Department of Economics, Faculty of Liberal Arts & Professional Studies, York University ECON 1530 3.00 Mathematics for Economists I (Sec A) [S1 2021] Course Outline

1.1 Course Webpage

eclass (Moodle): <u>eclass.yorku.ca</u>. After class starts, please check our course page on a regular basis (updated version of this course outline would be posted in eclass course page). *Please note: eclass course page may not be available till May 10, 2021*.

<u>1.2 Prerequisite / Co-requisite</u>

Grade 12U Advanced Functions or equivalent. 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 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 1930 3.00, GL/MODR 1930 3.00. *Note: Acceptable course substitutes are available in the Calendar.*

<u>1.3 Course Instructor/Contact</u>

Instructor: Simin Seury (PhD) Department of Economics, York University, 4700 Keele St., Toronto, ON M3J 1P3, CANADA Office Hours: **Virtual** (Weekly schedule of Zoom meetings and links would be available in course page) Phone: N/A. Email: **seury@yorku.ca**

<u>1.4 Lecture/Course Components</u> (asynchronous and synchronous components of lecture and tests/exams)

Lecture and in-class exams: Online during originally scheduled class time: TR 18:00-21:00 (EST).

Tutorial Hours: Thursdays: 18:00 - 19:00 (EST).

The delivery of this course depends on remote and online teaching and learning, using Learning Management System (LMS) of eclass (Moodle). There will be no in-person interactions or activities on campus.

You must be available online during the actual "class time" to attend in-class synchronous exams. All inclass synchronous exams would start at the beginning of scheduled class time (unless otherwise stated). Please make sure you are available during the entire scheduled class time, as we WILL NOT accommodate individual requests for alternative dates/times (NO EXCEPTIONS will be made).

Final Exam would be synchronous, and date/time of the Final Exam would be determined by the Registrar's Office during the S1 2021 exam period. You must be available online to attend the final exam accordingly. Again, we WILL NOT accommodate individual requests for alternative dates/times (NO EXCEPTIONS will be made).

For the **online lectures**, I would post recorded video lectures of the material sequentially during the scheduled class time (that is, I am going to post parts of each lecture one by one, as if you are listening in real time). In course webpage, under each section for a chapter, you will see entries titled "Chapter "x" Lecture Videos/links". The video clips would be in small segments, to give you the comfort of finishing one part, reviewing if necessary, and then moving on to the next clip.

Eclass (Moodle) announcements, folders, assessments, and forums would be used extensively for communication. In course webpage, under Forums, you would find a forum, titled "Forum - Chapter <u>(chapter number goes here)</u>". If you have a question related to that specific chapter, post it in the specified forum. If

you can, try to answer another student's questions, which would be a great learning experience even if the answers are not totally correct. It is also a good way for students to engage in a meaningful discussion and learn from each other. I would also monitor your response in the forum and include my comments, if needed, usually once a day, during weekdays. It is expected that you would check and read all available information before asking a question, and you would follow netiquette. Forums would be hidden during Midterms/Final Exam days. You must follow all eclass announcement on a regular basis.

A **Tentative Schedule** would be posted right below the "Course Outline" in our course page. This Tentative Schedule would be continuously updated as we would proceed, and this would provide a summary of our past/present/future (tentative) activities and serve as your schedule for this course.

Time-zones: Times for all activities, e.g. lectures, quizzes, tests, due dates for applications, are according to **local Toronto time (EST)**. If you are in a different time zone, please make sure you know how Toronto time converts to where you are. Errors in calculations are not an acceptable reason to miss tests or deadlines.

