

ADVANCED MICROECONOMICS, ECON 401:10
Department of Economics
St. Francis Xavier University
Fall 2022

Instructor: Teng Wah LEO

Time Blocks and Location: U4/U5 (Monday, 11:15 am – 12:30 pm, & Thursday, 12:45 pm – 2 pm), AX113

Office Hours: Monday, 10 am – 11 am & 1 pm – 2 pm; Thursday, 11:30 am – 12:30 pm & 2:15 pm – 3:15 pm; Friday, 1 pm – 3 pm. All other days and time are by appointment only. Office hours are held at my office, MULH3073.

Objective: The course is designed as a continuation to Intermediate Microeconomic Theory introducing additional mathematical rigour. In addition, the scope of the advances made in Microeconomic Theory is developed through the provision of the basic models within each idea. The intent is to ease the transition for the students into graduate work in theory.**Prerequisites:** MATH 111, MATH 112, ECON 201, & ECON 301.

The course materials are designed for use in ECON 401 at StFX University by myself only, and are the property of **Teng Wah Leo**. Copying this material including assignments, assessments and examinations for distribution, online posting, or selling of this material to third parties without permission is subject to Canadian Copyright Law and is strictly prohibited.

Drop-Date:

Students may drop a course, online in Banner, on or before **November 2nd, 2022**. After this date students are not permitted to drop courses without permission from their Dean. (Please see 3.1 in academic calendar for policy regarding course drops).

Evaluation: All tests and final examination will be in-person exams.

1. 40% – 4 × Assignments
2. 30% – Mid Term Examination
3. 30% – Final Examination

Note: All tests and examinations are compulsory. Should you miss an examination/test without an appropriate reason provided prior to the date of the examination/test at the latest, you will be awarded a mark of zero for that examination/test. There is no recourse after the fact.

Equitable Learning: Everyone learns more effectively in a respectful, safe, and equitable learning environment, free from discrimination and harassment. I invite you to work with me to create a classroom space – both real and virtual – that fosters and promotes values of human dignity, equity, non-discrimination, and respect for diversity.

Required Text:

None.

Supplementary Reading:

- Hal R. Varian. *Microeconomic Analysis*, 3rd Edition, W.W. Norton & Company, 1992.
- Andreu Mas-Colell, Michael D. Whinston, & Jerry R. Green. *Microeconomic Theory*, 1st edition, Oxford University Press, 1995.
- Carl P. Simon & Lawrence Blume. *Mathematics for Economists*, 1st edition, W.W. Norton & Company, 1994.
- Kevin Wainwright & Alpha C Chiang. *Fundamental Methods of Mathematical Economics*, 4th edition, McGraw-Hill, 2004.

Course Outline:

1. Decision Making by Individuals
 - Preference Relations & Choice Rules
 - Utility Maximization
 - Duality & Welfare Evaluation
2. Theory of the Firm
 - Production Set

- Profit Maximization
- Cost Minimization

3. Market Equilibrium

- Walrasian Equilibrium

4. Information & Principal-Agent Problems (Time Permitting)

- Full Information
- Signalling

5. Welfare Economics (Time Permitting)

- Social Choice Theory
- Social Welfare Functions
- Invariance Properties