

Faculty of Liberal Arts & Professional Studies

Department of Economics

Course: AP/ECON4010 M - Advanced Microeconomic Theory

Term: S2 2020

Prerequisite / Co-requisite

AP/ECON 2300 3.00, AP/ECON 2350 3.00, and AP/ECON 3530 3.00, or equivalents. Recommended prior completion: AP/ECON 2400 3.00 and AP/ECON 2450 3.00.

Course Instructor: Professor Elie Appelbaum

Contact Information: e-mail via Moodle (see: Student Guide to Moodle).

Technical requirements for taking the course

- You will need a stable, higher-speed Internet connection, a computer with webcam and microphone, and/or a smart device with these features.
- You will need to be able to use Moodle (see link to guide below).
- You will need to appear on video (e.g., zoom-sessions, remote proctoring, etc.).
- You will, therefore, need to be able to use Zoom (see link to guide below).

Useful links for student computing information, resources and help

- Student Guide to Moodle
- Zoom@YorkU Best Practices
- Zoom@YorkU User Reference Guide
- Computing for Students Website
- Student Guide to eLearning at York University
- You can determine your internet connection speed at Speedtest, or Fast.

Time and location

Please note that this is a course that depends on remote teaching and learning. There will be no in-person interactions or activities on campus.

Organization of the course

- This is a remote teaching course. It will be taught synchronously.
- Detailed lecture notes will be posted (on Moodle) for each topic. They will include general discussions of the issues, mathematical derivations/presentations, diagrammatic examples/explanations, as well as intuitive explanations.
- The lecture notes will be discussed/presented in scheduled zoom-sessions, which will take place during the scheduled meeting times of this course (Tuesdays and Thursdays 4:00 PM, see [Registrar's Office's website](#)). They will consist of 20 - 30 minute segments, as needed.
- The dates/times of these sessions will be posted on Moodle and you can also find them on the Moodle calendar.
- I will not record/post these zoom-sessions. Neither should you record them.
- The first zoom-session will be held on June 30th, at 4:00PM. A general outline/summary/introduction will be provided.
- Students should carefully go through the lecture notes before the zoom-sessions. The exams' questions will be based on these lecture notes.
- In addition to the lecture notes, accompanying problems/questions will be posted for each topic. Students should go through these problems and attempt to solve/answer each set of questions. Once the presentation of a topic is concluded, I will discuss the problem sets in a zoom-session.

Virtual Office Hours:

Tuesday & Thursday 6-7, via Zoom, **upon request**.
Again, these should not be recorded.

TA: TBA

Expanded Course Description and Course Learning Objectives

(1) The purpose of this course is to introduce students to most of the important topics in modern microeconomic theory, at an advanced and rigorous level. These topics include: general methodology of science, consumer behaviour, the theory of the firm, static and dynamic models of perfect and imperfect competition, general equilibrium, social welfare functions and the Arrow's Impossibility Theorem, expected and non-expected utility, risk aversion, portfolio choice, production under uncertainty, models of imperfect information, including moral hazard, adverse selection and signalling. **All topics are covered in the posted lecture notes.**

(2) In addition to gaining a good understanding of these topics, students will be able to apply the concepts, models and tools developed in this course to a wide range of issues in other areas of economics, as well as finance, public policy and various other areas of social science.

The course is also a good preparation for students who are interested in pursuing graduate work in economics, or finance.

Course Text/Readings

Textbook: Advanced Microeconomic Theory, Geoffrey A. Jehle and Philip J. Reny (JR) 3rd edition.

Other Useful (but not required) Books:

Microeconomics Analysis Hal R. Varian (third edition)

Essential Microeconomics, J.R., Riley

The Theory of Industrial Organization, J. Tirole

Note: All topics are covered in the lecture notes.

Topics:

1. Introduction and Methodology (lecture notes)

2. The Theory of Consumer Behaviour: Preferences, Expenditure, Indirect Utility Functions, Duality, Welfare Comparisons, Price Indices (JR 1, 2, 4.3, MWG: 1-4, Varian: 7-10).

3. The Theory of the Firm: Technology, Cost and Profit Functions, Duality, Aggregation, Productivity, Empirical Applications (JR 3, Varian 1-6, 12).

4. Choice under Uncertainty: Expected and Non-Expected Utility, Risk Aversion, Portfolio Choice, Production under Uncertainty, Value of Information (JR 2.4, MWG 6, Varian 11, Riley).

5. Non-Competitive Markets: Perfect Competition, Imperfect Competition (static and dynamic), (JR 4, Varian 16).

6. General Equilibrium: General Competitive Equilibrium – Definition, Existence, Properties, First and Second Fundamental Theorems of Welfare Economics (JR 5, MWG 15-16, Riley).

7. Social Choice and Welfare: Pareto Optimality, Second Best Problem, Compensation Principle, Social Welfare Functions, Arrow's Impossibility Theorem, Examples of Welfare Functions (JR 6, MWG 21).

8. Bargaining

9. Imperfect Information: Principal Agent Problems (Moral Hazard and Adverse Selection), Signalling, Market for Lemons (JR 8, Tirole, I.2.3, Riley).

Evaluation

The final grade for the course will be based on the following items weighted as indicated:

Midterm Test: (July 16, 2019, 4:00-5:30 PM) - 25%.

Final Exam: (TBA- August 14-21) - 75%.

Format of the exams: TBA.

Nature of the exam:

- (i) Only material that is covered in the notes will appear on the exam. All topics are covered in the notes. The material in the Introduction Section/Topic will not be on the test/exam. Material in the Introduction and Appendices will not be on the exam.

IMPORTANT COURSE INFORMATION FOR STUDENTS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents) -

<https://secretariat.info.yorku.ca/files/CourseInformationForStudentsAugust2012-.pdf>

- Senate Policy on Academic Honesty and the Academic Integrity Website
 - Ethics Review Process for research involving human participants
 - Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
 - Student Conduct Standards
 - Religious Observance Accommodation
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