

Economics 471 (L01) (Industrial Organization)

Instructor:	Andrew H. Wilkins	Lecture Location:	SB 142
Email:	ahwilkin@ucalgary.ca	Lecture Days/Time:	TR 17:00–18:15
Office:	SS 338		
Office Hours:	Following each lecture and by appointment		(Fall 2019)

Course Description:

“Rents—how to spot them, grab them, hang onto them. That's what strategy should be.”¹ The objective of this course is to introduce the theory of industrial organization. Industrial organization is concerned with the functioning of imperfectly competitive markets and the behaviour of firms in these markets. The course is organized around market power: its exercise, creation, enhancement, maintenance, and effects.

Course Outcomes:

Students who successfully complete this course will:

- Know and understand the sources of market power and the methodologies used to assess whether firms have market power, including market definition.
- Know the effect on efficiency of the exercise of market power and the normative foundations for the control of its exercise and prohibitions on conduct that creates, enhances, or maintains market power.
- Know and understand the requirements for price discrimination, the incentive for price discrimination, its effects and recognize it in practice.
- Know and understand the effects of competitor supply and durability on the exercise of market power by a dominant firm, including the Coase conjecture and conduct that mitigates its effect on market power.
- Know and be able to apply the following game theoretic solution concepts: dominant strategies, iterated elimination of dominated strategies, rationalizability, Nash equilibrium, subgame perfect Nash equilibrium, Bayesian Nash equilibrium, and Perfect Bayesian equilibrium.
- Demonstrate familiarity with classic oligopoly models and the factors responsible for the exercise of market power in oligopoly.
- Differentiate between noncredible threats and credible threats and the role of a strategic move in converting noncredible threats to credible threats.
- Recognize and differentiate between barriers to entry and profitable entry deterrence; be able to assess the effect of firm conduct on entry deterrence.
- Differentiate between the unilateral and coordinated exercise of market power and determine the likelihood of the coordinated exercise of market power.
- Analyse conduct for its effect on market power, differentiating between the exercise of market power and conduct that creates, enhances, and maintains market power.

¹ From “An Economist Takes Tea with a Management Guru.” *The Economist*. December 21, 1991, 107–9.

- Develop a basic familiarity with antitrust laws, enforcement, and institutions; regulation of pipelines, electricity, and telecom in Canada.

Course Outline:

The course will follow the following topics:

1. Foundations
 - a. Introduction and Competitive Markets
 - b. Welfare Economics of Market Power
2. Monopoly
 - a. Market Power and Dominant Firms
 - b. Non-Linear Pricing and Price Discrimination
3. Oligopoly
 - a. Game Theory
 - b. Oligopoly
 - c. Collusion and Cartels
4. Strategic Behaviour
 - a. Entry Deterrence
 - b. Predation
5. Transaction Costs, Vertical Control and Profit-Maximization (Time Permitting)
 - a. Economics of Coordinating Economic Activities
 - b. Firm Incentives and Profit Maximization

Prerequisite:

ECON 357

Required Textbook(s):

Church, J., and R. Ware. 2000. *Industrial Organization: A Strategic Approach*. San Francisco: McGraw-Hill. Available online at https://works.bepress.com/jeffrey_church/23/.

Church, J. 2004. *The Impact of Vertical and Conglomerate Mergers on Competition Brussels: European Commission*. Available online at <http://bookshop.europa.eu/en/the-impact-of-vertical-andconglomerate-mergers-on-competition-pbKD7105158/>

Recommended Textbook(s):

Eichenwald, K. 2000. *The Informant*. New York: Broadway Books. (Recommended)

Required and recommended readings will be drawn from the textbook, from material on reserve, and from the periodical collection in the library.

Books on Reserve:

Belleflamme, P., and M. Peitz. 2010. *Industrial Organization: Markets and Strategies*. Cambridge: Cambridge University Press.

Biggar, D., and M. Hesamzadeh. 2014. *The Economics of Electricity Markets*. Chichester: Wiley-IEEE Press.

Blair, R., and D. Sokol, eds. 2015. *The Oxford Handbook of International Antitrust Economics*. Oxford: Oxford University Press, Volumes 1 and 2.

Blair, R., and D. Sokol, eds. 2017. *The Cambridge Handbook of Antitrust, Intellectual Property, and High Tech*. Cambridge: Cambridge University Press.

