

Economics, Faculty of Liberal Arts & Professional Studies, York University

Fall 2019 Course Outline

Course #: AP/ECON 1540 Section A

Mathematics for Economists II

Fall 2019

Course Instructor Contact:

Name: Dr Shadab Qaiser

Office Location: Vari Hall 1075

Office Hours: TBA

Email: qaisers@yorku.ca

Link to Course Website: I will be using Moodle for posting announcements, lecture handouts, practice assignments, and practice tests.

Teaching Assistant Information: TBA

1. Course Objectives: Course Description (prerequisites/co-requisites):

This course extends the analysis of basic Economics ideas, topics and problems begun in AP/ECON 1530 3.00. Again, relevant mathematical ideas and techniques are recalled and/or derived so as to provide a deeper understanding of Economic issues and how they can be resolved. The issues and problems covered require functions of more than one variable for their resolution. The notion of Quantity Supplied is combined with the notion of Quantity Demanded and notions of Market Equilibrium are introduced and discussed. Equilibria are evaluated through the introduction of mathematical notions and properties of systems of equations, eventually in matrix form. A deeper understanding of theories of demand (supply) and the foundations of demand (supply) functions is developed through the introduction of mathematical notions of unconstrained and constrained optimization and linear and nonlinear programming. As in AP/ECON 1530 3.0, many topics and issues are addressed and problem framing and problem solving abilities are enhanced.

2. Prerequisite: AP/ECON 1530 3.00 or equivalent.

Prerequisites/Co-requisites: AP/ECON 1000 3.00 or AP/ECON 1010 3.00, or equivalent. Note: No credit will be retained for this course for students who have successfully completed or who are currently enrolled in SC/MATH 1021 3.00, SC/MATH 1025 3.00, or SC/MATH 2221 3.00.

Course credit exclusions: SC/MATH 1505 6.00, SC/MATH 1540 3.00, SC/MATH 1550 6.00, GL/MATH/MODR 2650 3.00. Note: Acceptable course substitutes are available in the Calendar

3. Required Course Text/Readings:

Essential Mathematics for Economic Analysis, 5th edition, Knut Sydsaeter and Peter Hammond with Arne Strom, Prentice Hall.

4. Topics to be covered

- a. Functions of many variables, Tools for comparative statics, Multivariable optimization
- b. Constrained optimization Matrix and vector algebra, Determinants and inverse matrices, Linear programming

5. Weighting of Course:

Midterm Exam – MT (40 %) Tuesday Oct 22, 2019 in Class

Final Exam – Cumulative F (60%) Held during Official examination period

Where MT is for Midterm Exam and F is for final exam. There will be no make-up exam for the midterm exam. Students absent from the midterm exam will have the weight transferred to their final exam. The final exam will be cumulative and will cover all materials discussed in class. The date of the final exam will be scheduled by the registrar's office. Students absent from the final examination and requesting for deferred standing must follow the guidelines for Deferred Standing of the Department of Economics at York University. The grades may be scaled to conform to the regulations of the Faculty of Arts.

Important Course Information for Students:

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage;

<http://www.yorku.ca/secretariat/policies/index-policies.html/>

- York's Academic Honesty Policy and Procedures/Academic Integrity Website

Academic Honesty and Integrity: Conduct that violates the ethical or legal standards of the University community or of one's program or specialization is subject to severe penalties. Students are responsible for understanding the nature and consequences of these offences, as contained in the Senate Policy on Academic Honesty, found on the York University Senate WEB page:

<http://www.yorku.ca/secretariat/policies/document.php?document=69>

- Ethics Review Process for research involving human participants

<http://www.yorku.ca/secretariat/policies/document.php?document=94>

➤ Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities

<http://www.yorku.ca/secretariat/policies/document.php?document=68>

➤ Student Conduct Standards

<http://www.yorku.ca/oscr/standards.html>

➤ Religious Observance Accommodation

<https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs>

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) -

<http://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

****Policy and Guidelines on Withdrawn from Course:** <http://secretariat-policies.info.yorku.ca/policies/withdrawn-from-course-w-policy-and-guidelines>

Important Dates

	Fall Term 2019 (F19)
Last date to add a course without permission of instructor (also see Financial Deadlines)	September 17
Last date to add a course with permission of instructor (also see Financial Deadlines)	October 1
Last date to drop a course without receiving a grade (also see Financial Deadlines)	November 8
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript)	November 9 - December 3