RES EC 732
Industrial Organization I

Spring 2016

Professor: Christian Rojas
Class meetings: T-TH, 4:00 to 5:15 p.m.
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Course Objectives:

The primary objective of this course is to study and apply the analytical tools of industrial organization to a variety of industries. The secondary objective is to familiarize students with research methodology and articles in industrial organization and encourage the formation of researchable questions. The course will cover traditional topics such as monopoly, oligopoly, price discrimination, entry, product differentiation, vertical control, and advertising.

In addition, the course will have an important empirical component: we will cover several empirical papers that will illustrate the importance of market imperfections in public policy as well as in business strategies. Students will be introduced to datasets and will be asked to work on projects reproducing results and coming up with new research ideas.

Reference Books:

There most relevant textbook reference for this course is:

Quantitative Techniques for Competition and Antitrust Analysis by Peter Davis & Eliana Garcés (2009) [DG]

I will rely on power point presentations and the presented material will primarily draw material from this book. I will also draw material from other sources, which are listed below for your reference. If some of the chapters in the books below are highly relevant (or are considered to be a good reference for a particular topic), I will make them available through scanned pdf files (posted on the class website):

By Oz Shy [S]

By Dennis Carlton and Jeffrey Perloff. [CP] – I have listed this book as “required” for this class, primarily because it provides a comprehensive overview of most IO topics. You are not really required to buy it, but if you are in need of a reference that will be useful for you to consult now and in the future, this will be a good one.


**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Problem sets, projects and other assignments</td>
<td>40%</td>
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<tr>
<td>Oral Presentation of Journal Article + class participation (IO in the news)</td>
<td>15%</td>
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<tr>
<td>Midterm exam</td>
<td>20%</td>
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<tr>
<td>Final project/exam</td>
<td>25%</td>
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**IO in the news (part of your class participation grade):**

Part of your participation has to do with bringing to class, every week or so (I will announce this in class), a brief 2-3 minute summary of an interesting article related to IO in an important newspaper/business magazine (e.g. WSJ, NYT, The Economist, Financial Times, etc.) and share it verbally with the rest of the class. I encourage you to subscribe to one or several of these media outlets for daily news e-mails – it is important to be up to date with current events and be able to relate them to our class material. This will start on February 4.

**On-Line Material**

I will be using Moodle to post class material. The syllabus is subject to change.
Presentation of Journal Article

These presentations will occur throughout the semester – I will give each student at least a week’s notice for presenting.

Objectives of this exercise:

1. To read and understand an article from a peer-reviewed journal related to topics we’ve been covering in this course.
2. To distill the important elements of the article. Being able to find the important elements of an article requires a good understanding of it. I recommend at least two or three readings of the paper.
3. To use and develop good presentation and speaking skills. It is important that you develop confidence and become comfortable at giving presentations because no matter what you do in your career, you will eventually have to give presentations. Being comfortable in front of a crowd only comes with practice!

Grading:

Presentation: 90 points (own presentation)
Participation: 10 points (participation when other classmates present)

Presentation:

1. Presentations should be about 30 minutes.
2. You will present using PowerPoint.
3. In using PowerPoint, keep it simple. Fancy slides distract the audience.
4. Do not engage in font abuse (i.e., cramming the slide with text using fonts below 20). Larger fonts are recommended.
5. Have a title slide with the title of your presentation (the title of the article if you want), your name, your affiliation (Department of Resource Economics), the context for the presentation (RESEC 732) and the date of your presentation.
6. Have an outline slide to allow the audience to know what you will be presenting (very basic, point form). It would be a good idea to have the full reference of the paper on that slide (author(s)’s name, year it was published, title of the article, name of the journal, journal volume, and page numbers).
7. Your introduction should tell us the objective of the paper and its motivation/hook. Provide a brief background about your topic for the audience to learn more about the topic.
8. If your paper has both conceptual and empirical aspects, say something about both. However, if the paper presents results of four models, for example, pick the one you consider most important/relevant/convincing. In other words, it is not necessary that you talk about every thing that is in the paper.
9. Do not make your slides crowded. If you have to say, “I know this is difficult to read, but…” then you should not have that slide as part of your presentation!
   a. If you want to show data from an article, you can adapt the data needed (either table or figure), and be sure to cite that reference at the bottom of the slide.
   b. Be sure you do include data (if appropriate to your article) and not just give results verbally. You can also make supply and demand graphs or diagrams from what you read in the articles, even if the authors do not have graphs or diagrams. If they helped you understand the article, most likely it will help the audience understand and will demonstrate your understanding.
10. Be sure to give a summary at the end with the most important points you want your audience to remember.

11. Be critical of the paper: comment on the things you like and dislike and provide alternative (improved) ways in which the paper could be modified. Also, think about how this paper could be extended so an interesting research question can be developed.

12. Always be sure to have good eye contact with the audience during your talk. Do not read from the projected image on the screen—when you do so your back is to the audience. Instead, read from your computer screen.

Participation:
Non-presenters should read the paper to be presented and come prepared to ask questions. Pay attention to the style and content of the presentation and provide constructive feedback.
Course Outline

Overview of Topics [estimated class periods]

1. Introduction to IO [1]
   - What is IO
   - Empirical v. Theoretical IO
   - Brief History
   - Reference material: WJ (Ch. 1); S (Ch. 1), CP (Ch. 1)

   1. Price discrimination
      a. First-degree price discrimination
      b. Third-degree price discrimination
      c. Second-degree price discrimination
   2. Bundling

   1. Single-Period Oligopoly Models
      a. Cournot Model
      b. Bertrand Model
      c. General conjectural variation models & criticisms of conjectural variation models
   2. Sequential Moves – Stackelberg Leader

References: DG (Ch.1)

   - Approaches to Market power [1]
     o SCP approach
     o Structural approach
     o Empirical examples
     o References: DG (Ch. 6), PKG (Ch. 2 and 3); WJ (Ch. 6); CP (Ch. 8)

   - Collusion and Dynamic games [3]
     o Factors affecting collusion
     o Folk theorem
     o Collusion Imperfect information and imperfect monitoring
     o Antitrust laws: Per se rule v. rule of reason
     o Examples from US and Europe
     o References: PKG (Ch. 5); WJ (Ch. 9 and 10); CP (Ch. 5)
• Differentiated products [3]
  o Horizontal differentiation
  o Vertical differentiation
  o Approaches to estimation
  o Examples of market power estimation
  o References: DG(Ch. 1, 9), PKG (Ch. 4); S (Ch. 7); CP (Ch. 7), WJ (Ch. 13)

• Mergers [2]
  o Antitrust laws
  o Market definition and the price effect of mergers
  o Applications: Staples-Office Depot merger
  o References: DG (Ch. 8), WJ (Ch. 4, 4.3); KW (cases 6 and 7)

• Vertical Issues [3]
  o Double marginalization
  o Exclusive dealing
  o RPM
  o Tying
  o Exclusive territories
  o Antitrust laws
  o References: DG (Ch. 10), CP (Ch. 12), WJ (Ch. 16)

  • Entry deterrence
  • Limit pricing
  • Predatory pricing
  • Entry Games and Estimation
  • References: DG (Ch. 5), WJ (Ch. 11 and 12), C (Ch. 14 and 15)

5. Advertising [2]
  • References: CP (Ch. 13, 14); WJ (Ch. 13)