

<b>Instructor</b>	Yanyou Chen
<b>Email</b>	yanyou.chen@utoronto.ca
<b>Day/Time/Location</b>	L0101: Tuesday 2:00 PM – 5:00 PM, AG ALGNT L0201: Wednesday 2:00 PM – 5:00 PM, AG ALGNT
<b>Office Hours</b>	Tue. 5:00PM – 6:00PM (GE 310)
<b>TAs</b>	Weiyue Zhang (head TA), vivianzhang.zhang@mail.utoronto.ca Symran Oberoi, symran.oberoi@mail.utoronto.ca Jiamin Yuan, jiamin.yuan@mail.utoronto.ca Zachary Tolliver, z.tolliver@mail.utoronto.ca
<b>TA Office Hours</b>	Monday 2:00PM – 3:00PM (location TBD)

## Course Overview

This course in applied microeconomics is concerned with the functioning of markets and the strategic behavior of firms. The focus is on strategic relationships between organizations, including competitive and cooperative relationships among firms. The first unit will cover basic models of imperfect competition and the impact of market structure. The second unit will focus on pricing strategies. The final unit will examine elements of firm competition that are not covered in the basic models.

## Prerequisite

ECO200Y1/ECO204Y1/ECO206Y1; ECO220Y1/ECO227Y1/(STA220H1, STA255H1)/(STA237H1, STA238H1)/(STA257H1, STA261H1)

The Department of Economics checks whether students have the course prerequisites, and students are removed if they do not have them. It is the students' responsibility to read the calendar. The instructor cannot waive prerequisites.

## Assessment

There will be three **problem sets**, one **term test**, and a **final exam**. The problem sets count for 20%. The term test counts for 35%. The final exam counts for 45%. Collaboration on the problem sets is allowed. Collaborating students can choose to submit a single group answer (maximum group size: 3 students). You are encouraged to type your homework, but hand-written and scanned work will be accepted if it is clearly presented. No late problem sets will be accepted.

There will be no extensions or make-up for the graded homework for any reason. No late problem sets will be accepted. These assignments can be completed over a few days, and students who fail to submit problem sets on time will receive a grade of zero.

If you become ill and it affects your ability to do your academic work, consult me right away. Normally, I will ask you for documentation in support of your specific medical circumstances. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, you can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI (including dates, academic impact, signature, phone and registration number). For more information on the VOI, please see <http://www.illnessverification.utoronto.ca>. For information on Absence Declaration Tool, please see <https://www.artsci.utoronto.ca/absence>. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

1. The makeup term test will be held on the week of October 30<sup>th</sup>. Time and location TBA.

2. Consistent with university policy, there will be no “makeup” test for the makeup term test. No medical excuses will be accepted, and a grade of zero will be applied if the students fail to write the makeup test.
3. The makeup test will include all the materials covered right up to the lecture before the makeup exam.

Students who miss the final exam for reasonable reasons may initiate petitions to the Faculty of the Arts and Science. Please note that all times listed in this syllabus are in local Toronto time. We will not accept confusion about deadlines as an excuse for lateness or missed work.

### **Textbooks**

The main textbooks for this course are:

- [PRN] Pepall, L., Richards, D. J., & Norman, G. (2014, 5th Edition). Industrial Organization: Contemporary Theory and Empirical Applications.

The textbook for this course is recommended, but not required. All content that students are expected to know will be addressed in lecture. However, a textbook is naturally able to cover material in greater depth than lecture slides, and so students may find PRN to be a valuable supplement to lecture slides.

- Tim Wu, The Curse of Bigness: Antitrust in the New Gilded Age, Columbia Global Reports, 2018.
- Kwoka and White, The Antitrust Revolution: Economics, Competition, and Policy 6th Edition.

### **Email Policy**

Questions regarding homework and the results of the graded materials should be reviewed initially with the TA. If you have additional questions once you have contacted the Teaching Assistant, contact the instructor. Any email to me or our TA should originate from your UofT email. Please include “ECO380, Section XXX” in the subject line and your name and student number at the end of your email. I will respond to email according to these policies:

- I only respond to emails posing questions that can be answered in 1-3 sentences. For detailed questions, please come to my office hours.
- I do not respond to emails that request information that can be found on the website or the syllabus.

### **Test Score Appeals**

- Please write a short paragraph explaining why you should obtain additional points. Turn in a hard copy of this by the end of the week following the week in which exams are first handed back. This holds regardless of whether you are in class when exams are returned.
- Conditional on this argument found persuasive by me, the entire exam will be re-graded. Your score may go up or down.

### **Required Material: Stata 14+**

One objective of the course is to get students to perform analyses using statistical software. Some tutorials will provide hands-on experience to Stata.

Stata is a proprietary commercial software, available on Windows, macOS and Linux. Stata comes in successive versions. You need version 14 or above. The program is available on all computers at the Map & Data Library computer lab (which is available remotely) and reference area. Check [here](#). Aside from library access, Stata is (as always) available at reduced rates for students. As of September 2023, a 6-month license to [Stata/IC](#) for students costs 48 USD (make sure to click on the 6-month tab). Unfortunately, you cannot use other software like R, Python etc.

### Academic Misconduct

Students should note that I do not tolerate any form of academic misconduct. Any student caught engaging in such activities will be subject to academic discipline ranging from a mark of zero to dismissal from the university as outlined in the academic handbook. Any student abetting or otherwise assisting in such misconduct will also be subject to academic penalties. During the testing window, any discussion of course material is forbidden.

### Ongoing Learning Disability or Accommodation Requirement

Students with diverse learning styles and needs are welcome in this course. If you have an ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) (<http://accessibility.utoronto.ca>) at the beginning of the academic term. (Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs.) AS will then assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your condition with any instructor, and your instructors will not reveal that you are registered with AS.

For more information on services and resources available to students, please contact Tanya Lewis, Director, Director of Academic Success and Accessibility Services, at (416) 978-6268; [tanya.lewis@utoronto.ca](mailto:tanya.lewis@utoronto.ca). Accessibility services: <http://studentlife.utoronto.ca/as/>

### Privacy

We are all expected to respect university privacy and copyright restrictions in this course. Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor.

### Tentative Schedule

Date	Topics	HW
Sep. 13 <sup>th</sup>	1. Introduction	
Sep. 20 <sup>th</sup>	2. Monopoly and Perfect Competition (PRN Ch.2) - <i>Tutorial 1: Stata I</i>	
Sep. 27 <sup>th</sup>	3. Game Theory and Competitive Strategy (PRN Ch. 9) - <i>Tutorial 2: HW1 solution &amp; Practice Questions</i>	HW1 due at 11:59pm Sep. 25 <sup>th</sup>
Oct. 4 <sup>th</sup>	4. Cournot and Bertrand Competition (PRN Ch. 9 and 10)	
Oct. 11 <sup>th</sup>	5. Stackelberg Competition (PRN Ch. 11) - <i>Tutorial 3: Stata II</i>	
Oct. 18 <sup>th</sup>	6. Collusion and Repeated Games (PRN Ch. 14) - <i>Tutorial 4: HW2 solution &amp; Practice Questions</i>	HW2 due at 11:59pm Oct. 16 <sup>th</sup>
Oct. 25 <sup>th</sup>	7. Pricing (PRN Ch. 5, 6 and 7)	

	<b>Term Test, Oct. 24<sup>th</sup> 18:00 – 20:00</b>	
Nov. 1 <sup>st</sup>	8. <i>Tutorial 5: Midterm solution</i>	Makeup term test
	<b>Reading Week</b>	
Nov. 15 <sup>th</sup>	9. Bundling (PRN Ch. 8)	
Nov. 22 <sup>nd</sup>	10. Entry, Exit and Predation (PRN Ch. 12 and 13) - <i>Tutorial 6: Stata III</i>	
Nov. 29 <sup>th</sup>	11. Non-Price Competition: Advertising and R&D (PRN Ch. 19, 20 and 21) - <i>Tutorial 7: HW3 solution &amp; Practice Questions</i>	HW3 due at 11:59pm Nov. 27 <sup>th</sup>
Dec. 6 <sup>th</sup>	12. Auctions (PRN Ch. 23)	
TBA	<b>Final Exam</b>	