University of Toronto Department of Economics

# ECO380H1S, Section L0101 -- Markets, Competition, and Strategy (Online)

Mondays, Wednesdays 10-1 Starting from Monday July 5, 2021

# <u>Instructor: Li Li</u>

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IMPORTANT: Please DO NOT USE Quercus' email system to contact me, even though I will use it for announcements. Emails that are sent to Quercus or other email addresses will be ignored. I make this email policy because Quercus does not offer a way to search emails by content. It would not be feasible for me to track emails from many students.

# **Teaching Assistant**

Alvaro Jose Pinzon Giraldo

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# **Course Description**

This course explains the functioning of markets from an economic perspective. In particular, we would study how firms would optimally react to the actions of other competing firms. Such considerations are generally known as strategic behaviors. To formalize this notion, this course would employ some tools in microeconomics, game theory in particular. The incorporation of game theory allows us to move beyond the perfectly competitive model where each firm faces a given market price without interacting with each other. Using these theoretical tools, we will study the market under imperfect competition.

# Prerequisite: ECO200Y1/ ECO204Y1/ ECO206Y1; ECO220Y1/ ECO227Y1/ (STA237H1, STA238H1)/ (STA247H1, STA248H1)/ (STA257H1, STA261H1)

The Department of Economics would verify if students have the course prerequisites. It is beyond the instructor's power to waive prerequisites. See the course policy at: <u>https://fas.calendar.utoronto.ca/course/ECO380H1</u>

#### **Course Structure**

Instruction will consist of three components:

- Lectures: Lectures will be recorded and posted to Quercus (weekly).
- **Tutorials:** Live tutorials will be hosted weekly. During this time, TAs will explain the answers of the assignment problems.
- Office Hours: Office Hours will be held online. Links will be posted on Quercus.

IMPORTANT: The first lecture is LIVE.

On Wednesdays 10:10am (Toronto time), I will hold an \*\*office hour\*\* answering students' queries for that week's lecture. I will distribute a Zoom link later on Quercus.

#### **Grading and Exam Policy**

There will be **5 problem sets** and **a final exam**. Each problem set counts for **10%**. The final exam counts for 50%.

There will be no problem set in the first week. Starting from the second week to the sixth week, there will be one problem set per week.

I will post the problem sets on **Crowdmark**.

\*\*Students can choose to collaborate on the problem sets. The maximal group size is 4 students.\*\* Each group submit ONE copy of the problem set.

PLEASE register your group members on Crowdmark if you are submitting on behalf of a group. Also make sure to write down the names and student numbers of ALL group members in the submission.

Do not make multiple submissions.

Your homework would preferably be typed. If you prefer to write by hand, please write eligibly.

I will distribute the problem sets 1 week in advance.

\*\*I will release the answer for each problem set on the weekend after each deadline. Therefore, I cannot accept late homework.

\*\*The TAs have the final judgment regarding the marking of the problem sets. Please contact them directly in case you have questions.\*\*

Students who fail to submit problem sets on time for medical reasons may seek special consideration by **emailing the instructor AND submitting an acceptable medical note within a week after the due date**. Petitions based on travel, employment or personal plans will not be considered.

If the instructor accepts students' medical notes to waive a problem set, the corresponding grades will be allocated to the other problem sets.

Students who miss the final exam for reasonable reasons may initiate petitions to the Faculty of the Art and Science. It is up to the Faculty to make decisions. **There are no make-up exams.** 

# <u>Textbooks</u>

The main textbooks for this course are:

- [PRN, required] Pepall, L., Richards, D. J., & Norman, G. (2014, 5th Edition). Industrial Organization: Contemporary Theory and Empirical Applications.
- McAfee, R. P. (2009). Competitive solutions: the strategist's toolkit. Princeton University Press.
- Brandenburger, A. M., & Nalebuff, B. J. (2011). Co-opetition.

Although the lectures will generally follow PRN, they will depart frequently. Please focus on the lecture slides. Additional readings may be assigned during the course of the class.

# Academic Misconduct

No form of academic misconduct would be tolerated. We will follow strictly the relevant rules and penalties as stated in the academic handbook.

# **Test Score Appeals**

Please write a short paragraph explaining why you should obtain additional points. If I find that the argument is persuasive, the exam will be re-graded. Your score can go up or down.

# **Course Outline**

- 1. Introduction
- 2. Monopoly and Perfect Competition (PRN Ch.2)
- 3. Game Theory and Competitive Strategy (PRN Ch. 9)
- 4. Cournot and Bertrand Competition (PRN Ch. 9 and 10)
- 5. Stackelberg Competition (PRN Ch. 11)
- 6. Collusion and Repeated Games (PRN Ch. 14)
- 7. Pricing (PRN Ch. 5, 6, 7 and 8)
- 8. Entry, Exit and Predation (PRN Ch. 12 and 13)
- 9. Non-Price Competition: Advertising and R&D (PRN Ch. 19, 20 and 21)
- 10. Voting and Tournament Model (My Own Notes)