

COURSE SYLLABUS

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1. Resources

Description from Course Catalog: Economic foundations, history, and recent developments in antitrust policy and economic regulation of monopolies. Emphasis on U.S. policy, with occasional comparisons to the European Union and other countries.

Prerequisites: ECON 002 and a course in calculus (MATH 028 or 050). The calculus prerequisite is essential—students must know how to find derivatives.

CBPA Promises: “Our graduates will have the skills and experiences to thrive in a complex, diverse, and evolving world. They will be (1) Proficient in their fields, (2) Data-driven, strategic problem solvers, (3) Effective communicators, (4) Ethical stewards, and (5) Global and multicultural citizens.” This course addresses all five Promises, but especially Promises (1), (2), and (5).

University “Engaged Citizen” Area of Inquiry: In this course, students will learn to participate effectively in the democratic process primarily through these outcomes:

2. *Establish skills, knowledge, or dispositions that lead them to be active stewards for the common good.*
Should business be regulated for the common good? If so, how? The loudest voices in democratic society often advocate only for themselves—whether businesses or consumers. This course establishes skills in looking beyond the interests of particular groups to the common good. It begins by developing a framework—economic welfare analysis—for evaluating the impact on all of society of business behavior and government regulation. Then this framework is applied throughout the course to problems of imperfect competition and monopoly and to possible government responses.
3. *Critically reflect on the social, economic, or political issues that they will face as citizens.* As citizens, we face important economic issues about whether and how business should be regulated. For example, how should the government respond if companies coordinate their pricing, if companies grow very large, if big companies try to merge, if companies “tie” or bundle their products so that consumers must buy all or none, or if companies charge different prices to different customers? Some industries, such as electric power, are now heavily regulated. Should they be deregulated and allowed to set their own prices? If not, how should government set prices for them? In this course, we reflect on these issues using economic analysis and data. Then we critically examine important legal cases and current policies followed by the Department of Justice and regulatory agencies which are intended to address these issues.

and to a lesser extent through this outcome:

1. *Learn to evaluate the mix of diverse values and interests that influence democratic decision-making.*
Government policies are the outcome of democratic decision-making among people with diverse interests. Even bad policies usually benefit someone. As we study market failure and possible government responses, we use economic theory and examples to determine who wins and who loses, and use economic welfare analysis to evaluate how much they win or lose.

Who should take this course: This course counts as an elective for the following programs:

- Economics major; Quantitative Economics major; and Economics minor
- Law, Politics, and Society major.
- Business Law major; and Law and Business minor.

Class meetings: For spring 2023, CRN 9937 meets Mondays and Wednesdays, from 12:30 to 1:45 in Aliber 103. For the week of Jan 31-Feb 2 only, the course meets in Cline Hall 206.

How to contact instructor:

- Electronic mail: william.boal@drake.edu
- Office: 319 Aliber Hall
- Telephone and voice mail: 271-3129

The quickest way to reach me is by email, which I check continually throughout the day. Please do *not* send messages by Blackboard, which I check infrequently.

Office hours: Office hours are a time when you can get help with homework, ask questions about course material, and discuss your grade or anything related to this course or economics in general. Bring your slideshow handouts. My office hours this semester are Monday, Tuesday, and Wednesday 2 to 4 PM on Zoom. Please make an appointment at least 3 hours in advance on Starfish. Zoom links are posted on Starfish and Blackboard. If these hours are inconvenient due to schedule conflicts, please send email to schedule a special appointment and suggest some alternate times.

