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 and regulation of firms under asymmetric information.

Expected Background: It is expected that students taking this course will be proficient in graduate level microeconomic theory and basic game theory.

Textbooks:


Optional Supplementary Texts:


Journal articles will be prescribed during the course.
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 (80%) and active participation in class-room discussion. No incomplete grades will be assigned.

Tentative List of Topics:

I. Monopoly power:
   Production and Pricing Decisions; Welfare loss.
   Durable Goods Monopoly & the Coase Conjecture
   Quality Choice & Information Problems: Reputation and Signalling
   Price Discrimination, Nonlinear Pricing, Tying and Bundling.
   Vertical Relationships & restraints.

II. Oligopoly:
   Review of non-cooperative game theory
   Price and Quantity Competition in Homogenous Goods
   Capacity Pre-commitment & Price Competition.
   Horizontal and Vertical Product Differentiation
   Brand Proliferation & Monopolistic Competition.
   Advertisement and Informational Differentiation.
   Consumer Search, Switching Cost & Competition
   Collusion: Repeated Interaction & Folk Theorems; Unobservable Actions.
   Incentives for Vertical Integration in Oligopoly.

III. Market Structure:
   Contestable Markets (Natural Monopoly)
   Strategic Entry and Exit Behavior
   Barriers to entry, Entry deterrence (Spence- Dixit-Stackelberg)
   Limit Pricing (Milgrom-Roberts).
   Persistence of Monopoly
   Predation & Mergers.

IV. Technological Change:
   Innovation and R&D Activity,
   Patent Races
   Adoption of New Technology
   Cooperative and Non-cooperative R&D; Research Joint Ventures.
   Network Externalities

V. Introduction to Models of Industry Dynamics.
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.)