

# Economics 471 (L01) Industrial Organization

Instructor: Aidan Hollis Email: ahollis@ucalgary.ca Lecture Location: ZOOM Delivery Lecture Days/Time: TR 9:30-10:45am

Office: ZOOM Delivery Office Hours: W9:30-10:30 (Fall 2020) https://ucalgary.zoom.us/my/8278950793

# **Course Description:**

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 Learning 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.
- Develop a basic familiarity with antitrust laws, enforcement, and institutions.
- Develop a basic familiarity with patents and innovation economics.

# **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. Innovation and Patents (Time Permitting)

## Prerequisites/corequisites:

ECON357 and ECON359

## **Required Textbook(s):**

Church, J., and R. Ware. 2000. Industrial Organization: A Strategic Approach. San Francisco: McGrawHill. Available online at https://works.bepress.com/jeffrey\_church/23/.

## **Online Delivery:**

This course will be delivered online. Students are expected to be able to participate online in accordance with this Course Outline. Lectures, assignments, office hours, exams, readings and other course material, etc. all require online access and this access is the responsibility of the student.

In order to remotely participate in online courses, students will need to have: computer with a current and updated operating system (macOS or Windows will work with all university-supported online learning technologies), a current and updated web browser installed – the latest versions of Firefox, Safari, Chrome or Edge will help to avoid compatibility issues, secure and reliable internet, microphone / headphones, webcam (optional), scanner (or camera to scan your work).

## Desire2Learn:

This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <a href="http://d2l.ucalgary.ca">http://d2l.ucalgary.ca</a> 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.

## Lectures:

Lectures will be delivered online at the Registrar scheduled times and delivered using ZOOM. The lectures will be recorded and subsequently posted to D2L.

#### Grade Determination and Final Examination Details:

ASSIGNMENTS	25%
CLASS PARTICIPATION	10%
TERM PAPER PROPOSAL	5%
TERM PAPER OUTLINE	5%
DRAFT REVIEW	5%
PRESENTATION	10%
TERM PAPER	40%
	100%

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

A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

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. <u>See https://www.ucalgary.ca/pubs/calendar/current/e-2.html</u>.

All other course components will also be accessed, submitted, and returned through D2L.

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

#### ACADEMIC MISCONDUCT

Academic Misconduct refers to student behavior that compromises proper assessment of students' academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

Student committing academic misconduct during the final exam will not receive a passing grade on the course.

For information on the Student Academic Misconduct Policy and Procedure please visit:

https://ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf

## https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf

Additional information is available on the Academic Integrity Website at <u>https://ucalgary.ca/student-services/student-success/learning/academic-integrity</u>.

### 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 <a href="http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf">http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf</a>.

# 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 <a href="http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf">http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf</a> and <a href="http://www.ucalgary.ca/legalservices/files/legalservices/faq-faculty\_0.pdf">http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf</a> and <a href="http://www.ucalgary.ca/legalservices/files/legalservices/faq-faculty\_0.pdf">http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf</a> and <a href="http://www.ucalgary.ca/legalservices/files/legalservices/faq-faculty\_0.pdf">http://www.ucalgary.ca/legalservices/files/legalservices/faq-students.pdf</a> and

# **Copyright Legislation:**

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

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

## **Recording of Lectures:**

Recording of lectures is prohibited, except for audio recordings authorized as an accommodation by SAS or an audio recording for individual private study and only with the written permission of the instructor. Any unauthorized electronic or mechanical recording of lectures, their transcription, copying, or distribution, constitutes academic misconduct. See <a href="https://www.ucalgary.ca/pubs/calendar/current/e-6.html">https://www.ucalgary.ca/pubs/calendar/current/e-6.html</a>.

## **Important Dates:**

Please check: <u>http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html</u>. **Student Organizations:** Faculty of Arts Students' Association (F.A.S.A.): Economics Department Representative

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! Call them at 403-220-3580, or email them at
  <u>artsads@ucalgary.ca</u>. You can also visit the Faculty of Arts website at
  <u>http://arts.ucalgary.ca/undergraduate</u>, 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].

# Student Support and Resources:

- See <u>https://www.ucalgary.ca/registrar/registration/course-outlines</u> 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 <a href="https://ucalgary.ca/student-services/s

## 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.

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