

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

AP/ECON 1530 3.0 Section M
Mathematics for Economists I
Winter 2020
Course Outline

Course Webpage: <https://moodle.yorku.ca/moodle/course/view.php?id=159741>

1. Course Instructor Contact:

Instructor: Sadia Mariam Malik
Office: 1126 VH
Office Hours: Tuesdays and Thursdays (3:00 - 4:00 pm)
Phone: 416-736-2100 (ext. 77043)
Class Time: Tuesdays and Thursdays (5:30 - 7:00 pm)
Class Location: CLH C

3. Course Description (prerequisites/co-requisites):

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.

Course credit exclusions: SC/MATH 1000 3.00, SC/MATH 1013 3.00, SC/MATH 1300 3.00, SC/MATH 1505 6.00, SC/MATH 1513 6.00, SC/MATH 1530 3.00, SC/MATH 1550 6.00, GL/MATH/MODR 1930 3.00. Note: Acceptable course substitutes are available in the Calendar.

4. Required Course Text/Readings:

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

5. Weighting of Course:

The final mark will be based on two term tests worth 20% each and a final exam (60%).

The dates for term tests are as follows:

Term Test 1	February 13, 2020
Term Test 2	March 19, 2020
Final Exam	To be scheduled by the registrar's office (April 7-25)

Term tests will consist of short numerical problems related to material covered in class. The final exam will be held in the period of April 7-25. The precise date for the final exam will be announced later by the registrar's office. The final exam will be comprehensive in the sense that it will include everything that we will cover in class up till the last class before the final exam. However, the content of the final exam will be more tilted towards the post-midterm material than the pre-midterm material.

The final course mark will be calculated according to the following formula:

Max (0.20T1+0.20T2+0.60F, F) where T1 stands for Term Test 1, T2 stands for term test 2 and F stands for final exam.

There will be no makeups for missed term tests. Any student who misses the final exam must provide appropriate documentation (i.e. medical note) to the Department of Economics within 5 business days of the missed exam and petition to write a deferred exam.

6. 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

7. Grading Scheme

The grade distribution will be based upon the total percentage points that you will earn in the semester. The standard cut-off points, provided by York University, will be used to convert percentages to letter grades. These are provided as under:

90-100 A+	80-89 A	75-79 B+	70-74 B
65-69 C+	60-64 C	55-59 D+	50-54 D
40-49 E	0-39 F		

8. Additional Information:

There will be common TA hours for all sections of the course and a list of all the TAs along with their office hours and office number will be posted for students in the reception area of the Economics department in VH1144. Students can feel free to go to any of the course TAs for help (students please ensure that you **only** attend tests and exam for the section you are registered in).

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

Important Dates

Last date to add a course without permission of instructor (also see Financial Deadlines)	Jan. 19
Last date to add a course with permission of instructor (also see Financial Deadlines)	Feb. 3
Last date to drop a course without receiving a grade (also see Financial Deadlines)	March 13
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below)	March 14 – April 5

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