

*San José State University* (11/5/2014)  
Econ 121, *Industrial Organization*, Section 1, FA 14

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<b>Office Hours:</b>	Tuesday and Thursdays, 3-4:00p.m., and by appointment, in DMH 131
<b>Location/ Days/Time:</b>	DMH 358 / Tuesdays & Thursdays / 1:30-2:45p.m
<b>Prerequisites:</b>	Econ 1B

### **Faculty Web Page and MYSJSU Messaging**

Copies of the syllabus, homework assignments, etc. may be found on Canvas. See my Econ 1B syllabus for information on accessing Canvas.

### **Course Description**

Industrial organization (IO) is an important branch of microeconomics which is characterized by its theoretical models and empirical methods. This course provides an overview of IO in three parts. Part I covers core price theory as it relates to antitrust law, including game theoretic models of competition and collusion among firms in an industry. Part II turns to firm behavior regarding their entry into markets, their internal organization (in terms of horizontal and vertical mergers) and various forms of potentially anticompetitive (illegal) conduct. In Part III we turn to specialized areas of studies to which IO theory and methods have been applied: Strategic Management and the Economics of Regulation.

### **Course and Program Learning Objectives (CLOs and PLOs)**

#### *PLOs*

PLO1: Microeconomics

PLO4: Areas of Specialization

#### *CLOs:*

CLO1: Describe the contours of the IO field and distinguish it from other areas of study.

CLO2: Explain Cournot's model of monopoly and perfect competition.

CLO3: Illustrate Bertrand, Cournot and Stackelberg's models of oligopoly using graphical or game theoretic techniques.

CLO4: Setup and solve an example that illustrates collusion through an infinitely repeated game, and contrast this with results from finitely repeated games.

CLO5: Solve a model of entry with discrete capacity.

CLO6: State assumptions and demonstrate efficiency effects of horizontal and vertical mergers.

CLO7: Describe theories of monopolistic behavior and relate them to historical and contemporary antitrust cases.

CLO8: Discuss legal and theoretical issues related to innovation.

CLO9: Describe the connections between the fields of IO, Strategic Management and Regulatory Economics.

CLO\_10: Describe key features of the Information Technology industry and list and describe models that have implications for strategic management.

CLO\_11: Describe key features of transport industries and use models to demonstrate implications for regulation and deregulation.

CLO\_12: Describe key features of environmental regulation and describe models that have implications for climate change regulation.

## Important Note Concerning Four-Unit Classes

Although this course has previously been a three-unit course, beginning this semester it is now taught as a four-unit course. The main similarity between the previous and current versions of this course is the fact that they all cover core IO theory and methods as they relate to antitrust law. This material is covered in Parts I and II. The main difference is the addition of Part III (see Course Description above, or Class Schedule below) which covers the related subdisciplines of strategic management and regulatory economics, and also applications to the information technology and transport industries, as well as extended coverage of environmental regulation.

Practically speaking, this means that by Veteran's Day, we will cover the same amount of material as previously covered in the entire three-unit course. As a result, students who may be used to three-unit upper-divisional courses will find the pace has been appropriately quickened.

In other words, please be prepared for a fast paced course.

## Required Textbook

Viscusi, W.K., J.E. Harrington, and J.M. Vernon. *Economics of Regulation and Antitrust*, 4<sup>th</sup> edition MIT Press

This book is available as a free eBook from the SJSU library. I expect that you will complete all of the assigned readings by actively engaging with the material (i.e., not by glancing at the pages while sitting at the beach.)

## Grading and Classroom Policy

The grading scale is: 60-62, D-, 62-68, D, 68-70, D+, 70-72, C-, 72-78, C, 78-80, C+, 80-82, B-, 82-88, B, 88-90, B+, 90-92, A-, 92-98, A, 98-100, A+. Class participation can help you on the margin (up to 0.5 points). I generally don't allow makeup exams unless there is sufficient notice and a very well justified reason.

## Assignments

There will be two midterms and a final worth a combined total of 85 points, and three Problem Sets worth 5 points each. Total points on all these assignments sum to 100.