Resources to purchase:

- Required: W. Kip Viscusi, Joseph E. Harrington Jr., and David E.M. Sappington, *Economics of Regulation and Antitrust*, 5th edition, Cambridge, Massachusetts: MIT Press, 2018, ISBN 9780262038065. Available for purchase at University Bookstore. Alternatively, it can be rented as an online e-textbook at <https://mitpress.ubliish.com/>. Used copies are OK, provided they are 5th edition.
- Required: *Boal's Econ 120 Slideshow Handouts*, a course packet. Available for purchase at University Bookstore. Alternatively, you may download and print this packet from Blackboard.
- Required: A simple calculator (capable of addition, subtraction, multiplication and division) for exams.
- Recommended: Your favorite introductory microeconomics textbook, for reference.
- Recommended: Your favorite calculus textbook, for reference.
- Recommended: A three-ring binder and highlighter for your course packet.

Online resources:

- Drake email. Course announcements will occasionally be sent to this account, so check it daily. Announcements often get diverted to “Junk” or “Clutter” folders, so check them as well as your inbox.
- Blackboard (drake.blackboard.com). If you have difficulty accessing Blackboard, please contact the Drake ITS HelpDesk at 271-3001.
- Course materials page (wmboal.com/antitrust). Old exams are posted here.

2. Requirements

Course grade: Each exam and homework exercise is graded on a scale from zero to 100. Your overall course score is calculated as a weighted average, using the following formula:

$$\text{SCORE} = 75\% \times \text{Exams} + 10\% \times \text{average Slideshow Quiz score} \\ + 10\% \times \text{average Problem Set score} + 5\% \times \text{Presentation score} - \text{Absences}$$

A SCORE of 97 or above is required for an A+, 93 for an A, 90 for an A-, 87 for a B+, 83 for a B, 80 for a B-, 77 for a C+, 73 for a C, 70 for a C-, 67 for a D+, 63 for a D, and 60 for a D-. SCORES will not be rounded before awarding letter grades. Extra credit work is not available. Exams, problem sets, and quizzes may not be redone for a better grade.

Exams: All exams are closed-book, closed-notes. Simple calculators are permitted, *but graphing calculators, calculators with alphabetical keyboards, wireless devices and mobile phones are not permitted*. If you do not bring a simple calculator, you must take the exam without a calculator. The final exam counts double and is required—students who do not take the final will not pass the course.

Slideshow quizzes: These online multiple-choice quizzes cover the slideshows presented in class and are accessed from Blackboard. They consist of 5-10 multiple-choice questions and are due the day after the topic is covered in class. You can take each slideshow quiz up to three times until the due date, but the questions will change. Blackboard records your *average* score, so don't retake a quiz unless you are confident that you can improve.

Presentation: Students will make short presentations of a recent antitrust case. Detailed instructions will be posted on Blackboard.

Policy on late work: Early submissions are welcome but *late submissions are not accepted*. If your computer fails, please use a computer in Cowles Library or some other device to complete assignments. Computer problems are *not* an acceptable excuse for late assignments. Students expecting to go on an athletic trip when an assignment is due should submit that assignment before leaving.

Policy on absences: Attendance is taken at every class. Students may miss up to three classes for any reason without penalty (except when exams are given). Thereafter, one point will be deducted from the course SCORE for each absence. Athletic team trips, documented by an official schedule sheet, will not be counted as absences.

Policy on rescheduling exams: If your own medical emergency, or a serious illness or death in your family requires you to miss an exam, you may be given a makeup exam. However, you must inform me of the emergency before the exam by email, and soon afterward submit a written explanation (including date of absence and documentation if possible).

Certain other circumstances are acceptable reasons for rescheduling an exam. These include religious observance, medical appointment, interview trip, and athletic team trip. Because these circumstances can be predicted, you must send me an email request to reschedule, with an explanation, at least one week before the date of the exam. *Unacceptable* reasons include family vacation, ride leaving early for break, early plane flight, overslept, etc.

Policy on grade corrections: Accurate grading is important. If you find an error, please let me know as soon as possible. The deadline for regrading homework, problem sets, or midterm exams is the day of the final exam.

Policy on computers and phones in class: Computers, tablets, and phones must be turned off during class unless I specifically announce otherwise.

