

ECO 7341
Theory of Industrial Organization
Spring, 2008.

Instructor:

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Office Hours: Tuesdays and Thursdays, 9 - 10.30 AM & by appointment.

Lectures: Wednesdays, 12.30 - 1.50 PM, Room-303, Umphrey Lee.

Objective:

Industrial Organization (I.O) is primarily concerned with the causes and consequences of market power, the strategic behavior of firms in markets with market power (typically oligopolies) and the interaction between firm behavior, market structure and the economic performance of markets. This is the first of a two-course sequence in I.O. primarily directed towards Ph.D. students in economics who have completed their core requirements for candidacy. Successful completion of these two courses will meet the graduate field requirements in I.O. This course will introduce students to fundamental questions, approaches and models in I.O. theory. The objective is to generate a clear understanding of basic methods (particularly, game theoretic) used in the current literature, the style of reasoning and the skill of capturing intuitive arguments & ideas in simple formal models.

The course will not cover the empirical literature. It will also exclude topics such as mechanism design, firm organization theory, contracts, regulation of firms under asymmetric information, collusion and vertical relationships.

Expected Background:

It is expected that students taking this course will be proficient in graduate level micro-economic theory and basic game theory.

Textbook:

Required: *The Theory of Industrial Organization* by Jean Tirole, MIT Press, 1988.

Optional Supplementary Texts:

Industrial Organization: Theory and Applications by Oz Shy, MIT Press, 1995.

Oligopoly Pricing: Old Ideas and New Tools by Xavier Vives, MIT Press, 1999.

Lectures in Industrial Organization Theory by Kaushik Basu, Blackwell, 1993.

Home Assignments:

Home assignments will be given out from time to time. It is expected that students will work on these assignments on their own and turn them in before the due date. Solutions will be discussed in class.

Evaluation:

Final grade will be assigned on the basis of performance in home assignments and active participation in class-room discussion. No incomplete grades will be assigned.

Tentative List of Topics:

1. Monopoly power and Welfare loss; Price Discrimination, Nonlinear Pricing, Bundling.
2. Oligopoly: Price competition, Capacity Pre-commitment; Strategic Delegation.
3. Horizontal and Vertical Product Differentiation; Brand Proliferation & Monopolistic Competition.
4. Advertisement and Informational Differentiation; Consumer Search, Switching Cost & Competition.
5. Competition with asymmetric information; information sharing.
6. Quality Choice & Information Problems: Moral Hazard and Adverse Selection; Reputation and Signaling.
7. Durable goods markets; Coase Conjecture, Leasing and Planned Obsolescence; Adverse Selection in Secondary Markets.
8. Contestable Markets (Natural Monopoly); Strategic Entry and Exit; Barriers to entry, Entry deterrence, Limit Pricing, Sunk Cost and Market Structure.
9. Technological Change: Innovation and R&D Activity, Patent Races, Adoption of New Technology, Cooperative and Non-cooperative R&D; Research Joint Ventures.
10. Models of Industry Dynamics: Learning by Doing and Cost Reducing Investment.

Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity will be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)