Introductory Mathematics for Economics I
AP/ECON 1530 3.0 – Fall 2019
Sections F,G,I

Instructor & TA information

Robert J. McKeown, PhD
Assistant Professor, Teaching Stream
Department of Economics, York University
Vari Hall 1052, mckeow99@yorku.ca

Course Description

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 issue and how it can be resolved. Students are expected to have a strong mathematical background including algebra, multiplicative reasoning, and calculus. These skills will be reviewed, practiced, and applied to economic concepts. For students lacking the requisite background, MATH1510, Fundamentals of Mathematics is recommended.

Requirements and Exclusions

Prerequisite: Grade 12U Advanced Functions or equivalent.
Co-requisites: AP/ECON 1000 3.00 or AP/ECON 1010 3.00, or equivalent.
Recommended completion: high-school calculus or equivalent OR MATH 1510 6.0C – Fundamentals of Mathematics.
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.

Learning outcomes

Why you should work hard in this course:

- "Students who complete Algebra ... are more than twice as likely to graduate from college..."[*]

- "A strong grounding in ... Algebra correlates powerfully with ... earning in the top quartile of income from employment."[†]

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[*]U.S. Department of Education, "Foundations for Success: The Final Report of the National Mathematics Advisory Panel," 2008

[†]ibid.

- The skills you develop in ECON1530 will be used again in your second, third, and fourth year economics courses – and graduate school.

- Math skills are highly correlated with course grades in economics.

- Math can be learned through practice – just because you don't know it now does not imply you won't!

If successful, you will be able to:

- Create mathematical equations (models) to express economic ideas such as consumer theory, firm decisions, and market behaviour.

- Use calculus and algebra to predict agent decisions from the model you've created.

- Illustrate your predictions in a two-dimensional graph.

- Translate a given mathematical statement into English and a written English description of a problem into math.

Textbook

Required Textbook:
"Essential Mathematics for Economics Analysis", Knut Sydsæter , Peter Hammond, Arne Strøm and Andrés Carvajal, 5th Edition, Pearson Education Limited, 2016. The lecture notes and in-class practice problems are (mostly) derived from this text. You will also find the assigned homework problems in it. The homework problems will be similar to quiz, test, and exam questions.

Recommended (Free) Textbooks:
"Elementary Algebra" John Redden, Saylor Foundation, 2011,
https://open.umn.edu/opentextbooks/textbooks/elementary-algebra

"Precalculus", Jay Abramson (and others), OpenStax, 2014
https://cnx.org/contents/_VPq4foj@11.10:EfTqzMNI@22/1-1-Functions-and-Function-Notation.

These two texts are helpful for those of you who want to refresh their math skills. They have many practice problems with solutions to help you.

Website

Announcements and course materials will be posted on the ECON1530 Moodle page.

Office Hours

To accommodate as many students as possible, I will be holding online office hours through Moodle using the Zoom software. You may join the conversation every Tuesday from 6:00 to 7:00 PM. You may ask me anything related to ECON 1530. Regarding personal matters, you may book an appointment with me by clicking on the "In-Person Office Hour Sign-Up Sheet" link on the ECON1530 Moodle page. I am available on Wednesdays from 12:30-1:30 PM.

Term Test Grade Appeals

On Portal, you will find a re-grade request form. You will need to explain, in writing, why you deserve additional marks. **Simply stating you deserve more marks is not sufficient**. You must explain why your answer is correct. You will have to print and submit the form to me **in person**. If approved, you will then meet with the TA responsible for grading that question. You should also be warned that, if your request is approved, **I will regrade your entire test! So, your overall grade may go up or down**.

Email Etiquette

The best form of communication in this course is in person, either with myself or a TA, during lecture, office hours, or immediately following lecture. *Generally, I do respond to questions about course content via email.* In the event that an e-mail communication is needed, please use your York e-mail account (the "york.ca" account). E-mails from other accounts may not reach my inbox and it is easier for me to help you if I can identify you quickly. You should address me as "professor" and use professional, polite language. Please include the (i) course code in the subject line, (ii) your full name as it appears on Moodle, (iii) your preferred name, and (iv) your student number. For e-mails requiring a reply, **I will reply within three business days**. If I fail to do so, assume I forgot and remind me via email or in person.

