

ECON 4697-001: Industrial Organization

Fall 2015

Professor Yongmin Chen

Office: Econ 112

Class Time and Location: 2:00-3:15 TTH; ECON 119

Office Hours: 10:00-11:30 and 3:30-5:00, Tuesday

Website: <http://spot.colorado.edu/~cheny/>

Industrial organization studies the functioning of markets. It is concerned with business behavior and strategy, as well as their implications for economic efficiency. It also studies the role of public policies in promoting efficiency. The topics that we intend to cover are listed below in the course schedule. The textbook is *Industrial Organization: Contemporary Theory and Empirical Applications* by Pepall, Richards, and Norman, 5th edition. I will indicate the required readings below and in my lectures.

Prerequisites & Grading: Students must have successfully completed ECON 3070, Intermediate Microeconomics, before taking this course. Grades are based on homework (10%), Exam 1 (20%), Exam 2 (30%), and Final exam (40%). You are required to attend all classes. If you must miss a class, please inform me in advance. You are encouraged to form study groups to discuss homework and lecture materials.

The course materials are arranged by topics (the topics are listed below), and each topic is usually covered over several classes. When homework is assigned for a topic, it is usually due at the beginning of the first class for the next topic. You can start working on problems in an assignment before I finish the topic.

A tentative course schedule is attached (the chapter and page numbers refer to those in the textbook). There can be changes to this schedule during the semester, which will be announced in classes. It is your responsibility to update your information about the course according to announcements made in class.

Course Schedule:

1. Introduction

- Readings: Ch. 1

2. Basic Microeconomic Tools

- Readings: Ch. 2
- HW 1. p. 44-45: #2, #3, #4

3. Market Structure and Market Power

- Readings: Ch. 3
- HW 2. p. 62-63: #1, #2, #3, #4

4. Monopoly Pricing

- Price for a single product
- Prices for multiple products
- Group-pricing
- Nonlinear pricing
- Dynamic pricing
- Bundling and Tie-in sales

- Readings: Ch. 5, Ch. 6, Ch. 8
- HW 3. p. 116-117: #1, 2, 3, 4;
- HW 4. p. 140-141: #1, 2, 3, 4, 5; p. 208: #1, 2, 3

5. Game Theory and Oligopoly Markets: Basic Concepts and Solutions

- What is a game?
- Strategy
- Dominant Strategy
- Nash equilibrium
- Cournot Model

- Readings: Ch. 9
- HW 5. p. 239-240: # 1, 3, 4, 6, 7

Exam 1 Tuesday, Sep. 29

6. Price Competition

- The Bertrand Duopoly Model
- Asymmetric Duopoly or multiple firms
- Product Differentiation in a duopoly: the Hotelling model
- Product Differentiation with Many firms: the Circle model and the Spokes model

- Readings: Ch. 10
- HW 6. p. 261-262: # 1, 2, 3, 4.

7. Dynamic Games and Competition

- Entry games and Subgame perfect Nash equilibrium
- The Stackelberg Model
- Sequential price competition
- Oligopoly price discrimination by purchase history

- Readings: Ch. 11;
- HW 7. p. 281-282: # 1, 2, 3, 4,

8. Price-Fixing, Repeated Games, and Collusion

- Price Fixing
- Repeated Bertrand Duopoly

- The number of firms and collusion
- Other factors facilitating or hindering collusion

- Readings: Ch. 14
- HW 8. p. 381-382: # 1, 2, 3, 4;
- HW 9. p. 382: #5, 6, 7, 8

Exam 2 Thursday, November 5

9. Horizontal Mergers

- Merger analysis in the Cournot model
- Merger and Cost savings
- The merged firms as Stackelberg leaders
- Horizontal merger and price competition
- Public policy toward horizontal mergers

- Readings: Ch. 15
- HW 10. p. 418-419: # 1, 2, 3, 4

10. Vertical Mergers

- The foreclosure theory
- Efficiency arguments
- Post-Chicago Approach
- Public policy toward vertical mergers

- Readings: Ch. 16
- HW 11. p. 456: # 1, 2, 3

11. Vertical Price Restraints

- Bilateral Monopoly
- Competitive downstream
- Resale price maintenance: theory and public policy
- Upstream competition

- Readings: Ch. 17
- HW 12. p. 481-482: # 1, 2, 3, 4

12. Exclusionary Contracts

13. Advertising and Information

Final Exam: Thursday, December 17, 1:30-3:00

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If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see [Temporary Injuries guidelines](#) under the Quick Links at the [Disability Services website](#) and discuss your needs with your professor.

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Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, Please make your requests to me within the first two weeks of the semester. See full details at http://www.colorado.edu/policies/fac_relig.html

Classroom Behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the [policies on classroom behavior](#) and [the student code](#).

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