1.5 Technology Requirements

Access to a laptop or desktop computer with camera, microphone, and a strong, stable internet connection is required to fully participate in this course. Phones and tablets WILL NOT WORK for the Quizzes, Midterms and final exam. To check if you have high speed Internet connection, you can run tests, such as <u>Speedtest</u>. It is your responsibility to ensure that you are preventing common mishaps. (For example, backup copies of your documents, use antivirus software, run scheduled updates well ahead of an exam/test, etc.). Computer virus/malware, crashed drives, broken devices, lost or corrupted files, incompatible file formats, faulty internet, and any other mishaps related to technology are not acceptable grounds for missing a test/exam/deadline. All exams in this course are synchronous and if required, you might need to appear online on webcam for purposes relating to grading or academic integrity concerns. If you are not comfortable with these requirements, please consider whether you wish to enroll in this section of the course (there are asynchronous sections available during other semesters). Here are some useful links for student computing information, resources and help:

<u>Student Guide to Moodle</u> <u>Zoom@YorkU Best Practices</u> <u>Zoom@YorkU User Reference Guide</u> <u>Computing for Students Website</u> <u>Student Guide to eLearning at York University</u>

Several platforms will be used in this course (e.g., eclass (Moodle), ALEKS, Zoom, etc.) through which students will be required to interact. Students shall note the following:

- Zoom is hosted on servers in the U.S. Only authenticated users would be allowed to join our Zoom meeting, which means students will need to join the Zoom meeting(s) with their PPY (passport York) username and password. For signing in to the Zoom application with Single Sign-On (SSO), see: <u>https://lthelp.yorku.ca/94581-zoom/626184-logging-in-to-zoom-with-single-sign-on-sso?from search=51122503</u>
- Should there be any Zoom session with the entire class (or a subgroup of our class), if you have privacy concerns about your data, you can provide only your first name or a nickname when you join such a Zoom session and you can keep your webcam and microphone off. I am not providing permission to record any Zoom office hour session (unless you obtain written permission from me). Your instructor reserves the right to keep record of any potential Zoom/Internet security breach.
- For one-to-one Zoom session, I need to see you during our interaction and, therefore, you need to activate your webcam and microphone.
- For Technology requirements/FAQs for Moodle: <u>http://www.yorku.ca/moodle/students/faq/index.html</u>

1.6 Emails and Communication: Etiquette/Netiquette

Since we have online meeting sessions every week, in which I would answer your questions, and since you are supposed to post your questions in eclass (Moodle) forum, emails are meant to be restricted solely <u>for</u> <u>administrative concerns</u>, which cannot be solved otherwise. For example: sending me Accommodation information is a valid administrative concern, for you should contact me asap. On the other hand, all academic concerns are meant to be dealt through class lectures, virtual hours, and eclass forums. Accordingly, I am not going to respond to any content questions (issues that are already explained in course outline/ Tentative Schedule/ eclass (Moodle) Announcements etc.). We have hundreds of students each semester; even if only a small percent of the students is sending emails, it results in a lot of emails.

If, however, you have a question that is not explained in the contents and/or you cannot post it in forums, and you need to email me, follow standard formal/official etiquette. Here is a guideline about *how to write an email*, with only three easy steps:

[1]: Address your professor properly,

(I would always address you as "Dear Student". Tips: You can start your email with "Hi/Hello Professor". That way, you do not need to write my name each time. Also, just "Hi" or "Hey" cannot be a formal way to address anyone. If you do that, you would self-identify yourself as a person who did not read this outline).

[2]: State your administrative concern clearly, in a nice and precise manner. *(Tips: Make sure your "Caps Lock" key is not stuck.)*

[3]: Sign off (best/ regards etc.) with **Your full name** (no nicknames please), **full ID**, and course number 1530A. (We teach hundreds of students, several courses, often at multiple universities. So, please be precise about your details).

I will not be able to respond to your emails (or forum posts) outside business hours/during weekends/ during holidays. During weekdays, I will check forum at least once a day and I would strive to respond to your emails in no later than two business days (which means I would try my best to respond to your emails much earlier than that).

Netiquette is a set of rules or standards for creating a positive learning space online. It is imperative that you follow proper netiquette in your online communication (emails/forums) with your professor and classmates. See information provided by York University (<u>http://www.albion.com/netiquette/corerules.html</u>) and some other sources: <u>http://www.bbc.co.uk/webwise/guides/about-netiquette</u>, and <u>https://www.memphis.edu/fcbe/students/netiquette.php</u>.

For technical difficulties/issues during an exam, students can contact York University's IT support. Students are expected to keep log and record of all such difficulties and inform me by email (seury@yorku.ca) immediately.

