

Industrial Organization

Econ 061

Fall 2019

Professor: Marc Remer

Email: mremmer1@swarthmore.edu

Office Hours: Wednesday 2:45-4:15, and by appointment, Kohlberg 203

Course Description

Industrial organization studies how the strategic actions of profit-maximizing firms affect the performance of markets. We will first analyze the behavior of monopolists, moving beyond the basic model of a single-product monopolist that sets one price, to understand such practices as price discrimination, bundling, non-linear pricing, and quantity discounts.

We will then study imperfectly competitive markets, which are characterized by a small number of firms whose individual actions affect market outcomes, such as prices and consumer welfare. In such markets, firms make strategic choices while anticipating the responses of their rivals. This section of the course will analyze how firms set prices or quantity, select product attributes, or choose which markets to enter in the face of competition. We will also analyze potentially anticompetitive behaviors, such as predatory pricing and tacit collusion, and the circumstances in which antitrust authorities intervene in markets.

This course will provide students with a deep understanding of how businesses make decisions and the ability to think critically about market outcomes. Students will also gain facility with modelling and solving economic problems. In doing so, students will gain insight into questions such as:

- Why are airline prices so high?
- Why does Microsoft sell software, such as Excel and Word, in bundles?
- Why do gas stations locate so close to each other?
- Why does the government block some mergers but not others?
- Is Google a monopolist?

Goals for the Course

I expect students to develop a deep understanding of the following:

1. Why firms make certain strategic choices, such as choosing a menu of prices or when to try to deter the entry of a rival.
2. How firms' strategic choices affect markets and consumer welfare.
3. How to work with economic models that are more sophisticated than those studied in Introduction to Economics.
4. How the tools of industrial organization can be applied to help us understand current behavior of real-world businesses.

Course Requirements

Exams

There will be two exams: a mid-term and final. The mid-term and final are worth 30% and 45% of your final grade, respectively.

Exam 1: Tuesday, October 8th

Final Exam: TBD

Paper and Presentation

The purpose of the paper and presentation is to apply the models we learn in class to the real world. Students will form groups of 3 or 4, complete a 5-8 page paper, and make a 10-15 minute presentation. Each group will have the option of discussing (i) the plans for an original business or (ii) the strategic decisions of an existing business. The paper and presentation will describe how one or more of the models covered in class captures the important features of the market in which the business operates, and explain the strategic decisions of the business within the context of the model. The paper and presentation will be worth 25% of your final grade.

Problem Sets

Problem sets will be assigned and posted on Moodle every one to two weeks. The problem sets will *not* be graded, and solutions will be provided a week after the sets have been posted. I

strongly encourage you to work in groups on the problem sets *before* the solutions are posted. This will greatly increase your success on exams.

Other Class and Grading Policies

- We will use single-variable calculus throughout the course. In particular, students should be comfortable taking derivatives of equations and solving for the maximum of a function.
- A make-up mid-term will only be accommodated if arrangements are made ***prior*** to the exam. Appropriate documentation of a circumstance that warrants rescheduling must also be provided.
- Final exams may only be rescheduled in accordance with College policy: <http://www.swarthmore.edu/registrar/final-exam-conflict> .
- Plagiarism and other forms of academic dishonesty will be dealt with in accordance with the College's policies.

Text and Readings

Pepall, Lynne, Dan Richards, and George Norman, *Industrial Organization: Contemporary Theory and Empirical Applications*, Fifth Edition.

A majority of the readings and problem sets will be from the fifth edition of this textbook. Your class notes are the most important reference during this course. You will also receive short readings on current topics to supplement the textbook readings. You should be prepared to discuss the short readings in class.

Accommodations

If you believe you need accommodations for a disability or a chronic medical condition, please contact Student Disability Services (Parrish 113W, 123W) via e-mail at studentdisabilityservices@swarthmore.edu to arrange an appointment to discuss your needs. As appropriate, the office will issue students with documented disabilities or medical conditions a formal Accommodations Letter. Since accommodations require early planning and are not retroactive, please contact Student Disability Services as soon as possible. For details about the accommodations process, visit the Student Disability Services website. You are also welcome to contact me privately to discuss your academic needs. However, all disability-related accommodations must be arranged, in advance, through Student Disability Services.

Course Topics and Tentative Schedule

Week	Date	Topic	Reading
1	Sep. 2 – 6	Introduction Cost Structure and Output Perfect Competition	Ch. 1 Ch. 4.1, Ch. 2
2	Sep. 9 - 13	Basic Monopoly Pricing Market Power and Market Structure	Ch. 2 Ch. 3
3	Sep. 16 – Sep. 20	Price Discrimination: Group Pricing	Ch. 5.1-5.3
4	Sep. 23 - 27	Price Discrimination: Non-linear Pricing Multi-Product Monopoly and Product Differentiation	Ch. 6 Ch. 7.1-7.4
5	Sep. 30 - 27	Multi-Product Monopoly and Product Differentiation Bundling and Tie-in Sales	Ch. 7.1-7.4 Ch. 8
6	Oct. 7 – 11	Exam 1 Introduction to Game Theory	Ch. 9.1-9.3
7	Oct. 14 – 18	Fall Break	
8	Oct. 21 – 25	Intro to Oligopoly, Cournot Competition	Ch. 9.4-9.6
9	Oct. 28 – Nov. 1	Price Competition Price Competition with Product Differentiation	Ch. 10
10	Nov. 4– 8	Dynamic Competition	Ch. 11
11	Nov. 11 - 15	Market Entry and Predatory Pricing	Ch. 12, 13
12	Nov. 18 – 22	Collusion	Ch. 14
13	Nov. 25 – Nov. 29	Merger Policy	Ch. 15
14	Dec. 2 - 6	Advertising Group Presentations	Ch. 19
15	Dec. 11	Group Presentations	