: First, to introduce key models and results in the study of IO, thereby providing students with an insight into the factors that influence the organization of markets and the challenges that face regulators. Second, to make students familiar with the technical and game theoretic methods employed in IO. Third, the subject will provide the skills necessary to formulate and critically assess the theoretical literature.

Prescribed Text

The prescribed textbook is *The Theory of Industrial Organization* by Jean Tirole. In addition, significant articles from each of the topics to be covered are listed below. Additional reading may be assigned during the semester. Any additional reading will be listed on the course website.

Assessment

The assessment of this subject consists of three components:

Each student will be required to complete a referees report on one piece of assigned reading. No two students may select the same paper. The report should comprise a 2-4 page typed critique of the paper, and a 15-20 minute presentation to be delivered in class. (Students are encouraged to use media, such as overhead projectors or PowerPoint, to facilitate their presentations.) Further details will be provided in class.

Over the course of the semester, students will develop a theoretical model based on a topic of interest. Ideally, the subject of the model should relate to one or more of the topics covered in this course, however any subject with a solid IO foundation is acceptable. The first step in the modeling project is to develop a 1-2 page proposal.

- Bulow, "An Economic Theory of Planned Obsolescence", QJE (1986), 101, 729-749.
- Gul, Sonnenschein & Wilson, "Foundation of Dynamic Monopoly and the Coase Conjecture", JET (1986), 39, 155-190.
- Milgrom & Roberts, "Pricing and Advertising Signals of Product Quality", JPE (1986), 94, 796-821.
- Pesendorfer, "Design Innovation and Fashion Cycles", AER (1995), 85(4), 771-792.
3. Oligopoly I: Price, Quantity and Product Differentiation
Tirole Ch. 5 & 7
- D'Aspremont, Gabszewicz & Thisse, "On Hotellings Stability in Competition," Econometrica (1979), 47 1145-50.
- Bulow, Geanakoplos & Klemperer, "Multimarket Oligopoly: Strategic Substitutes and Complements," JPE (1985), 488-511.
- Chen & Riordan, "Price and Variety in the Spokes Model", EJ (2007).
- Davidson & Deneckere, "Long-Run Competition in Capacity, Short-Run Competition in Price, and the Cournot Model," RAND (1986), 3, 404-415.
- Deneckere and Davidson, "Incentives to form coalitions with Bertrand competition," RAND, 1985.
- Ellison, "A Model of Add-On Pricing", QJE (2005).
- Homes, "The Effects of Third-Degree Price Discrimination in Oligopoly", AER (1989) 244-250.
- Hotelling, "Stability in Competition," EJ, (1929), pp. 41-57.
- Kreps & Scheinkman, "Quantity Pre-commitment and Bertrand Competition Yield Cournot Outcomes," BJE (1983), 326-337.
- Shaked & Sutton, "Relaxing Price Competition through Product Differentiation", RES (1982), 3-13.
- Shaked & Sutton, "Multiproduct Firms and Market Structure", RAND (1990), pp. 45-62.
4. Oligopoly II: Dynamic Oligopoly
Tirole Ch. 6
- Athey & Bagwell, "Optimal Collusion with Private Information", RAND (2001), 428-465.
- Athey, Bagwell & Sanchirico "Collusion and Price Rigidity", RES (2004) 317-349.
- Bernheim & Whinston, "Multimarket Contact and Collusive Behavior," RAND (1990), 21, 1-26.

- Eaton & Engers, "Intertemporal Price Competition", *Econometrica* (1990), 58, 637-659.
- Fudenberg & Tirole, "Customer Poaching and Brand Switching", *RAND* (2001), 634-657.
- Green & Porter, "Noncooperative Collusion Under Imperfect Price Information," *EMA* (1984) 52, 87-100.
- Klemperer, "Competition when Consumers Have Switching Costs: An Overview", *RES* (1995), 515-539.
- Klemperer, "The Competitiveness of Markets with Switching Costs", *RAND* (1987), 138-150.
- Maskin & Tirole, "A Theory of Dynamic Oligopoly, II: Price Competition, Kinked Demand Curves, and Edgeworth Cycles", *Econometrica* (1988), 56, 571-599.
5. Oligopoly III: Constrained Coalitional Price Setting
- Byford "A Constrained Coalitional Approach to Price Formation"
- Byford "Spatial Competition with Discrete Players"
- Guesnerie & Oddou, "Second Best Taxation as a Game", *JET* (1981), 25, 6791.
- Hamilton, MacLeod & Thisse, "Spatial Competition and the Core", *QJE* (1991), 106, 925-937.
6. Mergers, Entry and Exit
- Tirole Ch. 8-9
- Aghion & Bolton, "Contracts as a Barrier to Entry," *AER* (1987), 77, pp. 388-401.
- Cabral, "Horizontal mergers with free-entry: why cost efficiencies may be a weak defense and asset sales a poor remedy", *IJIO* (2003) 21, 607-623.
- Cabral & Riordan, "The Learning Curve, Market Dominance, and Predatory Pricing," *EMA* 62, 1115-1140.
- Farrell & Shapiro, "Horizontal Mergers: An Equilibrium Analysis", *AER* (1990), 107-126.
- Gowrisankaran, "A dynamic model of endogenous horizontal mergers", *RAND* 30(1), 56-83.
7. Vertical Contracting & Vertical Integration and Foreclosure
- Tirole Ch. 4
- Bernheim & Winston, "Exclusive Dealing", *JPE* (1998) 106(1), 64-103.
- Ordover, Saloner & Salop, "Equilibrium Vertical Foreclosure", *AER* (1990) 80(1), 127-142.

Rey & Tirole (forthcoming), "A Primer on Foreclosure", in: M. Armstrong and R. Porter (eds.), Handbook of Industrial Organization III.

Salop & Scheiman, "Raising Rivals' Costs", AER (1983) 73(2), 267-271.

Whinston, "Tying, foreclosure, and exclusion," AER (1990) 80(4), 837-859.

Procedures

1. If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and, <http://www.colorado.edu/disabilityservices>
Disability Services letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at, <http://www.colorado.edu/disabilityservices>
2. Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. You must inform me at least seven days in advance of any conflict due to a religious observance in order for alternative arrangements to be made. See full details at, http://www.colorado.edu/policies/fac_relig.html
3. Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty has the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their

