



Faculty of Science Course Syllabus
Department of Economics
Econ3319.03: Industrial Organization
Fall, 2020

Instructor: Ruth Forsdyke, Ruth.Forsdyke@Dal.ca

Lecture Slides, Videos, Brightspace Questions: Posted on Brightspace on Mon., Wed. am.

Office Hours (Professor): Brightspace Collaborate (video/ chat meet), hours to be decided.

Teaching Assistants: Kuda Sakutukwa (kd629066@dal.ca), Tapas Banik (tp422099@dal.ca)

TA Office Hours: Brightspace Collaborate (video/ chat meet), hours to be decided.

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.

6_Course Assessment

Component	Weight (% of final grade)	Date
<i>Midterm</i>	20%	<i>Fri. Oct. 16th (time TBA)</i>
<i>Final exam</i>	40%	<i>Scheduled by Registrar</i>
<i>Assignments</i>	22.5 % (best 3 out of 4)	<i>see Topics & Schedule table</i>
<i>Lecture Brightspace Quizzes</i>	12.5 %	<i>throughout course</i>
<i>Discussion Board Participation</i>	5%	<i>throughout course</i>

* See Course Policies (below) for information on test conflicts and writing in alternative time zones.

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:

Lecture slides and videos will be posted on Monday and Wednesday morning. When you log into Brightspace, first visit announcements for new information. The videos may vary in length and may not

cover all topics in the slides. To ask questions, use **Discussions** and/or visit the professor and/or TA during **Virtual Office Hours**. If your question is likely to be of general interest to the class, we prefer that you use Discussions. However, you may **email** your questions to the TAs or professor particularly if the question is not of general interest to the class.

Midterm and Final Exam: contain a mixture of Brightspace Quiz questions (ex. multiple choice, matching, ordering, fill in the blank) and written components (ex. graphing, microeconomic problems, short explanations and/or short essay).

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 **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 peek 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.

Lecture Brightspace Quizzes (12.5%): Brightspace quiz questions are provided to allow you to test your knowledge as the course proceeds. You will get **3 attempts** and find out which ones you got correct after each attempt. Your grade on the quiz will be the average of all attempts.

Discussion Board Participation and Study Groups(5%):

Participate in Discussion board forums such as "**Ask a Question or Make a Comment**" and "**Environmental Issues in the News**") and class exercises. These are accessed via the "Discussions" tab in Brightspace. Some discussions will be graded and other marks will be based on participation only. These include both class forums and group forums.

Class Discussions: All students, TAs, and the professor, may participate in the class forum. 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).

Study Group Discussions: Students will enrol in study groups. You may choose to work with students you know. If you do not pick a group, the professor will put you in a group. In study group discussions, anonymous comments are not allowed but only other group members, the professor and teaching assistants will be able to see your comments. Some basic assignment and test questions will relate to your topic.

Virtual Office Hours: These will be held by both the Professor and the teaching assistant and will be run using Collaborate Virtual Rooms assessable via Brightspace. These will be scheduled via a **Doodle Poll** link that will be sent via "Announcements". If you are unable to make these hours and have a question, please email the professor or TAs to set up an appointment.

Virtual Rooms (Collaborate): These are used for office hours and meetings and allow students to interact via video, audio, and chat. You may arrange to meet with study group members via audio, video and chat to study together virtually. A room will be open all the time for meetings.

8_Course Topics and Schedule (tentative as time permits)

Week:	Lecture Topic	Textbook Readings (2 nd ed. & online edition, regular font, 1 st ed. <i>italics</i>)
1 (Sept 8 - 11)	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>
2 (Sept 14 - 18)	L3) Math Tools	Calculus note, Section 3.2
3 (Sept 21 - 25)	L4 a) Monopoly Structure, Conduct	Ch. 5 (focus on 5.3, 5.4, 5.5, 5.6, 4.4 pg 81-85), <i>Ch. 5</i>
	L4 b) Monopoly Performance, Regulation	
	L5 –Conditions for Profitability of the Large Business Enterprise. Assn 1 due (Fri. Sept. 25th, 11:59 pm)	Ch. 3 (3.3, 3.4, 3.5), <i>Ch. 3</i>
4 (Sept 28 - Oct 2)	L6 a) Dominant Firms (fixed capacity structure, conduct, and performance)	Ch. 5 (5.3, 104 -107), <i>Ch. 5(pg. 70-72)</i>
	L6 b) Dominant Firms (limit pricing, variable capacity)	
5 (Oct 5 - 9)	L7 – Perfect Competition & Competitive Selection	Ch. 4 (4.1, 4.2, pg. 85), <i>Ch. 6 (6.1, 6.2)</i>
	L8 a) Monopolistic Competition and Product Variety	Ch. 4 (4.3, 4.4), <i>Ch. 6 (6.4, 6.5)</i>
	Assn 2 due (Fri. Oct 9th, 11:59 pm)	
6 (Oct 12 - 16)	L8 b) Monopolistic Competition and Product Variety	(L1 to L7)(L8, basic definitions at beginning only)
	Midterm (Fri. Oct. 16th, 11:59 pm)	
7 (Oct 19 - 23)	L9 a) Oligopoly (Overview, Cournot model)	Ch. 8, <i>Ch. 7</i>
	L9 b) Oligopoly (Cournot cont'd & Von Stackelberg)	
8 (Oct 26 - 30)	L9 c) Oligopoly (Bertrand)	Ch. 9, <i>Ch. 8</i>
	L10 a) Collusion and Price Wars	
	Assn 3 due (Fri. Oct. 30, 11:59 pm)	
9 (Nov 2 - 6)	L10 b) Collusion and Price Wars	
	L10 c) Collusion and Price Wars	
10 (Nov 9 - 13)	Study Break	
11 (Nov 16 - 20)	L11) Measuring Market Concentration and Power	Ch. 10 (pg. 251 – 253), <i>Ch. 9</i>
	L12a) – Price Discrimination	Ch. 6, Ch. 12 (Bundling, pg. 314-317), <i>Ch. 10, Ch. 15, pg. 273-274</i>
	Assn 4 due (Fri. Nov. 20, 11:59 pm)	
12 (Nov 23 - 27)	L13 a) Vertical Relations	Ch. 13
	L13 b) Vertical Relations	
13 (Nov 30 -Dec 4)	L14 - Monopsony	Note provided
	L15 – Corporate Governance	Note provided
14 (Dec 7 - 8)	Review	

- 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
- watch videos 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.
- read the text book chapters for overview and to understand concepts in lecture slides.
- do Brightspace Quiz problems.
- 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

Exam Conflicts & Time Zones: In cases of *conflicts on midterms and finals and time zones* which make it difficult to write at the same time as the other students, please email the professor to arrange to write an alternative test at an alternative time on the same day.

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 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 obtain a doctor's note or medical certificate containing a clearly written doctor or nurse's name, contact phone number and evidence of 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.

11_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 the office (Rm 3037, McCain Building), e-mail (elders@dal.ca) or leave message (902-494-6803).

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

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

https://www.dal.ca/academics/important_dates.html

University Grading Practices

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

Missed or Late Academic Requirements due to Student Absence (policy)

https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html

12_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/academic-advising.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 and Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness/services-support/student-health-and-wellness.html

Student Advocacy: <https://www.dsu.ca/services/community-student-services/student-advocacy-service>

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>