ECO 461-001: Market Structure and Antitrust Policy

Fall 2016

Instructor: Frank Scott
Office: 223-Q B&E
Phone: 257-7643
Email: fscott@uky.edu

Webpage: http://gattonweb.uky.edu/Faculty/scott/index.html

Goals of the Course:

This course is intended to introduce students to industrial organization. We will build upon the theory developed in ECO 201: Principles of Microeconomics and ECO 401: Intermediate Microeconomics so that we are able to analyze the behavior and performance of firms in particular industries. We will seek to understand the size and number of firms in a market, the nature of product differentiation, the conditions of entry and exit, and other relevant economic aspects of industries.

Course Content:

Our aim is to survey the field of industrial organization. We will study the goals of firms and reasons why firms exist in a market economy. We will evaluate markets in terms of the number and size distribution of sellers. We will analyze the determinants of market structure. We will pay particular attention to the behavior and interaction of firms in oligopolistic markets, and will study tacit and overt collusion, price discrimination, vertical integration, advertising and product differentiation, and entry and exit. We will end the course with a study of public policy towards competition and monopoly, paying particular attention to the antitrust laws.

Grading:

Your grade in the course will be determined as follows. There will be a midterm exam and a quasi-comprehensive final exam. The midterm exam will count 25% and the final exam will count 35% toward the determination of your final grade. You will also be asked to write a research paper focusing on one or more of the topical areas in the course outline. That will constitute 30% of your final grade. The remaining 10% of your grade in the course will be determined by your participation in class discussions.

Text:

Reading assignments will come from Luis Cabral's *Introduction to Industrial Organization* (MIT Press, 2000). It is available in both bookstores. I will also assign readings for each topical area taken from *The Wall Street Journal*.

Office Hours:

My office is 223-Q in the Business and Economics Building. Office hours are 3:30-4:30 p.m. on Tuesdays and Thursdays. If these times are inconvenient with you, don't hesitate to make an appointment with me.

ECO 461-001 Fall 2016 Schedule of Topics

Date	Reading	Topic
Aug 25		Introduction
Aug 30	Ch 1	What is Industrial Organization?
Sept 1	Ch 2	Review of Micro: supply and demand, elasticity
Sept 6		Review of Micro: production, costs, economic profit
Sept 8	Ch 3	Theory of the Firm: why do firms exist?
Sept 13		What are the goals of firms? Horizontal and vertical boundaries?
Sept 15	Ch 4	Game Theory: introduction
Sept 20		Simultaneous move games
Sept 22		Sequential move games
Sept 27	Ch 5	Monopoly
Sept 29	Ch 6	Perfect Competition
Oct 4		Working with perfectly competitive model
Oct 6		MIDTERM EXAM
Oct 11	Ch 7	Oligopoly
Oct 13		More oligopoly.
Oct 18		More oligopoly.
Oct 20	Ch 8	Collusion
Oct 25		More collusion.
Oct 27		More collusion.
Nov 1	Ch 9	Market Structure
Nov 3	Ch 10	Price discrimination
Nov 10		More price discrimination
Nov 15	Ch 11	Vertical relations
Nov 17		More vertical relations
Nov 22	Ch 12, 13	Product differentiation and advertising
Nov 29	Ch 14, 15	Entry and exit
Dec 1		More entry and exit
Dec 6	TBA	Antitrust laws
Dec 8	TBA	Antitrust policy; research papers due
Dec 15		FINAL EXAM: 1:00 p.m. B&E 165

Course Outline and Reading Assignments:

I. What is Industrial Organization?

Cabral, Ch. 1

II. Review of Basic Microeconomics

Cabral, Ch. 2

"Corn's Rally Sends Ripples," *WSJ*, 1/18/07: using basic demand and supply analysis. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/398983538?accountid=11836

"Thrill parks try to boost attendance: Some lower their fees to attract crowds," *Lexington Herald-Leader*, 5/27/06: own-price elasticity of demand. http://bit.ly/odthLq

"Amazon Adds That Robotic Touch," *Wall Street Journal*, 3/20/12, p. B1: tradeoff between capital and labor in the production process.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/929078080/13873 A065957AB4D7/74?accountid=11836

"Amazon Robots Get Ready for Christmas," *Wall Street Journal*, 11/20/14, p. B1: could you head up a project to determine the cost-minimizing mix of robots and workers during the peak and off-peak seasons?

