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

Fall 2021 Course Outline

Course #: AP/ECON 1530 Sec D

COURSE TITLE: Introductory Mathematics for Economists I

Fall 2021

Course Instructor Contact:

Course Instructor: Dr Shadab Qaiser

Office Location: Vari Hall 1075

Virtual Office Hours: TBA

Email: qaisers@yorku.ca

Link to Course Website: I will be using eclass for posting announcements, lecture recordings, online midterm/final exam and online assignment set.

Teaching Assistant Information: TBA

Technical requirements for taking the course:

You will need a computer with a RELIABLE internet connection. Phones and tablets WILL NOT WORK for the online midterm and online final exam.

Here are some 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

Course Format and Prerecorded Lectures

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. **The class lectures will be prerecorded and posted on the eclass course website on a weekly basis according to the course outline.** I will hold online office hours through Zoom to answer any course related questions and **there will be no live lecturing.**

Course Objectives: This course presents and analyzes a sequence of basic ideas, topics and problems arising in Economics. For each idea/topic/problem relevant mathematical ideas and techniques are recalled and/or derived so as to provide a deeper understanding of the Economic issue and how it can be resolved, if necessary. The notion of Quantity Demanded is first addressed by expressing quantity demanded as a linear function of price where both the slope and intercept embed important Economics ideas. This sequence leads naturally to the notion of Revenue (the product of quantity demanded and price) where nonlinear functions are analyzed using mathematical techniques that include derivatives. This sequence culminates with notions of prices that maximize revenue subject to a given demand function. A large number of such topic sequences involving univariate functions are examined.

Prerequisite: Grade 12U Advanced Functions or equivalent.

Prerequisites/Co-requisites: AP/ECON 1000 3.00 or AP/ECON 1010 3.00, or equivalent. Strongly recommended completion: high-school calculus or equivalent.

3. Required Course Text/Readings:

Essential Mathematics for Economic Analysis, 5th edition, Knut Sydsaeter and Peter Hammond with Arne Strom, Prentice Hall. You can also use older editions of this textbook.

4. Topics to be covered

a) Introduction to algebra and equations
b) Functions of one variable, Properties of functions
c) Differentiation, Derivatives in use, Single-variable optimization
d) Integration

5. Weighting of Course:

Online midterm test   35% (Monday OCT 25, 2021 at the beginning of class at 19:00 through eclass)

Online Assignment set   15% (Available online on eclass on Nov 15, 2021, Due on Nov 23, 2021 before 11:30 pm Toronto Time)

Online Final Exam – Cumulative (50%)   Scheduled during the official exam period by the Registrar's Office. **Comprehensive, covering all course material.**

There is no makeup Midterm test or makeup assignment. Students absent from the online midterm exam will have the weight automatically transferred to their online final exam. If a student missed the assignment (15%), the weight will be transferred to the online final exam. **Students are required to work independently on the online assignment set and on midterm/final exam.** The online final exam will be cumulative and will cover all materials discussed in the course. The date of the online final exam will be scheduled by the registrar's office. Students absent from the online final examination and requesting for deferred standing must follow the guidelines for Deferred Standing of the Department of Economics at York University.

6. Intellectual property notice
All materials prepared for **Econ 1530 Sec D** at York University are the intellectual property of the instructor. This can include but is not limited to the following material: lecture notes, handouts and recordings; assignment handouts and instructions; spoken and written presentations; audio and video recordings; PowerPoint slides; and questions and/or solution sets for assignments, quizzes, tests and final exams.

Course materials should only be used by students enrolled in this course. As a student in this course, you may not publish, post on an Internet site, sell, or otherwise distribute any of this work without the instructor's express permission. Unauthorized or commercial use of these materials is strictly prohibited. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course, or fall under an exception or limitation in Canadian copyright law. Copying this material for distribution (e.g. uploading material to a commercial third-party website, or online sharing of course material with people outside of the course) may lead to a charge of misconduct under York's Code of Student Rights and Responsibilities and the Senate Policy on Academic Honesty. In addition, you may face legal consequences for any violation of copyright law.

 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

Important Academic Forms

- Religious Accommodation - http://registrar.yorku.ca/sites/registrar/files/pdf/exam_accommodation.pdf
- Deferred Standing - http://registrar.yorku.ca/pdf/deferred_standing_agreement.pdf
- Attending Physician's Statement Form - http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf