

**Industrial Organization**  
**ECONOMICS EC3364G-001**  
Department of Economics  
Western University

**January 2022**

**General Information:**

**Instructor:** Tai-Yeong Chung  
**Office:** 4079 SSC  
**Phone:** (519) 661-2111 ext. 85512  
**E-mail:** [tchung@uwo.ca](mailto:tchung@uwo.ca) (Please put "EC3364" in the subject line)  
**Office hours:** Tuesday 1:00 pm – 3:00 pm  
Sign up via email for online Zoom appointments  
**Delivery mode:** Combination of online asynchronous and in-person  
**Meeting time(s):** Monday 3:30 pm – 5:30 pm and Wednesday 3:30 pm – 4:30 pm  
**Classroom:** AHB 2B02  
**Course website:** <https://owl.uwo.ca/portal>  
**Undergraduate inquiries:** 519-661-3507 SSC Room 4075 or [econugrd@uwo.ca](mailto:econugrd@uwo.ca)

**Registration**

You are responsible for ensuring you are registered in the correct courses. If you are not registered in a course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <https://student.uwo.ca>. If you notice a problem, please contact your Faculty Academic Counsellor immediately.

**Prerequisite Note**

The prerequisite for this course is **Economics 2261A/B** (Intermediate Microeconomic Theory II)  
*Prerequisite(s) for your course found at:*  
[http://www.westerncalendar.uwo.ca/Courses.cfm?CourseAcadCalendarID=MAIN\\_004496\\_1&S\\_electedCalendar=Live&ArchiveID=](http://www.westerncalendar.uwo.ca/Courses.cfm?CourseAcadCalendarID=MAIN_004496_1&S_electedCalendar=Live&ArchiveID=)

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken an anti-requisite course. Lack of pre-requisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record, but will ensure that spaces become available for students who require the course in question for graduation.

### **Course Objectives:**

Industrial organization studies firms and markets. It examines strategies of firms and their interactions in imperfectly competitive markets. Firms' price strategies include price discrimination and dynamic pricing. Non-price strategies include product differentiation, advertising, contracts, merger, and entry deterrence. We will also learn competition policies.

### **Course Learning Outcomes:**

At the end of the course and having completed the essential reading and activities, students should be able to:

- examine pricing/non-pricing strategies by firms and their welfare implications
- apply analytical models of firm behavior and strategic interaction to evaluate various business practices, including collusion, entry deterrence, product differentiation, price discrimination and merger
- explain the basic determinants of market structure and understand key issues in competition policy and regulation.

### **Text:**

Luis Cabral, Introduction to Industrial Organization, 2<sup>nd</sup> edition, MIT Press, 2017 (required)

### **Assessments and Grading:**

#### **1. Assignments (15%)**

Three problem sets will be given. Each problem set is worth 5%.

Assignment due dates:   1) **Jan. 31** (by midnight)  
                                  2) **Feb. 7** (by midnight)  
                                  3) **Mar. 23** (by midnight)

Time used for due date is Eastern time.

Late assignments will not be accepted (zero point).

## 2. Main Essay Project (19%)

The essay project requires a student to identify an IO related topic/issue and apply economics to analyze it. It is important to correctly apply relevant economic concepts and tools to the topic.

The topic can be an analysis of a firm or industry. I suggest you analyze a specific issue in detail instead of a broad survey. A topic can also be based on a current event from news article (check Economist, Globe and Mail, Wall Street Journal, Financial Times, end so on.) Third option is to analyze a legal case on competition (check Competition Bureau and US Department of Justice).

- A detailed proposal (2 pages) is due on **March 16, 2021**. A detailed proposal is a proposal detailed enough so that a reader can understand which topic you plan to analyze and how. It typically has two parts. The first part is to identify an issue or news and provide some background information. The second part is to outline your analysis, and methodology. What economic concepts and tools do you plan to use?
- Final essay is due on **April 4, 2021**.

### <Essay Grading>

Detailed proposal – 4 points (late penalty is one-point deduction per day)

Final Essay – 15 points (late penalty is four-point deduction per day)

The grade on this component will be based on both content and on quality of the student's writing (organization, grammar, and style).

## 3. Midterm Examination (31%) – Tentative date: Feb. 14, 3:30 p.m. – 5:00 p.m.

A midterm exam may be comprised of calculations, short answer, true/false, essay questions, or a combination thereof, on material covered up to and including the last class prior to the exam. The structure of the exam will be announced at OWL as the date approaches. All Department and University policies regarding missed exams and necessary documentation apply. Please see attached **Policy Regarding Makeup Tests and Final Examinations**.

## 4. Final Examination (35%)

The final examination will occur during the regular final exam period and will be scheduled by the registrar. This exam will assess students' ability to meet the learning outcomes of the course and will be based on all concepts learned during the course with more weight being assigned to material covered after the midterm examination. All Department and University policies regarding missed exams and necessary documentation apply. Please see attached **Policy Regarding Makeup Tests and Final Examinations**.

- Students are responsible for material covered in the lectures **as well as** the assigned material in the text. Exams will not be returned to students but may be reviewed in the instructor's office.
- Missed midterm exam without illness self-reports or approved, documented official accommodation will be given a mark of zero
- If there has been an illness self-report or approved, documented official accommodation, the weight of a missed midterm will be transferred to the final exam.

### **Course description:**

This course takes a formal approach to analyzing the way firms make production and sales decisions and interact strategically with each other in the marketplace. As this course is for upper-year undergraduate honor-level students, it will try to conduct rigorous analyses that are commensurate with such a level.

We begin with a study of optimal pricing policies, including versioning, bundling, and related market segmentation strategies. In the second part of the course, we apply game theory to the study of oligopoly interaction, focusing on pricing and output strategies in a dynamic setting. Finally, we analyze strategies for firm dominance, especially through the deterrence of potential competition. The list of such strategies includes capacity expansion, product proliferation, and exclusive dealing contracts.

The main goal of the course is to develop the basic intuition for pricing and other forms of strategic behavior on the part of firms, both when faced with complex patterns of consumer demand and when faced with strategic competitors. Readings in the textbook will provide background and introduction to a variety of topics, many of which will be covered in class in greater depth. Problem sets will focus on formal analysis. Occasional supplemental readings will provide additional motivation and opportunities to develop intuition.

### **Topics:**

- 1 What Is Industrial Organization?

#### **PART ONE: Microeconomics Foundations**

- 2 Consumers
- 3 Firms
- 4 Competition, Equilibrium, and Efficiency
- 5 Market Failure and Public Policy
- 6 Price Discrimination

#### **PART TWO: Oligopoly**

- 7 Games and Strategies
- 8 Oligopoly
- 9 Collusion and Price Wars

**PART THREE: Entry and Market Structure**

- 10 Market Structure
- 11 Horizontal Mergers
- 12 Market Foreclosure

**PART FOUR: Non-price Strategies**

- 13 Vertical Relations
- 14 Product Differentiation

## Please Note

### Department & University Policies for Winter 2022

The University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

1. **Guidelines, policies, and your academic rights and responsibilities** are posted online in the current Western Academic Calendar at: <http://westerncalendar.uwo.ca>. Claiming that “you didn’t know what to do” is not an acceptable excuse for not following the stated policies and procedures.
2. Students must familiarize themselves with the “**Rules of Conduct for Examinations**” [http://www.uwo.ca/univsec/pdf/academic\\_policies/exam/administration.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/exam/administration.pdf).
3. **Cheating as an academic offence:** Students are responsible for understanding what it means to “cheat.” The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as suspension or expulsion.
4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at [http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectCalendar=Live&ArchiveID=#Page\\_20](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectCalendar=Live&ArchiveID=#Page_20)).

Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

5. It is a Department of Economics policy that **NO** assignments be dated, stamped or accepted by staff. Students must submit assignments to the instructor.
6. **Appeals:** University policies and procedures for appealing a mark can be found in the Student Academic Appeals section in the current Western Academic Calendar at: [http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectCalendar=Live&ArchiveID=#Page\\_14](http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectCalendar=Live&ArchiveID=#Page_14). **Please note the relevant deadlines.**

Department of Economics procedures for appealing a mark can be found here: [https://economics.uwo.ca/undergraduate/program\\_counselling/responsibilities\\_policies.html#appeals](https://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals). The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed to submit an appeal to [econugrd@uwo.ca](mailto:econugrd@uwo.ca). Please follow the instructions and use the appeal form shown in the above link.

7. **Systematic adjustments of a class grade distribution** (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.
8. Note the following **add and drop deadlines:**

Deadline to add a second term half course:  
Deadline to drop a second term half course:

**Tuesday January 18, 2022**  
**Monday March 14, 2022**

## Policy Regarding Makeup Tests and Final Examinations

Faculty of Social Science policy states that oversleeping or misreading an exam schedule is NOT grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

## Policies Regarding Academic Accommodation

- The Faculty of Social Science's policies on academic accommodation are found at [https://counselling.ssc.uwo.ca/procedures/academic\\_consideration.html](https://counselling.ssc.uwo.ca/procedures/academic_consideration.html)
- **Accommodation for Students with Disabilities:** Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD, see [http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html)), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).
- **Rewriting Exams and Retroactive Reweighting are NOT Permitted:** Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted. Self-Reported Absences cannot be used once a student has proceeded to start to write a test or exam.
- **Self-Reported Absences:** Students will have two opportunities during the fall and winter terms to receive academic consideration if they self-report a missed assessment using the online self-reported absence portal, provided the following conditions are met: the assessment is missed due to an absence of no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted otherwise on the syllabus. Students are not able to use the self-reporting option in the following circumstances:
  - for exams scheduled by the Office of the Registrar (e.g., final exams)
  - absence of a duration greater than 48 hours
  - assessments worth more than 30% of the student's final grade
  - if the student has opened or started the test or exam
  - if a student has already used the self-reporting portal twice during the fall/winter terms

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate (SMC) if the absence is medical or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office for more information about the relevant documentation. It is strongly recommended that students notify the instructor as soon as possible, ideally before the assessment, when they become aware of an absence. University policy is that students must communicate with their instructors no later than 24 hours after the end of the period covered by the SMC or immediately upon their return from their documented absence. Failure to follow University policy and procedures may result in denial of academic accommodation and a grade of zero.

- **Documentation for Accommodation:** Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons. **All required documentation for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.**

- **Western University policy on Consideration for Student Absence** is available here: [Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs](#).
- **Student Medical Certificate (SMC):** This form is available here: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf)
- **Religious Accommodation:** Students should consult the University's list of recognized religious holidays and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

**Policy Regarding Class Attendance and Engagement:** If the instructor deems a student's attendance or engagement in the class to be unsatisfactory, that student may be prohibited from writing the final examination. Examples of unsatisfactory class engagement include frequent absences from an in-person or synchronous online class, lack of assignment submissions, and inadequate use of online course materials. Instructors who intend to make use of this policy will notify the student in advance.

**Statement on Mental Health and Support Services:** Students under emotional/mental distress should visit [https://uwo.ca/health/mental\\_wellbeing/](https://uwo.ca/health/mental_wellbeing/) for more information and a complete list of resources on how to obtain help.

**Statement on Remote Proctoring:** While Western intends to hold most classes, mid-terms and finals in-person, the London-Middlesex Health unit may require western to teach in a remote format. If this occurs, all assessments will be done remotely and may involve the use of remote proctoring software (i.e., Proctorio, ProctorTrack). Instructors will provide information on the details should the need arise.