

CARLETON UNIVERSITY
Department of Economics

ECON 2020 G
Intermediate Microeconomics I: Producers and Market Structure

Instructor: [Professor K.G. Armstrong](#)

2022 Winter

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Lectures: Tuesdays, 14:35–17:25, online [†]

~~Telephone: 613-520-2600 x 8696~~

Tutorials: Thursdays, 13:05–14:25, online

Office: [Loeb Building \(LA\) D-899](#)

Office Hours: Tuesdays, 16:00–17:00 or by appointment [‡]

Prerequisites

As stated in the [2021–22 Undergraduate Calendar](#), the prerequisites for this course are “ECON 1001 or ECON 1000 or FYSM 1003 with a grade of C- or higher; ECON 1401 / MATH 1401 (with a grade of C- or higher) and ECON 1402 / MATH 1402, or equivalent department-approved MATH course pair. May be taken concurrently with ECON 1402 / MATH 1402.” Please note that *all* of these prerequisites *must* be satisfied in order to remain registered in the course. Students who believe they have taken a similar background course or courses from another university must provide appropriate documentation to the [Department of Economics Undergraduate Administrator](#).

Qualification requirements for higher-level courses: A grade of C- or higher is required to qualify for ECON 2030; a grade of C+ or higher is required to qualify for ECON 4020. DEF(erred final grade) status at the end of this course precludes (continued) registration in any other course for which the former is a prerequisite.

Both in-class examinations specified in the “Evaluation” section below will be e-proctored using CoMaS. Students are required to install and test the CoMaS application *at least three workdays in advance* of the first exam (i.e., no later than Thursday, February 3) in order to ensure that everything will function as expected during both exams. See pages 3 and 4 of the SES document titled [Automated e-Proctoring Guide for Students](#) for the detailed requirements (including a Webcam) that *must* be met by every student. See carleton.ca/ses/e-proctoring for more information.

Preclusions

As stated in the 2021–22 Undergraduate Calendar, this course “[p]recludes additional credit for ECON 2001, ECON 2002 (no longer offered), ECON 2003 (no longer offered), and ECON 2009.”

Objectives

The aim of this course is to provide an analytical treatment of the theory of the firm: elements of production and cost; input allocation, pricing, and firm behaviour under perfectly and imperfectly competitive market structures; the role of information; game theory and public policy, including basic competition policy. Elementary mathematical tools (including calculus, high-school algebra, and graphical analysis) will be employed in the exposition of these topics.

[†] A video lecture of approximately 2½ hours (or 160 minutes) in length will be pre-recorded and released to the course on Brightspace two-and-a-half-or-so hours short of four days in advance of the end of the next scheduled lecture—i.e., Fridays at about 17:00.

[‡] Office hours will be conducted using BigBlueButton (BBB) via Brightspace as an open question-and-answer session followed by the opportunity to ask questions individually using “break-out” rooms. Individual or group appointments may be set up for other times by e-mail and will also be realized using BBB via Brightspace.

Tutorials

The main purpose of the weekly tutorials is to give students guidance in working through particular problems and applications of microeconomic theory covered in the lectures and in the textbook and thereby enhance their preparation for the mid-term and final examinations. Depending on the number of hours of support made available to the instructor, tutorials may be led by a teaching assistant assigned by the Department.

Required Text

MyLab Economics with Pearson eText—Instant Access—for *Microeconomics: Theory and Applications with Calculus*, 5th edition, by [Jeffrey M. Perloff](#), 2020 (ISBN-13: 978-0-13-489963-3); available from [The Bookstore](#).

Evaluation

Each student's grade in the course will be calculated as a weighted average of scores on twelve, formative (MyLab Economics) assessments (*two* in the first week and one per the second through fourth and sixth through tenth weeks at 2% each plus one per the last two weeks at 5% each for a total of 30%), a mid-term examination (22%), and an in-class final examination (48%).

Students will be expected come to each lecture having read carefully the relevant parts of the required text as stated in the "Course Schedule and Reading List" below and/or communicated in advance via [Brightspace](#). Perloff (2020) Chapters 6, 7, and 8 (Module I), 11, 12, and parts of 13 and 14 (Module II), and the remainder of 14, all of 15, and the remainder of 13 (Module III) will be covered in the order indicated over the first through fourth, sixth through tenth, and last two lectures of the (thirteen-lecture) term.

Formative assessments of student learning will be based on questions delivered using MyLab Economics. In general, these questions will be assigned each week in two equally weighted parts: one part will be a quiz comprised of four to seven "pools" of one or more multiple-choice questions; the other part will be "homework" comprised of twenty-five to forty-five varyingly extensive, straightforward to challenging, mostly non-multiple-choice questions. Students will be expected to attempt to work out solutions *on their own* to as many as possible of these questions and will be awarded marks on the basis of the fraction they get right, with an increasing marginal bonus for up to about one quarter correct and a decreasing marginal bonus for higher fractions correct.[§] Please be aware in any event that plagiarism is serious offence at Carleton and should be recognized and avoided.

Satisfactory Performance Criteria: Students must achieve a passing grade on the five formative assessments covering Module I of the course *and* a passing grade on the five formative assessments covering Module II of the course in order to achieve a passing grade (D- or higher) in the course overall. Students who fail to fulfil one or both of these criteria will receive a final course grade of F.

