

Business 9872 – Supply Chain Management

Fall 2022

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> Tuesdays 1:00 p.m. – 4:00 p.m. Location: Ivey 2120 (12 Sessions)

INTRODUCTION

This course introduces students how to solve real life managerial supply chain problem using game theoretical model.

COURSE DESCRIPTION

This course introduces students how to solve real life managerial supply chain problem using game theoretical model.

COURSE OBJECTIVES

The objective of this course is to teach students how to address a supply chain issue using game theoretical tools. Below are the topics that I will cover in this course. The students are expected to read papers and have oral presentation in class. By the end of this course, the students should know how to do effective verbal presentation and how to write papers.

Students should learn (not limited to) the following topics:

- Competition between firms
- Customer utility functions
- Vertically differentiated model
- Hotelling model
- Linear demand
- Capacity limit
- Customers freeriding behavior
- Counterfeiting products
- Online/offline channel
- Channel conflict environment / dual channel
- Contract design
- Cooperation/competition

METHODS OF EVALUATION/COURSE SCHEDULE/ATTENDANCE

30% - Class contribution

70% - Research project

Students must attend all classes. Any non-illness absence must be communicated to the instructor before the class. The minimum grade of the final project must be 80% and above. Students will have a presentation about the research project at the end of each month. By the end of the course, students are expected to submit their research project (in written form).

MATERIALS/REQUIRED READING

- Mathematica software
- Assigned reading will be distributed via email before class time

ENROLLMENT RESTRICTIONS

Enrollment in this course is restricted to graduate students in the Ivey PhD Program, as well as any student that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student's home program.

COURSE TIMELINE AND FORMAT

- The course will be held in-person.
- The first month would be going through some basic game theory / supply chain papers.
- The second month would be on signaling game and supplier encroachment.
- The third month would be on counterfeiting literatures.
- The last month would be on other relevant topics.

ACADEMIC OFFENCES: PLAGIARISM AND ACADEMIC INTEGRITY

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at https://grad.uwo.ca/administration/regulations/13.html

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

SUPPORT SERVICES: HEALTH AND WELLNESS

Students who are in emotional/mental distress should refer to Health and Wellness at Western University https://www.uwo.ca/health/psych/index.html for a complete list of options about how to obtain help. Additionally, students seeking help regarding mental health concerns are advised to speak to someone

they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), program coordinator or other relevant administrators in their unit.

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. See https://www.uwo.ca/health.

ACCESSIBLE EDUCATION WESTERN (AEW)

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW), a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.