ECONOMICS 220A
INDUSTRIAL ORGANIZATION

This is the first course in the graduate sequence on industrial organization and regulation. The course and the readings apply price theory and game-theoretic techniques to explain industry structure, conduct and performance. Among the topics we will study are the determinants of market structure, strategic interactions among firms, the effects of structure and conduct on prices and non-price dimensions of market performance, economics of R&D, and network effects. The emphasis is on general theoretical principles, although there will be some discussion of empirical approaches.

Students are expected to have a background in price and game theory at the level of Econ 201A and 201B. This course is preparation for Economics 220B (Regulation and Public Policy) and Economics 220C (Empirical Methods in Industrial Organization).

My office hours are Tuesdays 2:00-3:30 in 591A Evans, and by appointment. You can reach me at 642-1507, or (preferably) e-mail gilbert@econ.

There will be occasional problem sets. The main requirement is either a final paper or a final exam. The paper should be on an issue directly related to a topic covered in the course. The issue may be a theoretical point in industrial organization, an empirical study, or an analysis of a market institution.


Other useful texts are:

Assignments and Grading:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem sets</td>
<td>25%</td>
</tr>
<tr>
<td>Final paper/final exam</td>
<td>65%</td>
</tr>
<tr>
<td>Classroom participation</td>
<td>10%</td>
</tr>
</tbody>
</table>
COURSE OUTLINE

(* readings are optional)

I. Paradigms and methodologies (Week 1)
   Tirole, "Introduction" and "The Theory of the Firm"

II. Monopoly, price discrimination and product differentiation (Weeks 2-3)
   Tirole, Chs. 1-3
   *U.S. v. Aluminum Comp. of America*

III. Vertical integration and vertical control (Weeks 4-5)
   Tirole, Ch. 4

IV. Multi-firm behavior (Week 6)
   Tirole, Chs. 5-7
Bernheim & Whinston, "Multi-market contact and collusive behavior," *Rand J*, vol. 21, Spring 1990.

**V. Economics of research and development** (Weeks 7-8)

Tirole, Ch. 10, pp. 389-404

**VI. Patents and licensing** (Weeks 9-10)

Klemperer, "How broad should the scope of patent protection be?," *Rand J*, vol. 21, Spring, 1990.

**VII. Network effects, compatibility and standards** (Weeks 11-12)

Tirole, Ch. 10, pp. 404-414
*Farrell & Saloner, "Converters, compatibility and the control of interfaces," *J Industrial Econ*,

VIII. Entry deterrence, foreclosure, and predatory conduct (Weeks 13-14)

Tirole, Chs. 8-9
Aghion & Bolton, “Contracts as a barrier to entry,” *Am Econ Rev*, vol. 77, June 1987
Segal & Whinston, "Naked exclusion: comment," *Am Econ Rev*, vol. 90, 2000