http://search.proquest.com.ezproxy.uky.edu/docview/1626121572/92A2AB457DB74662 PQ/67?accountid=11836

See the robots in action at: http://www.youtube.com/watch?v=6KRjuuEVEZs

"Economic Profit vs. Accounting Profit," *Wall Street Journal*, 6/2/03, A17: an esoteric discussion of the concept of profit as treated in ACC 201 vs. ACC 202. If you understand this article you are ready to go to work for Warren Buffett. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/398903478/138739 DD9F16BF6DFC8/40?accountid=11836

"Meet the World's Largest Cargo Ships," *WSJ*, 1/8/13: reasons for economies of scale. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/1266990140/13FB AE3E923680778EB/71?accountid=11836

III. Theory of the Firm

Cabral, Ch. 3

"Sharp's New Plant Reinvents Japan Manufacturing Model," *WSJ*, 11/30/09: there is a clear upside, but can you see a downside for suppliers who locate on site? http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399128309?accountid=11836

"Companies More Prone to Go 'Vertical," *WSJ*, 11/30/09: the make or buy decision. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399140920?accountid=11836

IV. Introduction to Game Theory

Cabral, Ch. 4

Prisoner's dilemma game: http://www.youtube.com/watch?v=zpahL4fu5R8

"Apple-Amazon War Heats Up," *Wall Street Journal*, 7/26/12, B3: head-to-head competition by duopolists.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/1027821635/138B 0140DCF121A6495/84?accountid=11836

"Bigger Proves Far from Better for Canadian Jet Maker," WSJ, 1/9/15: look ahead and reason backward?

http://search.proquest.com.ezproxy.uky.edu/docview/1643323053/8A341AD473946EAPQ/6?accountid=11836

V. Monopoly and Perfect Competition

Cabral, Chs. 5 & 6

"Show Stopper: How Plastic Popped the Cork Monopoly," *WSJ*, 5/1/10. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/220157523?accountid=11836

"Alligator Farming Shows There's a Lot to be Said for Cows," *WSJ*, 8/2/89. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/398158016?accountid=11836

"Economic Woes Take a Bite out of Alligator Ranching," *WSJ*, 11/12/97. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/398605851?accountid=11836

"A Run on Alligators Sends Designers Scrambling," *WSJ*, 3/18/06. http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399057549?accountid=11836

Midterm Exam, Thursday, October 6th, 2:00 p.m.

VI. Oligopoly and Collusion

Cabral, Chs. 7 & 8

"Huge Cruise Ships Prepare for Launch but Face Uncertain Waters," *Wall Street Journal*, 12/04/09, B1: how cruise lines have to make capacity commitments before they know the exact state of demand.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399127167/138B0 3F609C59AFF144/53?accountid=11836

"Diamond Miners Band Together," WSJ, 11/17/09, p. B1: why engagement rings are so expensive.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399135128/13FC48BFB046D468D8/49?accountid=11836

"Potash Cartel Breaks Apart," WSJ, 7/31/13, p. B1: what the heck is potash and are corn prices headed downward?

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/1415576175/13FC 48F423965C114E3/79?accountid=11836 and

http://search.proquest.com/docview/1415577714/13FC48F423965C114E3/81?accountid=11836

VII. Market Structure

Cabral, Ch. 9

U.S. Department of Justice/Federal Trade Commission, *Horizontal Merger Guidelines*: see especially section 5 on market participants, market shares, and market concentration. http://www.justice.gov/atr/public/guidelines/hmg-2010.html

VIII. Price Discrimination

Cabral, Ch. 10

"Seeking Perfect Prices, CEO Tears Up the Rules," WSJ, 3/27/07: the inverse-elasticity pricing rule.