The mid-term examination will cover Module I of the course, take place in (the first half of the) class on Tuesday, February 8, be available only to those students with a passing grade on the five formative assessments to date, and be 75 minutes in duration.** Students who can document a compelling reason for missing this examination will be excused and the associated weight will be added to that of the final examination (so that it becomes 48% + 22% = 70%). Students *must* inform the instructor of such an absence in advance, if possible.

[§] The specific formula to be used to generate each homework mark (between zero and one) is "fraction correct of assigned exercises" raised to the power 0.415. Note that $0.50^{0.415} = 0.75$.

** The mid-term examination paper will become available on Brightspace at 2:35 p.m. EST at which point students will be expected to download it, answer the associated questions individually offline, and then upload their answers to Brightspace for submission no later than 4:00 p.m. EST. Note that these times imply a 10-minute file-transmission-and-submission allowance.

The final examination will cover Modules I and II of the course with roughly double the weight on the latter, take place in class on Tuesday, March 29, be available only to those students who have satisfied *both* of the aforementioned satisfactory performance criteria, and be 2¼ hours (or 165 minutes) in duration.^{††} Students who can document a compelling reason for missing this examination after informing the instructor of such an absence in advance *may* be granted a deferred final examination. Graded final exam scripts will not be available for (supervised) student perusal until after the course grades have been approved by the Faculty Dean (see the second paragraph of [Academic Regulation 3.3.4](#)).

Course Schedule and Reading List

- Jan. 11: Preliminaries (16:00–17:00 on BigBlueButton via Brightspace) *and Introduction (Perloff Ch. 1)*
- Jan. 11: Firms and Production (Perloff Ch. 6)
- Jan. 18: Costs (Perloff Ch. 7 excl. §4 to end)
- Jan. 25: Costs and Competitive Firms (Perloff Ch. 7 from §4 to end and Ch. 8 excl. §3 to end)
- Feb. 1: Competitive Firms and Markets (Perloff Ch. 8 from §3 to end)
- Feb. 8: Mid-Term Examination
- Feb. 10: No tutorial
- Feb. 15: Monopoly (Perloff Ch. 11 excl. §5 to end)
- Feb. 25: Graded Mid-Term Exam returned ~~by T.A.~~
- Mar. 1: Monopoly, Monopsony, and Price Discrimination (Perloff Ch. 11 from §5 to end and Ch. 12 excl. §3 to end)
- Mar. 8: Pricing and Advertising (Perloff Ch. 12 from §3 to end)
- Mar. 15: Game Theory (Perloff Ch. 13 excl. §4)
- Mar. 22: Oligopoly (Perloff Ch. 14 excl. §5 and §6)
- Mar. 29: Final Examination
- Mar. 31: No tutorial
- Apr. 5: Bertrand Oligopoly, Monopolistic Competition, and Factor Markets (Perloff Ch. 14, §5 and §6, and Ch. 15 excl. §2 to end)
- Apr. 12: Capital Markets and Investing, Exhaustible Resources, and Auctions (Perloff Ch. 15 from §2 to end and Ch. 13, §4)

^{††} The final examination paper will become available on Brightspace at 2:30 p.m. EDT at which point students will be expected to download it, answer the associated questions individually offline, and then upload their answers to Brightspace for submission no later than 5:30 p.m. EDT. Note that these times imply a 15-minute file-transmission-and-submission allowance. Note also that students are expected to follow the relevant parts of Carleton's formal "[Examination Procedures](#)," nos. 4, 9, and 11 in particular.

MyLab Economics Schedule

Assignment	Weight	Release Date	Due Date
Quiz 1 and Quiz 2 for Week 0	2%	Friday, January 7 at 5:00 p.m. EST	Friday, January 14 at 5:00 p.m. EST
Homework and Quiz for Week 1	2%	Monday, January 10 at 5:00 p.m. EST	Monday, January 17 at 5:00 p.m. EST
Homework and Quiz for Week 2	2%	Friday, January 14 at 5:00 p.m. EST	Friday, January 21 at 5:00 p.m. EST
Homework and Quiz for Week 3	2%	Friday, January 21 at 5:00 p.m. EST	Friday, January 28 at 5:00 p.m. EST
Homework and Quiz for Week 4	2%	Friday, January 28 at 5:00 p.m. EST	Friday, February 4 at 5:00 p.m. EST
Homework and Quiz for Week 5	2%	Friday, February 11 at 5:00 p.m. EST	Friday, February 18 at 5:00 p.m. EST
Homework and Quiz for Week 6	2%	Friday, February 18 at 5:00 p.m. EST	Friday, March 4 at 5:00 p.m. EST
Homework and Quiz for Week 7	2%	Friday, March 4 at 5:00 p.m. EST	Friday, March 11 at 5:00 p.m. EST
Homework and Quiz for Week 8	2%	Friday, March 11 at 5:00 p.m. EST	Friday, March 18 at 5:00 p.m. EDT
Homework and Quiz for Week 9	2%	Friday, March 18 at 5:00 p.m. EDT	Friday, March 25 at 5:00 p.m. EDT
Homework and Quiz for Week 11	5%	Friday, April 1 at 5:00 p.m. EDT	Friday, April 8 at 5:00 p.m. EDT
Homework and Quiz for Week 12	5%	Wednesday, April 6 at 5:00 p.m. EDT	Wednesday, April 13 at 5:00 p.m. EDT
Total:	30%		

Information on Academic Accommodations

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, please refer to the [Guide on Academic Accommodation](#)

Plagiarism

Any form of cheating and plagiarism is inadmissible and will be dealt with according to University policies & guidelines, see <https://carleton.ca/registrar/academic-integrity/>.