Assignment	Points	Due Dates
Two Midterms and a Final	25+25+35	September 25 <sup>th</sup> , November 4 <sup>th</sup> , and December 17 <sup>th</sup>
Three Problem Sets	15	September 23 <sup>rd</sup> , October 30 <sup>th</sup> , and December 9 <sup>th</sup>

## Course Outline

Date	Topic of lecture	Readings
26-Aug	<i>Intro to industrial organization and regulatory economics</i>	VHV Ch 1
28-Aug	Part I: Price Theory and Market Structure <i>An introduction to antitrust law and industrial organization economics</i>	VHV Ch 3
2-Sep	<i>Economic theory: static and dynamic efficiency</i>	VHV Ch 4
4-Sep	(cont.)	(skim pp. 90-93 & 95-98)
9-Sep	<i>Oligopoly theory</i>	VHV Ch 5
11-Sep	(cont.)	
16-Sep	(cont.)	(skip pp. 114-116 & 124-126)
18-Sep	(cont.)	(skip pp. 144-149)
23-Sep	Review for Midterm. <b>Problem Set 1 due</b>	
25-Sep	<b>M I D T E R M</b>	
30-Sep	Review Midterm.	
2-Oct	Part II: Entry, Firm Structure, Firm Conduct, and Innovation <i>Measuring market structure, market definition, and entry</i>	VHV Ch 6, (skip pp. 174-190)
7-Oct	(cont)	(skim pp. 195-197)
9-Oct	<i>Horizontal mergers</i>	VHV Ch 7
14-Oct	(cont)	
16-Oct	<i>Vertical mergers</i>	VHV Ch 8, pp. 235-246, 253-260
21-Oct	(cont)	pp. 266-275 & 282-289
23-Oct	<i>Monopolization</i>	VHV Ch 9, pp. 293-305, 332-344
28-Oct	<i>Patents and Copyright</i>	VHV Ch 24, pp. 865-875
30-Oct	(cont.) <b>Problem Set 2 due</b>	Farrell and Shapiro, pp. 1-14
4-Nov	<b>M I D T E R M I I</b>	
6-Nov	Review Midterm.	
11-Nov	<b>Veteran's Day – No Class</b>	
13-Nov	Part III: Beyond IO -- Business Strategy & Economic Regulation <i>The Logic of Strategic Management</i>	Barney pp. 6-12, 15, 17-19, 53-64, 71-76, 83, 87-90, 127-150.
18-Nov	CLASS CANCELLED. Attend Provocative Lecture if possible (5:15p.m.-6:45 in Student Union Theatre)	
20-Nov	<i>Regulation (and Deregulation) of Transport Industries</i>	VHV Ch 17
25-Nov	<i>Environmental regulation</i>	VHV Ch 21
27-Nov	<b>Thanksgiving – No Class</b>	
2-Dec	<i>Environmental regulation (continued)</i>	
4-Dec	<i>The economics of global environmental regulations</i>	Goodstein, Ch 22
9-Dec	Review for Final Exam. <b>Problem Set 3 due</b>	
17-Dec	<b>F I N A L</b> Wednesday, December 17, 12:15p.m.	

## References

- 1.) Jay Barney, 2007. *Gaining and Sustaining Competitive Advantage*, 3<sup>rd</sup> Edition, Prentice Hall.
- 2.) Joseph Farrell and Carl Shapiro, 2004. "Intellectual Property, Competition, & Information Technology"  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=527782](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=527782)
- 3.) Goodstein, Esban S. *Economics and the Environment*, 6<sup>th</sup> edition. John Wiley & Sons, Hoboken, NJ.
- 4.) Varian, Hal. *Intermediate Microeconomics*, 8th edition. W. W. Norton & Company, New York, NY.

## **University Policies**

### **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's [Catalog Policies](http://info.sjsu.edu/static/catalog/policies.html) section at <http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/) at [http://www.sjsu.edu/provost/services/academic\\_calendars/](http://www.sjsu.edu/provost/services/academic_calendars/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and penalties for dropping classes. Information about the latest changes and news is available at the [Advising Hub](http://www.sjsu.edu/advising/) at <http://www.sjsu.edu/advising/>.

### **Academic integrity**

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The [University Academic Integrity Policy S07-2](http://www.sjsu.edu/senate/docs/S07-2.pdf) at <http://www.sjsu.edu/senate/docs/S07-2.pdf> requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](http://www.sjsu.edu/studentconduct/) is available at <http://www.sjsu.edu/studentconduct/>. Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Integrity Policy S07-2 requires approval of instructors.

### **Campus Policy in Compliance with the American Disabilities Act**

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. [Presidential Directive 97-03](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) at [http://www.sjsu.edu/president/docs/directives/PD\\_1997-03.pdf](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) requires that students with disabilities requesting accommodations must register with the [Accessible Education Center](http://www.sjsu.edu/aec) (AEC) at <http://www.sjsu.edu/aec> to establish a record of their disability.