Lecturer: Xiaopeng Cheng
Classroom: TBA
Office Hour: MW 4:00pm – 5:00pm, 504 Saunders Hall
Email: xcheng@hawaii.edu

Course Description
Industrial Organization studies the behavior of firms and industries. It is a rich field both theoretically and empirically. Because the behavior of business directly affects the welfare of a nation, understanding industrial organization is also important for public policy analysis. Theoretical analysis of firms and industries will be much emphasized in this class.

Course Prerequisite
Intermediate Microeconomics. We will review the needed microeconomic topics briefly, but my intent is not to re-teach principles. Therefore sound background in Microeconomics is necessary. Students should be versed at mathematics, both in terms of solving mathematical problems and thinking mathematically. The use of calculus should be expected.

Textbook
The textbook for this course is Industrial Organization, 2nd edition (2000), by Don Waldman and Elizabeth Jensen.

Supplemental texts
Antitrust Economics on Trial, W. Adams and J. Brock (1992)

Attendance
Attendance is required unless you present a reasonable reason before your leave of absence in order not to have your points of attendance deducted. In addition, since quizzes will be given occasionally which will be counted toward your grade, students should make every effort to come. Students are responsible for all material covered during the class. If a class is missed, the material should be obtained from another student.

**Grading**

Grades in the class will be determined by a midterm exam, a final exam, assignments, quizzes, attendance and class participation. The grade breakdown is as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Make-up Exams**

A make-up exam will be given only under extreme circumstances. I should be notified in advance of the exam if you are unable to take the exam.

**Outline of the Course**

The main topics covered in this course are the following

I. Introduction

a) Reading: WJ, ch. 1

II. Basic Microeconomic Theory of the Firm and Market structure
a. Economic costs and the optimal size of the firm
b. The theory of perfect competition
c. Monopoly and aspects of monopoly theory
d. Oligopoly and monopolistic competition

Reading: WJ ch. 2, 3

III. Further Topics in the Theory of the Firm
a. The Social costs of monopoly
b. Concentration
c. Entry and Exit
d. The theory of contestable markets and potential competition

Reading: WJ, ch. 4, 5

IV. Oligopoly Theory and Collusion
a. Collusion and the Prisoner’s Dilemma
b. The Cournot Model
c. Bertrand Model
d. Price fixing and Collusion
e. Tacit vs. explicit collusion
f. Price fixing and the professions
g. Resale Price Maintenance

Reading: WJ, ch. 6-9
V. Product Differentiation and Advertising
   a. Theoretical analysis of product differentiation
   b. The optimal amount of variety
   c. Advertising and market structure
   d. Advertising as a barrier to entry

Reading: WJ, ch. 12

VI. Technological Change and Research and Development
   a. Impact of oligopoly
   b. Game theory and R&D
   c. Firm size and R&D
   d. Empirical evidence

Reading: WJ, ch. 13

VII. Market power and the problem of monopolization
   a. Limit Pricing
   b. Predatory Pricing
   c. Empirical evidence of monopolization
   d. Cases: What is monopolization
   e. Cases: Predatory pricing
   f. Cases: non-pricing strategies to deter entry

Reading: WJ, ch. 14
VIII. Mergers
   a. Horizontal mergers
   b. Vertical mergers
   c. Conglomerate mergers and corporate takeovers
   d. Corporate takeovers and market efficiency
Reading: WJ, Ch.15, 19

IX. Antitrust and regulation
   a. Policy toward monopolization
   b. Policy toward direct price fixing agreements
   c. Clayton Act
   d. Traditional public utility regulation
   e. X-inefficiency
   f. The Averch-johnson effect
   g. From regulation to deregulation
Reading: WJ, ch. 18, 19, 20