

**V31.0316 – SECTION 001**  
**INDUSTRIAL ORGANIZATION**  
**(AS OF JUNE 3<sup>RD</sup>, 2005)**

**COURSE DESCRIPTION:**

In economics, the field of Industrial Organization (IO) studies imperfect competitive markets, i.e., markets where a firm is able to exercise market power and set a price above marginal cost. By applying microeconomics and game theory, IO examines the strategic interaction and behavior of firms to acquire and maintain market power, and use these theoretical tools to explain observed features in particular markets and industries, such as the determination of prices, product positioning, research and development, advertising, and so forth. The objective of the course is to help you understand:

- a. How markets work (e.g. How does an incumbent firm discourage others to enter its market? Why collusion is possible in some markets and not in others?)
- b. How the firms' actions affect consumer welfare (e.g. Does price discrimination hurt consumers? Are vertical contracts between a manufacturer and a retailer good or bad for consumers?)
- c. Why government intervenes in markets (e.g. Why does the government regulate natural monopolies? What are the effects of patents on investment in R&D?)

**CLASS MEETINGS:**

The classes are held Tuesday and Thursdays from 4:55 PM to 6:10 PM in the Goddard building, room A (located at the basement). The course starts September 6<sup>th</sup> and ends December 13<sup>th</sup>.

**COURSE WEBSITE**

This course will take full advantage of the “Blackboard” web service, available through your NYU Home account. *You are responsible to check Blackboard frequently* for postings and announcements. If you have not checked for several days, click the “View All” tab when looking at announcements, or else you will only see the most recent ones.

**OFFICE HOURS:**

I hold office hours Tuesdays from 6:30 PM to 8:00 PM, and Thursdays from 2:30 PM to 4:00 PM, in 110 Fifth Ave., room XX. No appointment is necessary. Please feel free to drop by my office to ask questions, to make suggestions, or even just to introduce yourself. In addition to my office hours, I can answer questions right after class. You can also contact me by e-mail at [Martin.Paredes@nyu.edu](mailto:Martin.Paredes@nyu.edu).

**GRADER:**

TBA is the grader for this course. Her office hours would be announced later on Blackboard. You can reach her by e-mail at TBA.

**TEXTBOOKS:**

I will draw my lectures from a combination of the following two textbooks:

- o Luis M.B. Cabral, *Introduction to Industrial Organization*, MIT Press, 2000.
- o Lynne Pepall, Daniel Richards & George Norman, *Industrial Organization: Contemporary Theory and Practice*, South Western, 3<sup>rd</sup> Edition, 2005.

Cabral’s book is very accessible and gives you a concise presentation of most of the topics I will cover in lecture. Pepall et al. is a more advanced, more technical textbook than Cabral. Both textbooks are required, but I listed them as optional at the NYU Book Center (18 Washington Place), because they are also available at the Bobst Library. I intend to supplement my lectures by including some material from:

- o John E. Kwoka & Lawrence J. White, *The Antitrust Revolution: Economics, Competition, and Policy*, Oxford University Press, 4<sup>th</sup> Edition, 2003.
- o Massimo Motta, *Competition Policy: Theory & Policy*, Cambridge University Press, 1st Edition, 2004.

**COURSE REQUIREMENTS:**

Your *average score* in the course will be a weighted average of the following:

Problem Sets:	10%
Individual Papers:	10%
Best Midterm Exam:	25%
Worst Midterm Exam:	20%
Final Exam:	35%

Your final letter grade will be determined solely from your average score, based on the Department of Economics' grading practice, as follows:

<b>Grade:</b>	<u>Average score required for each grade:</u>
A, A-	in the top 30% of the class
B+, B, B-	in the top 70% of the class
C+, C, C-	in the top 90% of the class OR 60.0 or greater (either is sufficient)
D+, D	in the top 97% of the class OR 50.0 or greater (either is sufficient)
F	in the bottom 3% of the class AND below 50.0 (both must apply)

I know that grades are important to students, and be assured that I will do everything I can to treat everyone fairly. But your course grade is based solely on the average score, computed from problem sets and exams; no extra credit or additional work is offered, and grades cannot be negotiated. All your grades will be posted on Blackboard.