Disability accommodation: Any student who has a disability that substantially limits their ability to perform in this course under normal circumstances should contact [Student Disability Services](#), 271-1835, to request accommodation. Any request must be received from Student Disability Services at least one week before the necessary accommodation. All relevant information will be kept strictly confidential. If your accommodation requires extra time for exams, you should contact me at least a week before each exam to schedule an alternative time and place.

How to succeed in this course:

- Read the textbook before class.
- Study with pencil and paper. Economics is inherently mathematical. Math is difficult to absorb without trying it yourself. As you study your text or notes, try to reproduce any numerical examples and mathematical derivations while covering the page. Everything will make more sense if you work it through yourself.
- Further prepare for exams by working old exams, posted at wmboal.com/antitrust. Don't look at the answer key until after you have solved each problem, or you will become overconfident.
- If you are doing all this but not doing as well as you would like, please ask me for help. Talk to me after class, send email to william.boal@drake.edu, or visit my office hours. I am eager to help!

Policy on academic integrity: The CBPA’s Academic Integrity Policy (www.drake.edu/cbpa/about/cbpapolicies) applies to this course. The consequences of violating this policy vary, depending on my evaluation of the severity of the dishonesty. A violation (such as cheating, plagiarism, or fabrication) can result in a grade of zero on the test or assignment, an F for the course grade, or even expulsion from the University. Please read the policy and ask for clarification if necessary.

3. Schedule

Textbook should be read before class, but skip any mathematical examples—I will present simpler ones in class. Dates below in [brackets] are tentative. If bad weather or an epidemic closes campus, most likely we will have class online using Blackboard Collaborate.

Calculus Review (to be completed before course starts)

Big ideas: Rates of change are fundamental to modern economic theory. The economic term “marginal” corresponds to the mathematical term “derivative.”

Famous quote: «Quiconque connaît la notation algébrique, lit d'un clin-d'oeil dans une équation le résultat auquel on parvient péniblement par des règles de fausse position, dans l'arithmétique de Banque.» [“Anyone who understands algebraic notation, reads at a glance in an equation results reached arithmetically only with great labor and pains.”]
--A. A. Cournot, *Researches on Mathematical Principles of the Theory of Wealth* (1838)

- Read chapter 1 of online lecture notes, entitled “Review of Basic Calculus” (wmboal.com/imicro).
- Optionally, if your calculus is rusty, view “AP Calculus AB” videos on derivatives at <https://www.khanacademy.org/math/ap-calculus-ab/ab-differentiation-1-new>.
- Optionally, review chapters on techniques of differentiation in your favorite calculus textbook.
- Slideshow quiz due **Jan 24**.

Part 1: Review of Perfect Competition

Big ideas: Perfect competition is economically efficient because it ensures marginal-cost pricing.

Famous quote: “Every individual ... neither intends to promote the public interest, nor knows how much he is promoting it ... He intends only his own gain, and he is in this ... led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for society that it was no part of it. By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote it.”
--Adam Smith, *The Wealth of Nations* (1776)

A. Demand and supply [Jan 24, 26]

- Read Viscusi, Harrington, and Sappington chapter 1.
- Bring the following slideshow handouts to class: *Government regulation of business: introduction. Demand. Supply. Equilibrium. Elasticities. The price elasticity of demand. Price elasticity and revenue. The price elasticity of supply.*
- Slideshow quiz due Jan 27. (Do the quiz *after* the slideshows are covered in class.)
- Problem set due Jan 31.

B. Competitive firms [Jan 31]

- Bring the following slideshow handouts to class: *Cost curves. Profit maximization. Cost curves in the short run. Profit maximization in the short run. Short-run market equilibrium. Long-run market equilibrium.*
- Slideshow quiz due Feb 1.
- Problem set due Feb 2.

C. Welfare analysis [Feb 2, 7]

- Bring the following slideshow handouts to class: *Willingness-to-pay and consumer surplus. Marginal cost and producer surplus. Economic efficiency and welfare analysis. Perfect competition. Efficiency of perfectly competitive markets. Welfare analysis of price controls and quotas.*
- Slideshow quiz due Feb 8.
- No problem set. Instead, study for exam.

