

# Economics 468: Industrial Organization and Imperfect Competition

## Professor

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Office Hours: Tuesday 5:30 to 7:00 p.m., Thursday 9:00 to 10:00 a.m., and by appointment.

## Teaching Assistant

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Office Hours: Monday 1:00 to 2:00 p.m, Monday

## Lectures

Tuesdays and Thursdays, 4:00 to 5:15. 6203 Sewell Social Science.

## Overview

This course centers around firm behavior in imperfectly competitive markets, and the implications of this behavior on anti-trust policy. We will cover a sequence of topics on different decisions that firms make (e.g., how to set prices; whether to merge with a competitor; whether to enter a new market; whether to try to dissuade a potential competitor from entering the firm's own market; whether to engage in advertising or research and development). For each topic, I will present models which depict the trade-offs that firms are facing when making these decisions. Then, we will discuss related anti-trust cases, with the goal of illustrating how the theoretical models have been applied in the real world. Before each class, I will post lecture notes containing the theoretical material, along with handouts (taken from *The Antitrust Casebook: Milestones in Economic Regulation*, a textbook written by William Breit and Kenneth Elzinga) which describe the case studies.

Note: Much of the material in this course is adapted from Ken Hendricks' undergraduate IO course.

## **Textbook**

*Industrial Organization: Contemporary Theory and Practice*, Lynne Pepall, Daniel Richards, and George Norman, Thomson, 4th Edition, 2008.

The 4th edition is close enough to the 3rd and 5th editions that you should feel free to purchase these other editions if you find that they have a lower price.

## **Grading**

10% Attendance and Class Participation

20% Problem Sets

30% Midterm: March 10, in class

40% Final: May 11, 12:25PM - 2:25PM

## **Partial Course Outline (Up to the Midterm)**

### 1. Review (Chapters 1, 2, 4).

- Preliminaries
- Review of competitive markets
- Welfare measurement

### 2. Monopoly (Chapters 2, 5)

- Theory
- Antitrust Statutes: Sherman Act, Clayton Act, FTC Act.
- Applications: U.S. vs Alcoa (1945), U.S. vs United Shoe Machinery, U.S. vs E.I. duPont de Nemours & Co.

### 3. Price Discrimination (Chapter 5, 6, 8)

- First, second, and third degree price discrimination
- Two part tariffs
- Bundling and tie-in sales
- Applications: Utah Pie Co. vs Continental Baking Co. (1967), FTC vs Morton Salt (1948), Eastman Kodak vs Image Technical Services.

### 4. Oligopoly in Homogenous Good Markets (Chapters 9, 10)

- Capacity competition: the Cournot model
- Price-markups, measures of market concentration.
- Price competition: the Bertrand model.
- Application: Genesove, D. and W. Mullin, “Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914,” RAND Journal, 1998.

5. Oligopoly in Differentiated Good Markets (Chapter 10)

- Differentiated products
- Location models
- Application: HBS: “Breakfast Cereal Case”

6. Cartels and Price Fixing (Chapter 11, 14, 15)

- Sequential and repeated games
- Creating and enforcing cartels
- Cooperation and repeated play
- Applications: U.S. vs Addyston Pipe and Steel Co., Interstate Circuit, Inc. vs U.S. (1939), E.I. du Pont and Ethyl Corporation v FTC (1984).

7. Horizontal Mergers (Chapter 16).

Note: Depending on how fast we go, this section may follow the midterm

- Theory
- Merger guidelines for horizontal mergers
- Application: FTC vs Coca-Cola Bottling Company.

## **Career Coordination**

If you would like to discuss career options and career skills learned as an economics major, you are encouraged to email the Department Career Coordinator, Elizabeth Foste at [foste@wisc.edu](mailto:foste@wisc.edu).

## **Misconduct Statement**

Academic Integrity is critical to maintaining fair and knowledge based learning at UW Madison. Academic dishonesty is a serious violation: it undermines the bonds of trust and honesty between members of our academic community, degrades the value of your degree and defrauds those who may eventually depend upon your knowledge and integrity.

Examples of academic misconduct include, but are not limited to: cheating on an examination (copying from another student's paper, referring to materials on the exam other than those explicitly permitted, continuing to work on an exam after the time has expired, turning in an exam for regrading after making changes to the exam), copying the homework of someone else, submitting for credit work done by someone else, stealing examinations or course materials, tampering with the grade records or with another student's work, or knowingly and intentionally assisting another student in any of the above. Students are reminded that online sources, including anonymous or unattributed ones like Wikipedia, still need to be cited like any other source; and copying from any source without attribution is considered plagiarism.

The Dept. of Economics will deal with these offenses harshly following UWS14 procedures (<http://students.wisc.edu/saja/misconduct/UWS14.html>):

1. The penalty for misconduct in most cases will be removal from the course and a failing grade.
2. The department will inform the Dean of Students as required and additional sanctions may be applied.
3. The department will keep an internal record of misconduct incidents. This information will be made available to teaching faculty writing recommendation letters and to admission offices of the School of Business and Engineering.