 $\underline{\text{http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399036795?accountid=} \\ 11836$

"More Law Schools Haggle on Scholarships," WSJ, 7/30/12, p. B4: first degree price discrimination as practiced by law schools.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/1030070943/138B 00F13ED129D5D44/87?accountid=11836

IX. Vertical Integration and Vertical Control

Cabral, Ch. 11

"Jet Blues: Boeing Scrambles to Repair Problems with New Plane," *Wall Street Journal*, 12/7/07, p. A1: outsourcing, its advantages, and its disadvantages.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399080708/13873 <u>AD6059625FF222/4?accountid=11836</u> and "Boeing Tightens Its Grip on Dreamliner Production," *Wall Street Journal*, 7/2/09, p. B1;

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399125788/13873 AED4393B29D258/46?accountid=11836

"Burger King Franchisees Can't Have It Their Way," *Wall Street Journal*, 1/21/10, p. B1: franchising as an intermediate vertical strategy between arms' length spot market

transactions and complete vertical integration.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/399142145/13873 AA0B0474F2D72F/49?accountid=11836

X. Product Differentiation and Advertising

Cabral, Chs. 12 & 13

[additional outside readings to be added later]

XI. Entry and Exit

Cabral, Chs. 14 & 15

"Haven't Shareholders Had Enough Chicken?" WSJ, 4/4/01: sequential-move games, the learning curve, and business strategy.

http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/398780117?accountid=11836

"Oversize Expectations for the Airbus 380," *New York Times*, 8/10/14: who was right in their assessment of the superjumbo market in 2001, Boeing or Airbus? http://www.nytimes.com/2014/08/10/business/oversize-expectations-for-the-airbus-a380.html?ref=business&_r=0

"The tri-county pizza war," *Lexington Herald-Leader*, 11/10/05: hit-and-run entry in a contestable market. http://bit.ly/poGliZ

XII. Antitrust and Public Policy

U.S. Department of Justice, *Antitrust Enforcement and the Consumer*, http://www.justice.gov/sites/default/files/atr/legacy/2015/03/06/antitrust-enforconsumer.pdf

U.S. Department of Justice, *Price Fixing, Bid Rigging, and Market Allocation Schemes*, http://www.justice.gov/sites/default/files/atr/legacy/2007/10/24/211578.pdf

Final Exam, Thursday, December 15, 2010, 1:00-3:00 p.m.

Research Paper Guidelines:

A significant part (30%) of your grade in Eco 461 this semester will come from your term research project. I will not impose a specific format for this project to follow, because I want to allow room for you to exercise your own creativity. The choice of a topic is up to you. The only constraint is that you should pick something directly related to the material on the course outline. I will suggest possible topics as we move through the course, but you should start searching for something yourself right away.

You should aim for a report that has 8-10 pages of text (typed, double-spaced, 12 pt. font, normal margins) plus footnotes, a list of references, and any supporting figures, tables, or illustrations. The report should be prepared as a professional business report, following all of the normal rules of professional writing that you have learned in college and before. That also means that you should write efficiently and be careful not to waste your reader's time with verbosity and fluff. You should also carefully cite every resource you use in performing your analysis and composing your report.

The quality of your project will be determined largely by the amount of effort you spend researching your topic. I expect that many of you will rely heavily on internet sources. Because the quality and veracity of information obtained from the internet are sometimes hard to ascertain, I have the following request. Make a copy of every resource that you use in your report. If you use something from a book or a lengthy journal article, copy the cover page and the relevant section that you relied upon. When you turn in your report, attach these copies of your references to your report. I will return the entire package to you after I have graded your project.

As was stressed above, your choice of a topic is important. I strongly encourage you to try your ideas out on me before going too far. In early October, I will ask you to turn in a one-page memorandum to me describing what you have come up with. To get you started, here are some possible topics that have worked for students who have taken this course in prior years.

- Evaluate the vertical chain of production in an industry. What stages of production are characterized by arms-length market transactions and what stages are characterized by more permanent connections between firms?
- Evaluate a merger or acquisition that worked or one that didn't work. What were the synergies or lack thereof? Evaluate the stock market performance of the firms prior to the merger and after the merger.
- Analyze a market where firms have pricing power and practice price discrimination. What methods do firms use to sort customers and price according to willingness to pay?
- Analyze the product space in an industry and how firms locate themselves in product space. How do firms differentiate their products, and what role does advertising play?

- Evaluate an industry for potential entry by our company. Analyze the structure of the industry. Is there room for another efficient-sized competitor? How will existing firms react to a new entrant?
- Take an antitrust case and analyze the public policy issues at the core of the case. This could be a price-fixing case, a monopoly case, an anticompetitive merger, etc.
- Evaluate the nature of rivalry in an oligopolistic industry. What are the ways in which existing firms compete, i.e., do they use price competition, advertising, research and development of new products, etc.? What methods do they use to soften competition with one another?

Your project is due on Thursday, December 8, our last class meeting of the semester.