Evaluations

	Date	Time	Grades Scheme 1	Grades Scheme 2
Quiz 1	Week Four, start of class	50 minutes	7.5%	7.5%
Term Test	Saturday, October 26th, 10:00-12:00 PM	90 minutes	30%	30%
Class Participation	Weekly		–	5%
Quiz 2	Week Twelve, start of class	50 minutes	7.5%	7.5%
Final exam	Exam period: December 5-20	120 minutes	55%	50%

Note: See https://registrar.yorku.ca/enrol/dates/fw19 for other important dates such as the last day to drop a course. **You must not make any travel plans during the Exam Period!**

All Students are required to bring their York Student ID Card to all quizzes, tests, and exams. Failure to do so may result in a **grade of zero**. The quizzes will consist of multiple choice answers and perhaps some short written-answer questions. The term test will consist of short written-answer questions and perhaps some multiple-choice questions. Notice that **our term test will be held outside of regular class time**. Its location will be announced later on Moodle and during class. The final exam will be **cumulative** – you must not forget what you've already learned!

Missed tests

No permission is ever given to a student to write a test or exam in advance of its scheduled date. There will be **no deferments offered for missed final exams** except under extremely unusual circumstances. Anyone wishing to write a deferred final exam will be required to formally petition for such.

If you miss a quiz or term test, you must provide valid documentation **in person to me** within three business days or **you will receive a grade of zero**. If you were ill, you must provide a doctor's note with the following information:

- Full name of the physician,

- her/his mailing address,

- his/her telephone number, and

- her/his Ontario Licence.

Exams missed due to non-medical circumstances must be supported by appropriate documentation, i.e., death certificates, obituary notice, automobile accident reports, airline/bus ticket receipt for emergency travel (with the date of booking on the ticket), etc. Airline/train/bus ticket/receipts for emergency travel must indicate destination, departure, and return dates. These must be submitted **in person** to your me as soon as possible. Having to work at the time of the exam or non-emergency travel are not valid excuses.

Failure to provide any of the above will result in an automatic grade of zero. Only students with appropriate documentation are eligible for the make-up test. The make-up term test will be held on Monday, November 4 at 9:00 AM in a location to be announced on Moodle and in-class. If you miss the makeup test for any reason, you will receive a grade of zero for the missed quiz/test.

Important Academic Forms

- Religious Accommodation
  http://registrar.yorku.ca/sites/registrar/files/pdf/exam_accommodation.pdf

- Attending Physician's Statement Form
  http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf

Grading

Historically, the average grade across all sections of ECON1530 is a C+ (65-69 on the York scale). You final course grade may be adjusted to conform to Program or Faculty grade distribution profiles. Stated differently, your grades may be "curved".

We will be using Crowdmark to help with grading the term test and distribution of your graded results. Crowdmark is a 'collaborative online grading and analytics platform that helps educators evaluate student work more effectively.' Your term tests will be scanned and uploaded to Crowdmark. It is here that your work will be graded. You can access Crowdmark through Moodle.

In-Class Participation and iClicker Cloud

To answer an iClicker question you must have a tablet, smartphone, or laptop with you in class. If you do not have one, Learning Technology Services (LTS) will lend you a tablet for the semester. LTS is located in DB 1050.

iClicker Cloud uses GPS technology to confirm you are in class. You will be reminded to adjust your device's location settings when class starts. If you are not in the geographic area, you will not earn participation grades. Further, **you must register on our Moodle page to receive a grade. Click on the "iClicker Cloud" located there**. There is also a .pdf file called "Student Quick Start Guide" on Moodle with instructions to help you. If you encounter technical problems, contact LTS at lts@yorku.ca or telephone number (416) 736-2100, 8:30AM to 4:30 PM, Monday to Friday.

Participation grades can be earned in the following ways: (i) you earn two marks for responding to an iClicker question, (ii) if the answer is correct, you receive an additional two marks, and (iii) participating in class discussions. If you facilitate learning in the classroom in a remarkable fashion, I reserve the right to boost your final grade commensurate with your contribution. During each class, you will earn a percentage based on your responses and number of questions asked. The average of these across the semester will determine your participation grade. You may miss one class without negatively affecting your grade however any subsequent missed class will earn a grade of zero. If you attend all classes, you will receive a small bonus.

Help with ECON1530 – PASS

"ECON 1000, 1010, 1530 and 1540 are very challenging courses for students. Peer Assisted Student Success (PASS) sessions have been successfully implemented around the world as an effective strategy for success in such challenging courses. All students are strongly encouraged to attend weekly PASS sessions to foster their success in these courses. Research shows that students who attend PASS sessions regularly have a significantly higher success rate than those who do not. "
https://vanier.laps.yorku.ca/pass-sessions/

Academic integrity

- 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/

- Common infractions include:

  - To obtain unauthorized assistance on any assignment or during a test.
  - To provide unauthorized assistance to another student. This includes showing another student completed work (e.g., an answer on a test).
  - To falsify or alter any documentation required by the University. This, includes, but is not limited to, doctor's notes.
  - To use or possess an unauthorized aid in any test or exam (e.g., a cell phone).
  - To continue writing when the time is up in any test or exam.
  - To submit a medical note to get out of a test when the student is not actually sick.

- 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