First exam [Feb 9]

- Prepare by reviewing slideshow handouts and studying old exams posted online (wmboal.com/antitrust).
- You may use a simple calculator, but graphing calculators, calculators with alphabetical keyboards, wireless devices and mobile phones are NOT permitted
- Exam seating is assigned, so please check the projector screen before you sit down.

Part 2: Antitrust Theory

Big ideas: Monopoly, oligopoly and collusive markets are economically inefficient because they push price above marginal cost and reduce the quantity traded. But concentrated markets are not necessarily inefficient.

Famous quote: “People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.”

--Adam Smith, *The Wealth of Nations* (1776)

A. Monopoly theory and antitrust [Feb 14, 16]

- Read Viscusi, Harrington, and Sappington chapter 3.
- Bring the following slideshow handouts to class: *Monopoly and barriers to entry. The monopolist's marginal revenue. Monopoly pricing. Welfare analysis of monopoly. The structure-conduct-performance paradigm. Antitrust statutes and their enforcement.*
- Slideshow quiz due Feb 17.
- Problem set due Feb 21.

B. Theories of oligopoly and collusion [Feb 21, 23]

- Read Viscusi, Harrington, and Sappington chapter 4.
- Bring the following slideshow handouts to class: *Oligopoly. Basic game theory. Cournot duopoly. Cournot oligopoly. Bertrand duopoly. Joint profit maximization (collusion). Cartels in the real world. Cheating in a cartel. Antitrust law on price-fixing.*
- Slideshow quiz due Feb 24.
- Problem set due Feb 28.

C. Theories of market structure [Feb 28, Mar 2]

- Read Viscusi, Harrington, and Sappington chapter 5.
- Bring the following slideshow handouts to class: *Measures of industry concentration. Concentration and profits. Scale economies. Entry costs and equilibrium entry. Entry barriers and contestable markets. Preventing entry.*
- Slideshow quiz due Mar 3.
- No problem set. Instead, study for exam.

Second exam [Mar 7]

- Prepare by reviewing slideshow handouts and studying old exams posted online (wmboal.com/antitrust).
- Bring a straightedge to this exam—a ruler or an extra pencil.
- You may use a simple calculator, but graphing calculators, calculators with alphabetical keyboards, wireless devices and mobile phones are NOT permitted.
- Exam seating is assigned, so please check the projector screen before you sit down.

Part 3: Antitrust Policy

Big ideas: Horizontal and vertical mergers have very different effects on prices and economic efficiency, and so are treated differently by the courts. Whether other business practices harm economic efficiency often depends on context, so courts use the “rule of reason.”

Famous quote: “Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer.”
--Adam Smith, *The Wealth of Nations* (1776).

Another famous quote: “The successful competitor, having been urged to compete, must not be turned upon when he wins.”
-- Judge Learned Hand, *United States v. Aluminum Co. of America*, 148 F 2nd 416 (2d Cir. 1945).

A. Policy on horizontal mergers [Mar 9, 21]

- Read Viscusi, Harrington, and Sappington chapter 6.
- Skim 2010 Horizontal Merger Guidelines (at www.justice.gov/atr/public/merger-enforcement.html).
- Bring the following slideshow handouts to class: *Mergers. Motivations for horizontal mergers. Historic horizontal merger cases. Horizontal merger enforcement today. Changes in concentration. Upward pricing pressure. Other ways to evaluate mergers. Conglomerate mergers.*
- Enjoy Spring Break, March 13-17!
- Slideshow quiz due Mar 22.
- Problem set due Mar 23.

