Introductory Mathematics for Economics I
AP/ECON 1530 3.0 – Fall 2021 Section E

Instructor Information

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Course Description

Mathematics puts the M in STEM. Math is the gateway to science, technology, and engineering – the STE in STEM. Since mathematical economics is a STEM field, it should be no surprise to you that an undergraduate student majoring in our field needs strong math skills to be successful. These skills include an understanding of algebra, multiplicative reasoning, word problems, and calculus. All of these are contained in this course. This course provides a review of these skills through practice and application to economic concepts. Note the word "review" – ECON1530 expects you to already have strong algebra skills. If this is not the case, consider taking MATH1510 – the Fundamentals of Mathematics before you take this course. If you have not taken calculus in High School or if you have been out of school for some time, you should expect to devote a considerable amount of your time to studying ECON1530.

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. Like an online course, you can learn the course material at your own pace, following the schedule of readings and activities.

Why You Should Work Hard in ECON1530

- "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."[†]

- Research has shown math skills are highly correlated with success in economics – you will need these skills in the coming years.

- Math can be learned through practice – just because you can't solve a problem now does not imply you never will!

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.

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

[†]ibid.

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.

Course Format and Required Technology

This section reflects that ECON1530 will be taught entirely online.

Several platforms will be used in this course (e.g., Moodle, Zoom, etc.) through which students will interact with the course materials, the course director/TA, as well as with one another.

Course Format

- This course is mostly asynchronous – you will work on homework problems and learn new content at a time and location that is most convenient to you.

- Videos, slides, and other content is available through Moodle/eClass.

- However, we will have synchronous weekly Zoom meetings where you work in groups to solve problems and earn participation grades.

- If you do not wish to participate in our weekly meetings, perhaps because of your time zone differing from YU's, participation grades will be shifted to your term tests.

- Tests and the final exam must be written at specific times *regardless of your geographic location*.

Please note the following:

- Zoom is hosted on servers in the U.S. This includes recordings done through Zoom.

- To access our Zoom meetings, you may be required to supply your York U passport username and password. If you are having trouble with this, please contact https://uit.yorku.ca/student-services/passwords-passport-york-access/

- If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.

- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

Course materials will be posted on the ECON1530 eClass/Moodle page: https://eclass.yorku.ca/eclass. Please review the technology requirements and FAQs for Moodle.

Here are some useful links for student computing information, resources and help: http://elearning-guide.apps01.yorku.ca/, https://uit.yorku.ca/student-services/, https://uit.yorku.ca/wp-content/uploads/sites/3/2012/02/Zoom@YorkU-User-Reference-Guide.pdf

Required Technology

- You will need a **laptop or desktop** in good working order. You will not be able to complete course assessments with just a tablet or smartphone.

- You will need a reliable internet connection. To determine Internet connection and speed, there are online tests, such as Speedtest, that can be run.

- You will need a **digital camera** of decent of quality such as one built into a laptop, smartphone, or tablet. You will write your tests on paper, take a picture, and upload the picture to Moodle/eClass. Alternatively, you may write on a touch-screen, save the file as an image (.jpg, .png,.pdf) and upload your work. It's your responsibility to ensure your answers are legible and properly labeled with the correct question number.

- You will need a **webcam with microphone** or **smartphone** for our Zoom meetings.

- You will need a **six-week subscription to ALEKS** to complete term test 1 and quizzes 1-3. This is also where you will find practice problems. Algebra skills are highly correlated with undergraduate success in economics, and ALEKS can help you learn. The cost of a six-week subscription is \$39.00 (no tax). A subscripton for the entire semester (18 weeks) is \$79.00. You can purchase a subscription at the York U bookstore https://www.bookstore.yorku.ca/sell_access_codes.asp. Scroll down until you see ECON1530.

Why Are We Using ALEKS?

Assessment and LEarning in Knowledge Spaces (ALEKS) is a web-based, artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what you know. ALEKS then instructs you on the topics you are most ready to learn. As you work through our course, ALEKS periodically reassesses you to ensure that topics learned are also retained. Questions are free-form – not multiple-choice. ALEKS also provides the advantages of one-on-one instruction, 24/7, from virtually any Web-based computer for a fraction of the cost of a human tutor. Research shows that students who do well on ALEKS also do well at university. Other research shows that strong algebra strongly predict success in economics. In 2019, ALEKS won three prestigious SIIA CODiE Awards for (i) Best College and Career Readiness Solution, (ii) Best Summative Assessment Solution, (iii) Best Mathematics Instructional Solution.

https://www.aleks.com/about_aleks/overview

Textbook – You Must Acquire This Text!

