

Econ 4041

Organization of Industries with Calculus



This course is a mathematical treatment (calculus) of contemporary industrial organization analysis and antitrust policy. Using game theory and calculus techniques, we will develop the standard models of price determination under different market structures. These models include perfect competition, monopoly, Cournot competition with homogenous goods, and Bertrand competition with homogenous and differentiated goods. We will then use these models to examine select horizontal antitrust topics such as collusion, horizontal mergers, monopolization, and price discrimination.

In the second part of the course, we will develop several models of vertical price determination using game theory and calculus techniques. We will then use these models to examine vertical antitrust topics such as minimum and maximum resale price maintenance, exclusive dealing arrangements, bundling and tying arrangements, and vertical foreclosure.

- **Students who take this course should have completed Econ 2010 and have an understanding of basic calculus (MATH 1220)**
- **There will be three examinations and weekly problem sets given in this course.**

