



Faculty of Science Course Syllabus
Department of Economics
Econ3319.03: Industrial Organization
Fall, 2022

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

Lectures: Tues, Thurs (10:05 - 11:25 am), LSC Common Area, room C220

Office Hours (Professor):

Tuesday: 4:05 - 4:50 (real, room C12 Maxwell House)

Friday: 11 am to noon (online via Brightspace Collaborate)

Teaching Assistants: TBA

TA Office Hours: TBA

Course Delivery: In person, videos will be posted.

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 80% of the energy inputs which are heavily damaging the 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
	Scheme 1	Scheme 2	
Midterm	21	23	Thurs Oct. 13th in class
Final Exam	44	46	Scheduled by Registrar
Assignments	30	31	Best 3 out of 4 (2 prior to midterm and two after)
Participation	5	0	- based on in-class and/or discussion board participation. A rubric will be provided.

* In the advent of a CUPE strike during which teaching assistants will not be available to grade, the marking scheme will remain the same but Assignments may be up to 100% electronically graded.

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 prefer 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.

Videos:

The videos were prepared during the online covid year and provide the main points of the lectures which should enable you to keep up with course material if you need to miss classes due to illness. Although, videos should be quite close to in-class material, due to content updating and the high time costs of modifying videos, in cases in which videos differ from in class lectures, I will let you know.

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.

Practice Problem Sets: These are provided for practice and are NOT handed in. **Answers** are posted so you can check your answers and if you get stuck, you may peak at answers to help you to see how to proceed. However, do your best to try the problem on your own before peaking at the answers.

Participation (optional 5%):

Participation marks may be gained due to "real" in-class participation or virtually via Discussion board forums such as "Ask a Question or Make a Comment" and "Industrial Organization Issues in the News"). These are accessed via the "Discussions" tab in Brightspace. You may participate in the class discussion using your real name or anonymously (meaning that other students will not know who you are but the professor and teaching assistants will know your name). A rubric will be provided.

Office Hours: There 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 TAs 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.

8_Course Topics and Schedule (tentative as time permits)

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

- read through course syllabus to get an overview of what lies ahead.
- make a schedule, write down due dates in your planner and set aside times to study.
- Manage your time and avoid distractions such as social media while studying.
- After logging into Brightspace, check **Announcements** for new information.
- do all assignments
- attend lectures and work through slides. Take notes organizing the material in a manner that makes sense to you and relates 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. Videos may also help you to review lectures or go over elements that you had difficulty with during class.

- read the text book chapters for overview and to understand concepts in lecture slides.
- 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 office hours and on discussion boards.
- start studying early for tests. Do review sheet problems.
- explain concepts to yourself and students (orally and using words). Test yourself.
- If you are having trouble focussing your study, please visit office hours for advice.

10_Course Policies

Late or Missed Midterms or Assignments: If you miss a midterm or assignment due to illness, as soon as possible, inform the professor via email and submit a **Declaration of Absence (DOA)** form **through Brightspace**. 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

In the case of a ***missed midterm or more than one missed assignment***, other evaluation components will be given higher weight. There is no make-up midterm.

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.

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***.

Class slides are a complement, not a substitute for reading the textbook. It is recommended that you read assigned readings prior to the lecture.

Students are responsible for ***checking Brightspace “Announcements” regularly***. Important information to guide your learning as well as occasional corrections to assignments or test review questions is posted there.

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

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.

Students are responsible for ***checking the final exam schedule prior to booking any flights***.

Part B: University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of 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.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus_life/academic-support/accessibility.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.

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

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

Statement: <http://www.dal.ca/cultureofrespect.html>

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 (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus_life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=117&chapterid=-1&topicgroupid=31821&loaduserredits=False>

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

Part C: Student Resources and Support

Advising

General Advising https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: <https://www.dal.ca/faculty/science/current-students/undergrad-students/degree-planning.html>

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: <https://libraries.dal.ca/>

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Fair Dealing Guidelines <https://libraries.dal.ca/services/copyright-office/fair-dealing.html>

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness.html

Student Advocacy: <https://dsu.ca/dsas>

Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html

Safety

Biosafety: <https://www.dal.ca/dept/safety/programs-services/biosafety.html>

Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>

Radiation Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety.html>

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>

Dalhousie COVID-19 information and updates: <https://www.dal.ca/covid-19-information-and-updates.html>