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 class practice problems are largely derived from this text. You will also find assigned homework problems at the back of each chapter and section. These homework problems will be similar to quiz, test, and exam questions.

Office Hours

Tuesdays, 11:00am - 12:00pm EST via Zoom starting September 14. A link for office hours can be found on Moodle/eClass. Note: office hours will not be held during reading week or the final exam period.

However, you may email me to request an appointment at any time.

Email Etiquette

If you have a content question (ie. math problem), please ask me during office hours. *Generally, I do not respond to questions about course content via email.* In the event that an e-mail communication is needed, please use your York U e-mail account (the "york.ca" account) or whichever email account is tied to your eClass login. 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 and section number in the subject line, (ii) your full name as it appears on Moodle/eClass, (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	Platform	Grades: Best of Option A	Option B
Pre-Course Survey	Sep 24	–	online	1%	1%
Term Test 1	Oct 7, 8:30 AM	90 mins	ALEKS	20%	22.5%
Term Test 2	Nov 18, 8:30 AM	60-90 mins	eClass	20%	22.5%
Post-Course Survey	Dec., TBA	–	online	1%	1%
Quizzes	Sundays before 11:59 PM	30 mins	ALEKS, eClass	20%	20%
Participation	Weekly	–	Zoom/iClicker	10%	0%
Final exam	Exam period: Dec 9-23	120 mins	Moodle	28%	33%

1.0% Bonus mark!	Spend 5 hours or more on ALEKS between Sep 9 and Sep 15.
1.0% Bonus mark!	Spend 5 hours or more on ALEKS between Sep 16 and Sep 22.
1.0% Bonus mark!	Spend 5 hours or more on ALEKS between Sep 23 and Sep 29.

Your instructor will subjectively review your activity to ensure your time was spent working.

Note: See https://registrar.yorku.ca/enrol/dates/fw21 for other important dates such as the last day to drop a course. **Be sure you make yourself available during the Exam Period. Flights are not a legitimate reason for missing a university exam.**

The first three quizzes are written on ALEKS and consists of ALEKS algebra problems. You will be asked to complete the **ALEKS initial knowledge check** before you can complete a quiz. This 30 question or less quiz creates your unique learning path. Quiz 1 is a scheduled knowledge check similar to the initial knowledge check. There is no time limit on Quiz 1. You can start, pause, and continue later. Quizzes 2-10 have 5-10 questions and take 30 minutes. Moodle/eClass quiz questions will be numeric or multiple choice. If a quiz question has more than one part, you must correctly solve ALL parts to gain credit for the answer. No part-marks are awarded!

Term Test 1 will be written on ALEKS. Term Test 2 and the final exam include short, written-answer questions. Take a picture of your short-answer question and upload it via Moodle/eClass. Other question types such as multiple-choice or numeric may also be included. The final exam will be **cumulative** – you must not forget what you have learned!

Missed tests

To be eligible for accommodation, please email me (politely) with your reason. No permission is ever given to a student to write a test or exam in advance of its scheduled date.

- **Quizzes and participation** have zero-tolerance – these cannot be replaced or re-scheduled. Instead, your lowest quiz score will be dropped from the calculation of your final grade. Your lowest participation grades will also be dropped.

- **Term Test 1**: there will be a make-up test on Tuesday, October 12 at 7:00 PM EST on ALEKS. If you miss both Term Test 1 and the makeup test for term test 1, you will receive a grade of zero for term test 1.

- **Term Test 2**: there will be a make-up test on Tuesday, November 22, at 7:00 PM. If you miss both Term Test 2 and the makeup test for term test 2, you will receive a grade of zero for term test 2. Note that the format of this make-up test may differ from the original test. Check eClass Announcements for details.

  Note these times are tentative and subject to change. Check Moodle/eClass announcements for the latest information on tests and make-up tests.

- **Final Exam**: 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.

  https://shrm.laps.yorku.ca/students/deferred-exam-request/

For religious accommodation, notify the instructor no later than **seven days** prior to the test. If you were too ill to write the test, notify the instructor via email within **five days** of the test.

Grading

Historically, the average grade across all sections of ECON1530 is a C+ (65-69 on the York scale). "Curving" your grades is at the discretion of the instructor and the Department of Economics. This curve may increase or decrease your grade.

Term Test Grade Appeals

On eClass, 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. Your request may or may not be approved. Note that I will regrade your entire test! **So, your overall grade may go up or down**.

