Instructor: Corinne Langinier, Heady Hall 383, phone: 294-5830, e-mail: langinie@iastate.edu

Time and Location: M W F from 10 to 10:50 am (to change) Room: East 111

Office Hours: Wednesdays from 2 pm to 3 pm and by appointment


Main Textbook:

The Theory of Industrial Organization (tenth Edition), by Jean Tirole, the MIT Press, 1998 (required).

Complementary Textbooks:

1. Introduction to Industrial Organization, by Luís Cabral, the MIT Press 2000.

Complementary Readings:

2. Handbook of Industrial Organization
3. The Economist.

Web links:

- IO Resources: http://netec.mcc.ac.uk/WebEc/webec1.html
Grading: There will be 5 assignments, a term paper, two midterm exams and a final. They will count toward the grade as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Assignments and Paper</td>
<td>40%</td>
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<tr>
<td>Midterms</td>
<td>30%</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
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Course Overview and Policies:

This course will cover traditional topics in Industrial Organization, such as monopoly and oligopoly theory, price discrimination, product differentiation, research and development, network. This course is divided into two parts: the exercise of monopoly power and the strategic interaction when firms are in competition. We will first study in detail the monopolistic behavior before introducing the strategic behavior. In order to fully understand the strategic behavior, a good knowledge of game theoretic models is very important. We will also study the effects of information being asymmetrically distributed among economic agents.

There will be two midterm exams and one final. There will be no make-up exams. If students miss the midterm exam and have a well-documented, university-approved excuse (such as a severe illness), the grade weights for the final exam will be scaled up appropriately. All students must take the final exam to be assigned a grade.

The homework assignments will be due the week after. They will not be accepted late for any reason. Every homework assignment will be included in the final grade calculation as well as the term paper. This required paper can be a model that you develop or a survey of papers in IO literature. I will distribute guidelines and a list of suggested topics. You may pick your own topic, subject to approval. I require an intermediate Paper Memo at the end of the 7th week of term, which should include a clear statement of the economic issues you will discuss, and any other legal or policy issues, and a comprehensive bibliography. The final paper is due at the end of the 16th week of term.

Iowa State University complies with the American with Disabilities Act and Section 504 of the Rehabilitation Act. Any student who may require an accommodation under such provisions should contact me as soon as possible and no later than the end of the first week of class or as soon as you become aware. No retroactive accommodations will be provided in this class.
Schedules and Topics:

**Week 1** Introduction: What is a firm?. The theory of the firm.

- Complementary Readings on Contract and Organization of the firm


**Part I: The Exercise of Monopoly Power**

**Week 2** Chapter 1: Monopoly.

*Homework Assignment #1 (Introduction and Chapter 1) due on Thursday September 8.*

**Week 3** Chapter 2: Product Selection, Quality and Advertising.

**Week 4** Chapter 3: Price Discrimination.

*Assignment #2 (Chapters 2 and 3): Read and present a paper (or part of it) on week 5.*

**Week 5** Presentation of papers.

- Complementary readings:
  

**Week 6** Mid-Term: Chapters 1 to 3.

**Week 7** Chapter 11: Introduction to non cooperative Game Theory.

*Intermediate Paper Memo.*

*Assignment #3 (Chapters 11 and 5) due on Thursday October 13.*

**Part II: Strategic Interaction**

**Week 8** Chapter 5: Short-run Competition.

**Week 9** Chapter 7: Product Differentiation: Price Competition and Non-Price Competition.

*Assignment #4 (Chapter 7). Read and present a paper on week 11.*

**Week 10** Presentation of papers.

- Complementary readings:

**Week 11 Second Mid Term. Chapters 5, 7 and 11.**

**Week 12** Chapter 8: Entry, Accommodation and Exit.

**Week 13** Chapter 9: Information and Strategic Behavior: Reputation.

**Week 14** Thanksgiving break.

**Week 15** Chapter 10: Research and Development and the Adoption of New Technologies.

- Readings on Optimal scope of Patents

- Readings on the pace of R&D, patent race

- Readings on Patents and R&D and Network

  *Homework Assignment #5: Present term paper on week 16.*

**Week 16** Presentation of papers.

*Final Paper due the last week of course.*

**Week 17** Final Examination.