B. Policy on vertical mergers and vertical restraints [Mar 23, 28]

- Read Viscusi, Harrington, and Sappington chapter 7.
- Skim 2020 Vertical Merger Guidelines (at www.justice.gov/atr/public/merger-enforcement.html).
- Bring the following slideshow handouts to class: *Vertical mergers and transaction costs. Successive monopolies and double marginalization. Foreclosure for monopoly extension. Other foreclosure. Law and policy on vertical mergers. Vertical restraints. Tying.*
- Slideshow quiz due Mar 29.
- Problem set due Mar 30.

C. Policy on monopolization and price discrimination [Mar 30, Apr 4]

- Read Viscusi, Harrington, and Sappington chapter 8.
- Bring the following slideshow handouts to class: *Law on monopolization. Historic monopolization cases. Predatory pricing. Reputation models of predatory pricing. Law and policy on predatory pricing. Refusal to deal. Monopoly price discrimination. Market-segmenting price discrimination. Law and policy on price discrimination.*
- Slideshow quiz due Apr 5.
- Problem set due Apr 6.

D. The new economy and global antitrust [Apr 6, 11]

- Read Viscusi, Harrington, and Sappington chapter 9.
- Bring the following slideshow handouts to class: *Network effects. Microsoft cases. Two-sided platforms. Google cases. Competition policy in the European Union. Competition policy in China.*
- Slideshow quiz due April 12.
- No problem set. Instead, study for exam.

Third exam [Apr 13]

- Prepare by reviewing slideshow handouts and studying old exams posted online (wmboal.com/antitrust).
- You may use a simple calculator, but graphing calculators, calculators with alphabetical keyboards, wireless devices and mobile phones are NOT permitted
- Exam seating is assigned, so please check the projector screen before you sit down.

Part 4: Economic Regulation

Big ideas: When monopoly is inevitable, regulatory agencies often set prices. To maximize economic efficiency, they should set prices equal to marginal cost, but sometimes they can't or won't.

Famous quote: "I can't tell one plane from the other. To me, they're all just marginal costs with wings."
--Alfred Kahn

A. Introduction to economic regulation [Apr 18, 20]

- Read Viscusi, Harrington, and Sappington chapter 10, and chapter 12 (through page 526).
- Bring the following slideshow handouts to class: *Brief history of regulation in the U.S. Theories of regulation. Economic theories of regulation. Natural monopoly. Pricing with economies of scale. Multipart tariffs. Multiproduct firms. Ramsey pricing.*
- Slideshow quiz due Apr 21.
- Problem set due Apr 25.

B. Regulation of electric power [Apr 25, 27]

- Read Viscusi, Harrington, and Sappington chapter 12 (pages 531-end), chapter 13, and chapter 17 (through page 683).
- Bring the following slideshow handouts to class: *Traditional rate-of-return regulation. Incentive regulation. Common costs and joint costs. Peak-load pricing in theory. Peak-load pricing in practice: electric power. Markets for wholesale electric power. The California energy crisis of 2000-01. Market power in wholesale power markets.*
- Slideshow quiz due Apr 28.
- Problem set due May 2.

C. Regulation and deregulation of transportation [May 2, 4]

- Read Viscusi, Harrington, and Sappington chapters 15 (through page 616) and 16.
- Bring the following slideshow handouts to class: *Effects of price regulation in competitive markets. Indirect effects of regulation. Measuring the effects of regulation. Regulation of railroads and trucking. Effects of deregulating railroads and trucking. Regulation of airlines. Effects of deregulating airlines.*
- Slideshow quiz due May 5.
- No problem set. Instead, study for final exam.

Final Exam

The University Registrar (www.drake.edu/registrar) has scheduled the final exam for this course on **Tuesday, May 9 from noon to 1:50 PM**. The content of the final exam is comprehensive and includes questions from all parts of the course.

- Prepare by reviewing the hour exams you have already taken and old final exams posted online (wmbol.com/antitrust).
- Bring a straightedge to this exam. You may use a simple calculator, but graphing calculators, calculators with alphabetical keyboards, wireless devices and mobile phones are NOT permitted.
- Exam seating is assigned, so please check the projector screen before you sit down.

[end of syllabus]