Zoom Session Participation Grades

Our Zoom sessions give you the opportunity to:

- work with your classmates,

- work on problems every week so you do not fall behind,

- receive feedback on your progress.

The following rules are strict to better encourage you to participate. If you do not participate, this hurts both you and your classmates. **Participation is a positive externality**. You must have a working video and audio connection with stable wifi. *If you do not wish to participate, your grades will be shifted to other evaluations.*

Each Zoom session (i.e. class) has a participation grade. The average grade for all sessions determines your final participation grade. To earn grades in a session, you must do **all** of the following:

1. Login to Zoom using your authenticated yorku.ca account and attend the entire session. The Zoom activity log will be used to record your attendance. If you log out for an extended period, you will be marked absent.

2. Listen to the instructor and answer some "warm-up" questions with iClicker. **Each question is graded out of 4**: You will receive grades for

   i) Responding (2 marks)
   ii) Giving the correct answer (2 marks)

3. You will be assigned to a group. Work together to solve the weekly activity sheet. You have two deliverables:

   - Answer ALL the questions and submit images of your answers **individually** on Crowdmark via eClass in 90 minutes or less. Please answer one question per page. Be sure your submitted pages are vertically aligned! This makes it easier for me and the TA to read your answers.

4. You will leave the breakout room and answer a number of multiple-choice or calculation iClicker questions.

5. We will solve the weekly activity sheet together as a class. There may be some iClicker questions interspersed or following the solution.

Your session grade is a weighted combination of the above. **Your lowest participation session scores is dropped**, so you can miss one session and still earn a perfect score. Your instructor reserves the right to exercise judgment and discretion when determining your participation grade. This includes awarding bonus marks for high-quality efforts and penalizing students who do not participate in their groups.

Where to Find Help with ECON1530

Peer Assisted Study Sessions (PASS)

ECON 1530 is a challenging course 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/

The New LA&PS Math Centre

The new Student Numeracy Assistance Centre - Keele (SNACK) is opening this Fall. The Centre has many useful resources including: workshops and drop-in peer tutoring – arrive alone or with a free friend. To learn more, visit our webpage:

https://www.yorku.ca/laps/snack/

Academic Honesty and Integrity

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.

As a student at York University, you have a responsibility to not only understand, but also play an important part in upholding the integrity of the academic experience. The Faculty of Liberal Arts and Professional Studies at York University supports the International Center for Academic Integrity's definition of academic integrity. That is, you will be committed to acting in all academic matters, even in the face of adversity, with honesty, trust, fairness, courage, respect and responsibility.

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's Academic Integrity module at the beginning of the course (https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/). Breaches of academic integrity range from cheating to plagiarism (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.). All instances of academic dishonesty in this course will be reported to the appropriate university authorities, and can be punishable according to the Senate Policy on Academic Honesty.

How can you demonstrate academic integrity?

- Respect the ideas of others: Your course work should represent your own knowledge and ideas. You should not falsely claim credit for ideas that are not your own, by presenting another's work as yours. If you are quoting, paraphrasing, or summarizing another person's work in order to support your own ideas, identify the work and the author through proper citation practices. For more information about how to cite properly, use the Student Papers and Academic Research Kit (SPARK). You can improve your writing, research, and personal learning abilities through the Learning Commons.

- Respect your peers: Know when you are allowed to collaborate. Ask your instructor about what group work entails when it comes to the sharing of work. In test situations and assignments, don't steal or give answers to your peers. Cheating and aiding in a breach of academic honesty are both

against York University's academic honesty policy. Specific to ECON1530, you can share answers with students in your breakout room, but you are not allowed to share with others.

- Respect yourself: When you act with integrity, you know that your work is yours and yours alone. You do not allow others to impersonate you on tests and exams. You do not buy or otherwise obtain term papers or assignments. You do the work. As a result, you know that you earned the grades that you receive, so you can be proud of your York degree. By acting with integrity in your course work, you are also practising a valuable professional skill that is important in all workplaces.

- Take responsibility: If you have acted in an academically dishonest way, you can demonstrate courage and take responsibility for your mistake. You can admit your mistake to your course instructor as soon as possible.

Students who engage in academic dishonesty can be subject to disciplinary action under the Senate Policy on Academic Honesty. **Your lack of familiarity with the Senate Policy and Guidelines on Academic Honesty does not constitute a defence against their application**. Some academic offences can also constitute offences under the Criminal Code of Canada, which means that you may also be subject to criminal charges.