If you think you see incidents of misconduct, you should tell your instructor about them, in which case they will take appropriate action and protect your identity. You could also choose to contact our administrator (Tammy Herbst-Koel [Therbst@wisc.edu](mailto:Therbst@wisc.edu)) and your identity will be kept confidential.

## **Grievance Procedure**

The Department of Economics has developed a grievance procedure through which you may register comments or complaints about a course, an instructor, or a teaching assistant. The Department continues to provide a course evaluation each semester in every class.

If you wish to make anonymous complaints to an instructor or teaching assistant, the appropriate vehicle is the course evaluation. If you have a disagreement with an instructor or a teaching assistant, we strongly encourage you to try to resolve the dispute with him or her directly. The grievance procedure is designed for situations where neither of these channels is appropriate. If you wish to file a grievance, you should go to room 7238 Social Science and request a Course Comment Sheet. When completing the comment sheet, you will need to provide a detailed statement that describes what aspects of the course you find unsatisfactory. You will need to sign the sheet and provide your student identification number, your address, and a phone where you can be reached. The Department plans to investigate comments fully and will respond in writing to complaints.

Your name, address, phone number, and student ID number will not be revealed to the instructor or teaching assistant involved and will be treated as confidential. The Department needs this information, because it may become necessary for a commenting student to have a meeting with the department chair or a nominee to gather additional information. A name and address are necessary for providing a written response.

## Regrade Policy

*Deadline:* One week after exam was returned to class (late requests will not be considered)

*Math Errors:* If there was an arithmetic error in adding up points on your exam, let us know right away, and we will record the correct grade. This doesn't constitute a regrade request. Just write a brief note on the cover sheet and give it to the professor or TA.

*Rationale for Regrade Policy:* The regrade procedure is intended to correct serious errors in grading. It is not intended as a opportunity to argue about each judgment call made by the graders. We agree that graders sometimes take off 1-2 points too many here and there, but we believe that they also give you 1-2 points too many just as often. When we regrade exams, we sometimes disagree with the exact points awarded on each question by the graders, but the total grade usually comes out the same. Our overall experience with regrade requests is that very few of them lead to a change in an exam grade, and an even smaller percentage have any effect on the final grade for the course. However, significant mistakes in grading do occur, if rarely. If you sincerely feel that your exam was unfairly graded, we will look it over carefully. In that case, we reserve the right to regrade the entire exam, which may result in either an increase or a decrease in your grade.

*How to Request a Regrade:*

If you feel that a regrade request is justified, print out the Regrade Request Form, fill it in, and turn it with your exam to your professor/TA as instructed . We always look at all the regrades at once so that we can compare them with the key and with each other. We think it is fairer to do it this way so we will not discuss your regrade in person.

*Some Cautions:* When calculating the final letter grades for the course, we try to give extra consideration to each student who is near a cut-off, to see if there is some justification for bumping the letter grade up a notch. We will keep a record of all regrade requests, and students who have asked for this extra consideration during the course of the semester may not receive additional consideration at the time that final grades are assigned. Unfortunately, there have been several instances in the past where students have modified an answer after the exam had been graded, and then submitted the exam for a regrade. Because of this, we will not consider regrades of exams that corrected with white-out or other obvious signs of after exam correction. A random sample of exams are photocopied before they are returned. Any indication that a regrade has been requested for a modified exam will be considered academic misconduct , and appropriate disciplinary action will be taken.

*What Merits a Regrade:* The following are the usual circumstances that may lead to an increase in points:

- Your answer is really the same as the one on the answer key, but the grader didn't realize

it.

Your explanation should make it clear why you believe your answer is the same.

- Your answer is different from the one provided on the answer key, but your answer is also correct.

Your explanation should make it clear that you have read the answer key, and why you think that your answer is equally good.

*What Doesn't Merit a Regrade:* The following are not valid reasons for regrades:

- *"Most of what I wrote is correct, so I think I deserve more partial credit."*

Partial credit is given equally for all students who write a particular answer, so it would not be fair to give you more points for this without adding points to all students who wrote the same answer.

- *"I wrote so much, and the grader didn't notice that the correct answer is buried somewhere within this long paragraph."*

You will lose points if the correct answer is accompanied by incorrect information or by so much irrelevant information that it gives the impression that you didn't know the answer, and were just writing down everything you could think of on this topic.

*Acknowledgement:* this page was prepared using rules widely applied by professors in all disciplines/universities and wording borrowed extensively from Biology C2006 / F2402 at Columbia University ([http://www.columbia.edu/cu/biology/courses/c2006/regrade\\_requests.html](http://www.columbia.edu/cu/biology/courses/c2006/regrade_requests.html))