

Industrial Organization

ECO-14301: Organización Industrial

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This course will study how firms compete with each other in imperfectly competitive markets. We will start with a brief review of the basic concepts from consumer and producer theory. The remainder of the course will focus on firms' price and non-price strategies in the case of oligopoly. Examples of the topics covered include price discrimination, collusion, horizontal mergers, predatory pricing, vertical restraints, product differentiation, research and development, and network effects.

By the end of this course, you should be able to do the following:

1. understand the standard economic models for the analysis of imperfectly competitive markets;
2. apply these models to explain the real-world behavior of firms in the Mexican economy and elsewhere; and
3. find relevant questions and data for writing an undergraduate thesis or *tesina* in the field of industrial organization.

Prerequisites

I expect you will have taken the standard sequence in microeconomics, including the basics of consumer theory, producer theory, and game theory. We will revise some of this material in the first weeks of the course.

Lectures

There are two course sections. Group 1 meets on Tuesdays and Thursdays, 8:30 to 10:00 a.m., in PF 101. Group 2 meets on Tuesdays and Thursdays, 10:00 to 11:30 a.m., in PF 101. Please attend the section in which you are enrolled.

Lectures will be held in person. I will post the lecture slides on Canvas before the lecture. If you have to miss a lecture for health or other reasons, you should talk to your classmates to catch up on any material you missed, as not all lecture material will be posted on Canvas. In particular, there will be regular in-class exercises whose questions and answers will not be posted on Canvas.

I want to make the lectures as interactive as possible. Therefore, you should treat the lectures as an opportunity for active participation and discussion. Please feel free to stop me and ask questions.

Textbook

The required textbook for the course is Luís Cabral, *Introduction to Industrial Organization*, Second Edition. We will cover much of the material in this textbook during the course. An [electronic version](#) of the text is available to rent. In addition, the ITAM library has two paper versions available for you to use.

Many of the end-of-chapter problems in the textbook will be useful practice for the midterm and final exams.

In addition to the textbook, there will be several academic journal articles related to the course topics that are also required reading. These articles will be posted on Canvas. You should expect to see questions about these articles on the midterm and final exams.

Homework Assignments

There will be (approximately) 12 weekly homework assignments to help you learn the course material. The midterm and final exams will be similar to the exercises on the homework assignments.

The questions for the homework assignments will be posted on Canvas. You will submit your handwritten answers at the start of the lecture (normally on Thursdays). There will be opportunities to ask questions about the homework assignments in the lectures and during office hours.

I encourage you to work together in small groups to discuss how to solve the homework problems. However, you must write up your own answers to the assignments. You should not copy answers from other students or from the internet. If you are caught cheating, you will receive a zero for the assignment. Repeated offenses may result in a failing grade for the course.

Scanned and emailed homework assignments will not be accepted. Late homework assignments will not be accepted.

Examinations

There will be three midterm exams. Midterm Exam 1 will be held on **September 5**, Midterm Exam 2 will be held on **October 10**, and Midterm Exam 3 will be held on **November 16**. The final exam will be given as announced in the official exam schedule. The final exam will be cumulative and based on all material from throughout the course.

I will drop your lowest midterm grade from your final grade calculation. Therefore, there will be no makeups available for the midterm exams.

A makeup for the final exam will be allowed only for a documented medical or family emergency. I reserve the right to choose how to make up for a missed final exam. This may include an oral exam and/or using your results from the midterm exams.

Contact Information

There are two ways to contact me for help with any aspect of the course.

1. I am available for office hours on Tuesdays, 11:30 a.m. to 1:00 p.m., in the economics department in Río Hondo (in the small office in front of the secretary's office). You do not need to make an appointment.
2. Please feel free to send me an email, either using a Canvas message or directly to: shaun.mcrae@itam.mx.

Course Grade

The calculation of your overall grade will use the following percentage shares:

Midterm exams (best two out of three)	40%
Final exam	60%

If you attend lectures regularly during the semester (that is, you are present for at least 80% of the lectures), then I will allow your homework assignments to count for 20% of your overall grade if this helps. In that case, the share of the final exam in your overall grade will be 40%.

I will translate your final percentage grade into the official numerical grade based on the following conversion table:

95–100%	10
85–94%	9
75–84%	8
65–74%	7
55–64%	6
Below 55%	NA

There will be no tolerance for plagiarism or any other form of cheating. Your assignments and exam answers must be your original work, written in your own words, with proper citations to any source material. Failure to do this will automatically result in a grade of NA for the entire course. ITAM policy requires me to report all incidents of plagiarism to Dirección Escolar.

Course topics and calendar

I will post the lecture readings and other class information on Canvas.

1. Recap of consumer and producer theory
2. Price discrimination
3. Oligopoly: Bertrand and Cournot models
4. Collusion
5. Horizontal and vertical product differentiation
6. Market structure
7. Horizontal mergers
8. Entry deterrence
9. Vertical integration and vertical restraints
10. Research and development
11. Network models