



Faculty of Science Course Syllabus
Department of Economics
Econ3319.03: Industrial Organization
Fall, 2023

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Instructor: Ruth Forsdyke, Ruth.Forsdyke@Dal.ca, (902) 494-6990

Lectures: Tues, Thurs (1:05 pm - 2:25 pm), LSC Common Area, room C220

Office Hours (Professor):

Monday: 11:30 am - 12:20 pm (online Collaborate, access via Brightspace)

Friday: 11:30 am to 12:20 pm (real, room C12 Maxwell House)

Teaching Assistant: Maria, Largo Lievano, mr357817@dal.ca

TA Office Hours: TBA

Course Delivery: In person, lectures not recorded

Part A: Course Information

1_Course Description (Calendar)

The course provides an overview of the organization of production. Market structure, firm conduct, and performance affect each other in complex ways; the degree of horizontal and vertical integration affects the ability to set prices, for example. Governments regulate firms in order to reduce socially harmful anticompetitive behaviour. NOTES: Approved with Canadian Studies.

2_Course Prerequisites

ECON 2200.03 or 2220.03 with minimum grade of C.

3_Course Description (Longer)

This is an introductory course in industrial organization, which is concerned broadly with the analysis of production systems and how well they perform. We focus on firms and in particular on **corporations**. Corporations are often very *large* in terms of market shares with **imperfectly competitive** market structures including monopoly, dominant firms, and oligopoly. They often produce multiple products and product varieties in conglomerate market structures and may produce multiple products along vertically integrated supply chains. Also, due to mergers and acquisitions, divestment, market entry and exit, and policy, market structures change over time.

Under concentrated market structures, firms may behave **anti-competitively** for example by: raising prices, **bundling**, **predatory pricing** to drive smaller rivals out of the market; **price discrimination**; **collusion** to pre-agree to market shares, **exclusive territories**, and **vertical restraints**. Large firm size also causes management challenges due to owners and managers not being the same people causing **principle agent problems** and inefficiency within firms. The performance of imperfectly competitive markets may be improved via **competition (antitrust) policy**, patent and copyright laws, and fraudulent advertising policies.

Methods of analysis include the structure, conduct, performance (SCP) framework, microeconomics, and case studies from a variety of sectors including computers, telecommunications, fossil fuels, electricity, pharmaceuticals, banks, media products, and food. **Mathematical tools** employed include algebra, graphs, basic calculus, and game theory. These are developed slowly providing an opportunity to learn in an applied context while developing appreciation for the uses of mathematical models in economics.

Throughout, we discuss the **unsustainability of our industrial systems** for example due to fossil fuels providing about 80% of energy inputs, the largest source of greenhouse gas emissions, which, in turn, are causing catastrophic damages to essential natural production systems.

4_ Course Objectives/Learning Outcomes

- Develop a useful narrative about industrial organization based on historical and current events.
- Understand some industrial organization (IO) theories and models, empirical support for these, and model limitations.
- Use models to make predictions about market structure, conduct and performance.
- Explain rationale for competition policy and be able to give some examples.
- Develop analytical skills while practicing applying microeconomic theory to IO problems.
- Relate newspaper, magazine articles, and videos, on IO topics to course content.
- State reasons that the industrial system is currently unsustainable due to environmental damages.
- Improve skills in critical thinking.
- Develop time management and organization skills.
- Develop genuine confidence in your ability to learn.

“Education is a process of living, and not a preparation for future living” -- John Dewey.

“The human mind is our fundamental resource” John F. Kennedy

5_ Course Materials

Required Textbook: Cabral, Luis M.B. (2017). *Introduction to Industrial Organization*, 2nd Ed., Cambridge Mass., MIT Press. The 1st edition may also be used but has older case studies. The textbook can be purchased online at:

<https://mitpress.ubliish.com/book/introduction-industrial-organization-0#purchase>

or

<https://bookstore.dal.ca/CourseSearch/?course%5b%5d=SUB,FALL20,ECON,ECON3319,&>

- Other course materials available on *Brightspace* include slides, videos, and links to internet media.

Library Reserves (supplementary material):

- Carlton, D.W. and Perloff, J. M. (2005) *Modern Industrial Organization*, 4th Ed., Pearson, Addison-Wesley, U.S.A.

- Waldman, D. E. and Jensen E.J. (2013) *Industrial Organization: Theory and Practice*, 4th Ed., Pearson, Boston.