- Carleton, D., and J. Perloff. 2005. *Modern Industrial Organization*. 4th ed. Boston: Addison Wesley.
- Enrich, D. 2017. *The Spider Network: The Wild Story of a Math Genius, a Gang of Backstabbing Bankers, and One of the Greatest Scams in Financial History*. New York: Custom House.
- Evans, D., and R. Schmalensee. 2016. *Matchmakers: The New Economics of Multisided Platforms*. Boston: Harvard Business Review Press.
- Ezrachi, A., and M. Stucke. 2016. *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy*. Harvard University Press.
- Gibbons, R. and J. Roberts. 2013. *The Handbook of Organizational Economics*. Princeton: Princeton University Press.
- Hovenkamp, H. 2015. *Federal Antitrust Policy*. 5th Edition. St. Paul, Min.: West Academic.
- Katz, M. and H. Rosen. 1998. *Microeconomics*. 3rd ed. San Francisco: McGraw-Hill.
- Kwoka, J. E., Jr., and L. J. White, ed. 2014. *The Antitrust Revolution*. 6th ed. Oxford: Oxford: University Press.
- Landsburg, S. 1993. *The Armchair Economist*. Toronto: Maxwell MacMillan.
- Menard, C., and E. Bertrand. 2016. *The Elgar Companion to Ronald H. Coase*. Cheltenham: Edward Elgar.
- Niels, G, H. Jenkins, and J. Kavanagh. 2016. *Economics for Competition Lawyers*. 2nd Edition. Oxford: Oxford University Press.
- Waldman, D., and E. Jensen. 2013. *Industrial Organization: Theory and Practice*. 4th ed. New York: Pearson.

Desire2Learn:

This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <http://d2l.ucalgary.ca> through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. These e-mails go to your University of Calgary e-mail addresses only.

Grade Determination and Final Examination Details:

ASSIGNMENTS	30%
MIDTERM EXAM	20%
FINAL EXAM	50%
	<hr/>
	100%

The official grading system will be used. See <http://www.ucalgary.ca/pubs/calendar/current/f-1-1.html>.

Students must receive a passing grade on the final exam to pass the course.

If a student's letter grade on the final exam exceeds their midterm letter grade, the weight of the midterm is transferred to the final exam. The student must have written the midterm or provided supporting documentation for the absence such as a medical note or statutory declaration.

As per the Writing Across the Curriculum Statement in the Calendar, writing and grading thereof will be a factor in the evaluation of student work. See <https://www.ucalgary.ca/pubs/calendar/current/e-2.html>.

Any student work which remains undistributed after the last day of classes will be available to students through the instructor's office during the instructor's office hours.

The final examination will be comprehensive, scheduled by the Registrar, held in a classroom, and last 2 hours. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam www.ucalgary.ca/registrar/exams/deferred_final. Under no circumstance will this be accommodated by the Department.

Tests and exams WILL NOT involve multiple choice questions.

Programmable calculators, cellphones, textbooks, course notes, and other electronic devices will not be allowed during the writing of tests or final examinations. Students are reminded that simply being able to access their cellphone during an exam is academic misconduct.

The exact date for the in-class midterm will be announced at least one week in advance.

THERE WILL BE NO MAKEUP OR DEFERRED QUIZZES/TESTS/EXAMS under any circumstances, nor may the quizzes/tests/exams be written early. Students unable to write the quizzes/tests/exams because of documented illness, family emergency, religious observance, or university-sanctioned event will have the weight shifted to the final examination; otherwise a grade of zero will be assigned.

Reappraisal of Grades and Intellectual Honesty:

For reappraisal of graded term work, see Calendar I.2

<http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

For reappraisal of final grade, see Calendar I.3

<http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

Statement of Intellectual Dishonesty, see Calendar K.4

<http://www.ucalgary.ca/pubs/calendar/current/k-4.html>

Plagiarism and Other Academic Misconduct, see Calendar K.5

<http://www.ucalgary.ca/pubs/calendar/current/k-5.html>

Academic Accommodations:

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Freedom of Information and Protection of Privacy (FOIP) Act:

Personal information is collected in accordance with FOIP. Assignments can only be returned to the student and will be accessible only to authorized faculty and staff. For more information, see <http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf> and http://www.ucalgary.ca/legalservices/files/legalservices/faq-faculty_0.pdf.

Internet and Electronic Communication Device information:

The use of cell phones for any purpose in class is prohibited. Computers and tablets may be used for note taking only unless otherwise authorized by the instructor.

Copyright Legislation:

See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf. Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Important Dates:

Please check: <http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>

Student Organizations:

Faculty of Arts Students' Association (F.A.S.A.):

Economics Department Representative

Office: SS 803, E-mail: econrep@fasaucalgary.ca and Web: www.fasaucalgary.ca.

Society of Undergraduates in Economics:

<https://www.ucalgarysue.com/>.

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students to succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career events such as Industry Night and information sessions, mentorship programs, and social events for members. They invite you to join by contacting SUE at societyofundergradsineconomics@gmail.com.

Faculty of Arts Program Advising and Student Information Resources:

- Have a question, but not sure where to start? The Arts Students' Centre is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580, or email them at artsads@ucalgary.ca. You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate>, which has detailed information on common academic concerns, including program planning and advice.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.

Student Support and Resources:

- See <https://www.ucalgary.ca/registrar/registration/course-outlines> for information on campus mental health resources, the Student Ombuds' Office, Student Success Centre, Safewalk, and Emergency Evacuation and Assembly.
- Online writing resources are available at <https://ucalgary.ca/student-services/student-success/writing-support>.

Notes:

1. Students are responsible for all assigned material, e.g., supplementary material posted on D2L, regardless of whether or not the material was covered in class.