

BROWN UNIVERSITY

Econ 146 Industrial Organization (Section 01, Exam Group 04)

Fall 2008
revised 20080905

“ECON 1460 (Industrial Organization) A study of industry structure and firm conduct and its economic/antitrust implications. Theoretical and empirical examinations of strategic firm interactions in oligopolistic markets, dominant firm behaviors, and entry deterrence by incumbents. Also economics of innovation: research and development activities and government patent policies. Prerequisite: ECON 1110 or 1130 (EC 111 or 113). Some knowledge of calculus required. (from Banner Course Listing)

Class meeting: 11:00 am - 11:50 am MWF

Room: Alumnae Hall 212

Instructor: A. Yasuhara

Office: Blistein House, Rm 225

E-mail: Akio_Yasuhara@brown.edu

Office hours: From 1:00PM to 2:00PM on Wednesday and Friday, or by appointment.

Office hours during the reading week and the exam week will be announced later.

Teaching Assistant: Mr. Nathan Schiff

E-mail address: Nathan_Schiff@brown.edu

Office hours: Mondays and Wednesdays, 10:00am to 11:00am

Textbook (required):

- Dennis W. Carlton and Jeffrey M. Perloff (2005), *Modern Industrial Organization*, 4th edition, Pearson
- Lecture notes and homework sets on our Course Web Page at:
<http://mycoruses.brown.edu>

Grading Rule

The course grade will be based on your performance on homework sets (30 percent of the final grade), one mid-term exam (30 percent) and the final exam (40 percent).

Homework problems must be solved by yourself without any discussion or consultation with other students. Homework due dates shall be strictly enforced. If you can not attend the class meeting on the homework due day, submit your homework answers by e-mail attachment (to Akio_Yasuhara@brown.edu) before the end of the class meeting.

Show a 90-percent-or-above weighted average performance to receive an “A” for the course, and 80-percent-or-above performance to receive a “B”. Performance below 65 percent would receive a “fail.”

Auditing Student – Auditors must hand in all homework answers and show a passing grade.

The dates of the exams are:

Midterm exam Monday, October 20; 60 minutes in class

Final exam Tuesday, December 16, 9:00-11:10AM (two hours)

COURSE OUTLINE

Part I. Review of Ec111/Ec113 and Analytical Tools

- 1.1. Math and statistics tools (by TA)
 - Calculus
 - Differentiation and Integration
 - Optimization with/without constraints
- 1.2. Review of Ec111 (chapter 02)
 - Consumer preference, budget, demand, indirect utility and consumer's surplus
 - Production function, cost function, profit maximization and producer's surplus
 - Competitive market equilibrium
 - Welfare economics – Pareto optimality
 - Distortions and dead weight losses (DWL)
 - Game theory

Part II. Market Structure

- 2.1. Firm (chapter 02)
 - Economies of scale and economies of scope
 - Market allocation vs. firm
- 2.2. Competitive Market (chapter 03)
 - Demand, residual demand and elasticities.
 - Free market and entry barriers
- 2.3 Monopoly and Monopsony (chapter 04)
 - Marginal revenue and the demand elasticity
 - The Dead Weight Loss (DWL) of monopoly
 - Natural monopoly
 - Monopsony
 - Dominant firm
 - Contestable market
- 2.4 Cartels (chapter 05)
 - Profit maximization of cartels
 - Temptation of cheating
- 2.5 Oligopoly (chapter 06)
 - Cournot model
 - Bertrand Model
 - Stackelberg Model
 - From game-theory viewpoints
- 2.6 Product Differentiation (chapter 07)
 - Circle Model
 - Linear Model
- 2.7 Performance of Industries (chapter 08)
 - Mark-up
 - Measurements

Part III. Business Strategies and Conducts

- 3.1 Price Discrimination (chapters 9 and 10)
 - Market segmentation
 - Completely discriminating pricing
 - Two-part tariff
 - Quantity discount
- 3.2 Strategic Behavior (chapter 11)
 - Predatory pricing

- Limit pricing
 - Raising costs
 - Product compatibility, network and tie-in sale
- 3.3 Vertical Integration/Restriction (chapter 12)
- Integration
 - Restriction
- 3.4 Information (chapter 13)
- Tourists and natives
- 3.5 Durable Goods (chapter 15)