- Heilbroner, Robert and Singer Aaron (1994) *The Economic Transformation of America: 1600 to Present*, 4th Ed., Harcourt Brace & Co.

- Galbraith, J.K. (1971) *The New Industrial State*, 2nd Ed., Houghton-Mifflin, Boston.
- Chandler, A.D. (1977) *The Visible Hand: The Managerial Revolution in American Business*, Belknap Press, Cambridge Mass.
- McQuaig, L. (2004) *It's the Crude, Dude: War, Big Oil and the Fight for the Planet*, Doubleday, Canada.

6 Course Assessment

There are two course assessment schemes as indicated below. Both will automatically be calculated and your grade will be the higher of the two.

Component	Weight (% of final grade)	Date, Details
Midterm	25	Tues Oct. 17th in class
Final Exam	45	Scheduled by Registrar
Assignments	30	Best 3 out of 4 (2 prior to midterm and two after)

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (<50)
A- (80-84)	B- (70-72)	C- (55-59)	

7 Details on Course Work and Assessment

Lectures and Questions:

You are encouraged to ask questions during class, or/ and on the discussion board, and during office hours. If your question is likely to be of general interest to the class, we recommend that you ask during class or on the Brightspace Discussion board. However, you may **email** your questions to the TAs or professor particularly if the question is of a private nature or is not likely to be of general interest to the class.

Lecture Slides/ Covid Videos:

The lecture slides will be posted after class. I will also post videos that were produced during the Covid lockdown, the "covid videos". Note that although these may be helpful if you need to miss classes due to illness, or to review material previously covered in class, they should be regarded as highly imperfect substitutes for real in-class lectures and may differ in coverage or emphasis. Also, any information in the videos regarding dates (ex. assignment due dates, test dates) or statements like "next week we will cover" should be disregarded as they applied to the time period of the Covid Lockdowns.

Midterm and Final Exam: The midterm is held in class and the final exam is scheduled by the Registrar and both are on campus.

Assignments: Your grade will be the average of the best 3 out of 4 assignments. One of the best ways to learn is to teach and you may wish to work together on assignments. However, *you must hand in an individual assignment, which must be written in your own words.* If you worked in a group, please write down other group members, names on top right hand side of assignment. Submit via Brightspace

Assessments>>Assignments. TAs may mark all or a selection of submitted questions as time permits.

Practice Problem Sets: These are provided for practice and are NOT to be submitted for a grade. Answers are posted, so, if you get stuck, you may peak at answers to help to see how to proceed. However, do your best to try the problem on your own before peaking at the answers as you will likely learn more!

Discussion Board: Participate in the Brightspace discussion forums by means such as asking a question, making a comment, relating class content to real world events, or responding to posts made by the professor, TAs, or other students, and/or posting links to useful information. You may either use your name

or participate anonymously (meaning that other class members will not know who you are, but the professor and teaching assistants will know your name).

Office Hours: These are a mixture of online and real office hours (see above). If you are unable to make these hours and have a question, please email the professor or TA to set up an appointment. Dependent upon Covid conditions, office hours may be moved entirely Online.

Virtual Rooms (Collaborate): These are used for office hours and meetings and allow students to interact via video, audio, and chat. A room will be open all the time for meetings and can be accessed via the "Content" tab in Brightspace.

8_Course Topics and Schedule (tentative as time permits)

	Lecture Topic	Textbook Readings (2 nd ed. & online edition, regular font, 1 st ed. italics)
	L1) Introduction Structure, Conduct, Performance, Framework	Ch. 1, Ch. 1
	L2) Technology and Market Structure	Ch. 3 (Cost function, pg. 41 – 43), Predatory Pricing, pg. 317-20, Ch. 2
	L3) Math Tools	Calculus note, Section 3.2
	L4 a) Monopoly Structure, Conduct, b) Performance and Regulation	Ch. 5 (focus on 5.3, 5.4, 5.5, 5.6, 4.4 pg 81-85), Ch. 5
	L5) Conditions for Profitability of the Large Business Enterprise.	Ch. 3 (3.3, 3.4, 3.5), Ch. 3
	L6) Dominant Firms a) fixed capacity structure, conduct, and performance. b) limit pricing, variable capacity.	Ch. 5 (5.3, 104 -107), Ch. 5 (pg. 70-72)
	L7) Perfect Competition & Competitive Selection	Ch. 4 (4.1, 4.2, pg. 85), Ch. 6 (6.1, 6.2)
	L8) Monopolistic Competition and Product Variety	Ch. 4 (4.3, 4.4), Ch. 6 (6.4, 6.5)
	L9 a) Oligopoly (Cournot model)	Ch. 8, Ch. 7
	L9 b) Oligopoly (Von Stackelberg)	
	L9 c) Oligopoly (Bertrand model)	
	L10) Collusion and Price Wars	Ch. 9, Ch. 8, Case Study, Lysine, Fair fight in the Marketplace (PBS) at https://www.youtube.com/watch?v=DPXTsPS-hyw
	L11) Measuring Market Concentration and Power	Ch. 10 (pg. 251 – 253), Ch. 9
	L12) Price Discrimination	Ch. 6, Ch. 12 (Bundling, pg. 314-317), Ch. 10, Ch. 15, pg. 273-274
	L13) Vertical Relations	Ch. 13
	L14) Monopsony	Note provided
	L15) Corporate Governance	Note provided

