



Faculty of Science Course Syllabus
Department of Economics
Econ3319.03: Industrial Organization
Fall 2018

Instructor: Ruth Forsdyke, Ruth.Forsdyke@Dal.ca, room C12, Maxwell House, (902) 494-6990

Lectures: M,W (11:35 to 12:55) LSC Common Area (room C208)

Office Hours (Professor): Mon. & Wed. 3:30 – 4:30 or by appointment.

TA: Cameron Sawyer, Cameron.Sawyer@dal.ca, Office Hours, Tuesday, 9 – 10 am, location TBA.

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

All Economics courses, unless stated otherwise, have a minimum grade requirement of C for their prerequisite courses.

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 are performing. Our focus will be on firms and in particular on **corporations**.

Corporations are often very *large* in terms of their market shares. Market structures are often **imperfectly competitive** including monopoly, dominant firms, and oligopoly with firms often producing multiple products and product varieties in conglomerate market structures and/or occupying multiple product niches along vertically integrated supply chains. Also, due to mergers and acquisitions and divestments, market structures change over time. For example, in March of 2014, **Loblaw**, the biggest Canadian supermarket chain acquired **Shoppers Drug Mart**, the largest Canadian pharmacy for \$12.5 billion. This reduced the number of firms operating in Canada’s retail pharmaceutical sector.

Under concentrated market structures, firms may behave **anti-competitively** with respect to pricing, product positioning, advertising and so on. At the most basic level, a lack of competition may enable firms to price above marginal cost, in the way of a monopoly. For example, **Loblaw - Shopper’s Drug Mart**, might now charge higher prices for drugs, potentially harming the sick and elderly.

Other potentially anticompetitive strategies to be examined include: **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 government intervention under **competition (antitrust) policy**. For example, **Canada’s Competition Bureau** might have prevented Loblaw’s acquisition of Shopper’s Drugmart if its analysis had suggested that drug prices would rise

significantly. Other important areas of regulation include patent and copyright laws and the regulation of fraudulent advertising.

Our methods of analysis include case studies from a variety of sectors such as steel, computers, telecommunications, fossil fuels, electricity, pharmaceuticals, banks, media products and food. Methods of analysis include the structure, conduct, performance (SCP) framework, and microeconomics. The **mathematical tools employed** include **algebra, graphs, and basic calculus**. The tools of calculus are developed slowly such that this course provides an opportunity to learn in an applied context while also developing an appreciation for the uses of mathematical models in economics.

Throughout the course, we'll discuss the unsustainability of our industrial systems due fossil fuels providing 80% of the energy inputs causing heavy damages to the natural production systems.

4_Course Objectives/Learning Outcomes

- Develop a useful narrative about the topic of industrial organization based on historical and current events.
- Understand some industrial organization (IO) theories and models, the 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 and magazine articles on IO topics to course content.
- Learn some tools and acquire a factual basis to solve problems similar but not identical to lecture material.
- Understand structure, conduct and performance approach.
- Understand that the current industrial system is unsustainable due to environmental damages.
- Improve skills in critical thinking.
- 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.

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.

Electronic Resources:

- *Brightspace* (slides, notes on specific topics, media, academic journal articles)

- Church, J. and Ware, R. (Jan. 2000) *Industrial Organization: A Strategic Approach*, Irwin. McGraw-Hill, Boston. http://works.bepress.com/cgi/viewcontent.cgi?article=1022&context=jeffrey_church

Discussion Forums on Brightspace: (see “discussions” tab on top left of web page).

- 1) **Question and Answer Forum:** (please ask questions or initiate discussions here). If another student asks a question and you know the answer, please help them out.
- 2) **IO in the News:** The professor, TA and Students will post current events here. Students are encouraged to post current events and provide comments.

6_Course Assessment

| Component | Weight (% of final grade) | Date |
|----------------------|---------------------------|---|
| <i>Midterm</i> | 22.5% | <i>Wed. Oct. 24th (in class)</i> |
| <i>Final exam</i> | 45% | <i>(Scheduled by Registrar)</i> |
| <i>Assignments</i> | 27.5 % (best 3 out of 4) | |
| <i>Participation</i> | 5% | |

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:

Practice Problem Sets:

Textbook practice problem sets are provided for practice and are NOT to be handed in. Answers to these are posted so that you can check your answers.

Assignments:

There will be four hand-in assignments. Your assignment score will be based on the best 3 out of 4 assignments. One of the best ways to learn is to teach and you will benefit from helping each other. Hence, you are encouraged to work in groups. However, *each student must hand in an individual assignment, which must be written out in your own words to indicate that you understand what you are doing*. If you worked in a group, write down other group members, names on top right hand side of assignment.

Participation:

The participation grade will be determined by a combination of attendance and engagement in the course.

8_Course Policies

In cases in which a student misses a midterm, final exam, or other assignment due to illness, a doctor’s note must be provided. In this case, other assessment components will be given more weight. Doctor’s notes must contain a clearly written doctor or nurse’s name with a contact phone number and evidence that the student was ill.

Late assignments receive a maximum penalty of 5% per day, unless the student provides a doctor’s note. Assignments will not be accepted after answers have been posted on the web.

Class slides are posted after lectures and are not a substitute for reading the textbook.

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

9_Course Content

(tentative as time permits)

- 1) Introduction. What is industrial organization (IO)? Why is it important? How will we study it? (ch. 1)
- 2) Structure, Conduct, Performance (SCP) Framework & technological change and market structure (ch. 1, ch. 2 to review micro concepts in IO context).
- 3) Conditions for Profitability of the Large Business Enterprise (ch. 3).
- 4) Perfect Monopoly (ch. 5).
- 5) Dominant Firms (ch. 5).
- 6) Perfect Competition & Competitive Selection (ch. 4).
- 7) Monopolistic Competition and Product Variety (ch. 4)
- 8) Games and Strategies (ch. 7).
- 9) Spatial Models of Product Differentiation (ch. 14)
- 10) Oligopoly (ch. 8)
- 11) Collusion (ch. 9)
- 12) Market concentration and market power: theory and measurement (ch. 10)
- 13) Price discrimination (ch. 6)
- 14) Vertical relations between firms (ch. 13)
- 15) Corporate Governance (Case Study, note will be provided)
- 16) Monopsony and intermediaries (Note will be provided)

- Other topics that will be integrated with above material as time permits include:

- Patents and Technological Change (ch. 1, Ch. 15)
- optimal durability (ch.15, Carlton and Perloff)
- advertising (persuasive vs. informative) (ch. 14)
- environmental unsustainability of current production systems.
- entry costs and market structure

10_How to Learn in this Course

- attend lectures and take careful notes.
- do practice problems (make a serious effort *before* looking at solutions).
- read text book before lecture.
- ask questions during class or office hours and while you are studying. The TA and I like to provide one-on-one help, please visit us!!!
- do all assignments.
- study for tests (do review sheet problems).
- work with other students to share ideas and information (Use Brightspace to ask and answer questions message board).
- read newspaper articles on IO events.
- manage your time.
- If you are having trouble focussing your study, see us for advice. We want to help!

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

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>

Aboriginal Student Centre: https://www.dal.ca/campus_life/communities/native.html

Black 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 Services: https://www.dal.ca/campus_life/health-and-wellness/health-services/services.html

Counselling: https://www.dal.ca/campus_life/health-and-wellness/counselling.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

Research Lab Safety https://www.dal.ca/content/dam/dalhousie/pdf/dept/safety/lab_policy_manual_2007.pdf

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>