**EXAMS:**

There will be two midterm exams and a final. Both midterms will be held during class time. The final exam will be held on Thursday, December 15<sup>th</sup>, from 4:00PM to 5:50PM. There will be no make-up exams, that is, nobody will be allowed to take an exam earlier or later. Students who miss an exam will receive a grade of zero in that exam, *unless* they have documented medical reasons. The final exam is comprehensive.

**INDIVIDUAL PAPERS:**

You will submit four (4) short papers during the semester, on topics that I will announce in class and in Blackboard. Only the best three (3) will count for your grade. The topics will range from theoretical (e.g., to explain the difference between SCP and the NEIO) to empirical (e.g., to discuss one of the recent mergers that has occurred). I expect the papers to include an opinion about the respective issue. You will have about two weeks from the moment I assign the topic.

**PROBLEM SETS**

I will assign four (4) problem sets during the semester. Only the best three (3) will count for your grade. They will be posted on Blackboard for downloading and printing, and your completed answers to the problem sets will be usually collected two weeks later during lecture. The specific date will be written on the respective problem set. If you know in advance that you will miss lecture, make prior arrangements with another student to turn in any problem set that is due. Also, do *not* leave problem sets in my mailbox or your grader's mailbox, and do *not* email them. No late problem sets will be accepted.

**INCOMPLETES:**

The Department of Economics does not grant incompletes except in cases of genuine emergencies, which must be documented and approved by the department's Director of Undergraduate Studies. The appeal and documentation must be provided *before* the final exam. Do not assume that you can miss the final exam and make it up later.

## COURSE OUTLINE

### I. Industry Structures

1. Introduction. (Cabral, ch. 1 & 2 | Pepall, ch. 1 & 4)
2. Monopoly, Perfect Competition, and other models with no Strategic Behavior (Cabral, ch. 5 & 6 | Pepall, ch. 2)
3. Review of Game Theory. (Cabral, ch. 4 | Pepall, ch. 9.1, 9.2, 9.3, 11.3, 14.2 & 14.3)
4. Single-Period Oligopoly Models: Cournot, Bertrand and Stackelberg Duopoly Models. (Cabral, ch. 7 | Pepall, ch. 9.4, 9.5, 11.1, 10.1 & 10.2)
5. Collusion and Cartels. (Cabral, ch. 8 | Pepall, ch. 14.1 & all 15)
6. Measures of Market Structure and Market Power (Cabral, ch. 9 | Pepall, ch. 3)

### II. Business Strategies

7. Product Differentiation. (Cabral, ch. 12 | Pepall, ch. 10.3 & 11.2)
8. Price Discrimination. (Cabral, ch. 10 | Pepall, ch. 5, 6 & 8)
9. Horizontal Strategies. (Cabral, ch. 15 | Pepall, ch. 16, 12 & 13)
10. Vertical Strategies. (Cabral, ch. 11 | Pepall, ch. 17, 18 & 19)
11. Research & Development. (Cabral, ch. 16 | Pepall, ch. 22 & 23)
12. Other Topics: Quality as a Decision Variable, Durable Goods, Auction Markets. (Cabral, ch. 10 | Pepall, ch. 7 & 25)

### IMPORTANT DATES TO REMEMBER

Tuesday	September 6 <sup>th</sup>	First lecture
Thursday	October 13 <sup>th</sup>	First Midterm Exam
Tuesday	November 22 <sup>nd</sup>	Second Midterm Exam
Tuesday	December 13 <sup>th</sup>	Last lecture
Thursday	December 15 <sup>th</sup>	Final Exam