- Ch. 7 “Games and Strategies” (**Ch. 4, 1st ed.**) will be integrated into other topics, particularly oligopoly.
- environmental unsustainability of current production systems will be integrated throughout.

9_How to Learn in this Course

- attend all lectures (unless sick), pay attention, and take notes. Taking notes may help you to pay attention and to learn the material due to forcing you to try to understand the content in order to write it down concisely. Audio reinforcement may help you to learn.
- read through course syllabus to get an overview of what lies ahead.
- manage your time -- make a schedule, record due dates in your planner and set aside times to study.
- avoid distractions such as social media while studying.
- After logging into Brightspace, check **Announcements** for new information.
- do all assignments
- read and work through the textbook readings for overview and to understand concepts in lecture slides. Use the lectures and slides to guide your focus. Slides and posted "Covid Videos" may help you to review points from the lectures and go over any points you had difficulty with during class. You may benefit from taking notes that organize the material in a manner that makes sense to you and relates the material to prior knowledge. Charts, flow charts and mind maps may be helpful. Work through the mathematical problems and write down and/or talk through the method used. Make summaries to identify key points.
- watch videos if you need to miss lectures due to illness and find out what you missed in class by asking other students and/or visiting the professor's office hours.
- do the practice problems on your own. If you get stuck, peak at the solution and then try on your own again. Repeat as necessary. Note down where you went wrong in your initial attempt.
- relate course concepts to other things you know.
- ask questions while studying, in class, in office hours and on discussion boards.
- start studying early for tests. Do review sheet problems.
- explain concepts to yourself and other students. Test yourself.
- If you are having trouble focussing your study, please visit office hours for advice.

10_Course Policies

1) Students are responsible for **CHECKING THE FINAL EXAM SCHEDULE PRIOR to booking any flights**. There are **NO EARLY EXAMS under ANY circumstances**.

2) **Late or Missed Midterms or Assignments:** If you miss a midterm or assignment due to illness, as soon as possible, please inform the professor via email and include a signed **Student Declaration of Absence (DOA) form**. Be sure to read the form carefully. This form may only be used twice for this course. These are available at: https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html

3) In the case of a **missed midterm**, other evaluation components will be given higher weight. There is no make-up midterm.

4) If the **final exam is missed due to illness**, please inform the professor by email as soon as possible to arrange to write an alternative exam.

5) **Late assignments** receive a maximum penalty of 5% per day, unless the student submits a DOA form and will not be accepted after answers have been posted on the Brightspace.

6) **Class slides** should be regarded as complements as opposed to substitutes for reading the textbook. When you read the textbook, with pencil and paper, work through the examples.

7) Students are responsible for **checking Brightspace "Announcements" regularly**. Important information to guide learning as well as occasional corrections to assignments or test review questions are posted there.

8) **Online Access:** When connecting to online resources, you are responsible for observing any applicable laws of the country you are connecting from.

9) You are responsible for establishing whether you have access to all course material as soon as the term begins and before the ADD/DROP date. If you do not have access to certain material, inform the instructor as soon as possible. Alternative access methods are not guaranteed.

10) Students are expected to conduct themselves with academic integrity and should familiarize themselves with the University academic integrity policy at the link in Part B below. If you have questions, please ask the professor.

Part B: University Policies and Statements

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St or elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus_life/communities/indigenous.html

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: <https://www.dal.ca/about-dal/internationalization.html>

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus_life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html>)

Conduct in the Classroom – Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture

of diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <http://www.dal.ca/cultureofrespect.html>

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at:

https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.