2.1 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 to provide a deeper understanding of the Economic issue and how it can be resolved, if necessary. For example, 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. Many such topic sequences involving univariate functions are examined.

<u>2.2 Course Text / Requirements</u>:

Required: 6 Week ALEKS Access Code, Standalone ISBN: 9780073199658. This is a six-week subscription to ALEKS to complete Midterm Test 1 and quizzes, and to practice several relevant practice exercises. Algebra skills are highly correlated with undergraduate success in economics, and ALEKS can help you learn. Students can purchase the access code from our Bookstore (from York University Bookstore's site, go to <u>https://www.bookstore.yorku.ca/sell_access_codes.asp</u>, and scroll down to find ECON1530. Bookstore's listed Purchase Price is \$43.90 Canadian Dollars). Alternatively, students can also purchase directly from McGraw Hill, <u>https://www.aleks.com/sign_up</u>, with a credit card during the registration process (ecommerce pricing is around 25 US Dollars + tax).

Required Textbook: Sydsæter, Knut, Peter Hammond, Arne Strøm and Andres Carvajal. *Essential mathematics for economic analysis.* 5e. Pearson education. 2016. *Please note: We are not going to use MyMathLab in this course at all.*

2.3. Tentative Topics

The course would cover the following chapters from the textbook (as time permits):

Chapter 2 | Algebra

Chapter 3 | Solving Equations

- Chapter 4 | Functions of One Variable
- Chapter 5 | Properties of Functions
- Chapter 6 | Differentiation
- Chapter 7 | Derivatives in Use
- Chapter 8 | Single-Variable Optimization

Chapter 9 | Integration

A **Tentative (Weekly) Schedule** would be posted in the course page with more details. Your instructor reserves the right to make small changes to the coverage as the course develops.

3.1 Evaluation

Components	Due Date / Time / Structure ⁽¹⁾	Weight
Pre-Course Survey	Friday May 21, 2021 5:00 PM. Online Survey.	1%
Midterm 1	Tuesday May 25, 2021, during first half of our class time. Duration: 1 hour; online in ALEKS, synchronous.	20%
Midterm 2	Tuesday June 08, 2021, during first half of our class time. Duration: 1 hour; online in eclass (Moodle), synchronous.	20%
Quizzes	Several quizzes throughout the semester, online in ALEKS, asynchronous with specific deadlines. Duration: 30 minutes.	20%
Final Exam	TBA. According to the S1 Exam schedule. Syllabus: Cumulative (including everything covered throughout the semester); online in eclass (Moodle), synchronous.	33%
Participation & presentation	Online with specific deadlines.	5%
Post-Course Survey	Monday June 21, 2021 5:00 PM. Online Survey	1%

Note: (1) If there are any changes, students would be notified on or before 2nd week.

<u>3.2 Tests</u>

All Midterm Tests and Final Exam are online and synchronous (which means, all students enrolled in the course will participate at the same time). More information about tests and exams would be provided in our course website before each exam.

Quizzes would be asynchronous consisting of multiple-choice/ short answer / numeric questions. You will need to complete the ALEKS **initial knowledge check** before you can attempt any quiz, consisting of around 30 questions; this quiz would create your unique learning path. There is no time limit; you can start, pause, and continue later. But it is in your best interest to complete this ungraded knowledge check asap. The rest of the graded quizzes would in general have 5-10 questions, which would appear sequentially (you cannot go back to the previous question) during a time span of 30 minutes. Further instructions/details about quizzes would be posted in Moodle after/during the first week of our class.

Midterm Tests will be held on the date mentioned above (starting at the beginning of our regular class time, unless otherwise notified).

Midterm 1 will be in ALEKS, synchronous, consisting of multiple-choice / short answer / numeric questions. Duration: 1 hour.

Midterm 2 would be in eclass (Moodle). Duration: 1 hour. There would be two parts in Midterm 2; each part would appear sequentially for limited duration (you cannot go back to the previous part). In each part, you would need to solve problems and upload pictures of your answer. There would be no multiple-choice questions in Midterm 2.

Further details would be provided during the first two weeks of the semester and relevant instructions would be posted in the course page before each exam.

Final exam will be held according to the S1 2021 exam schedule (TBA). Syllabus would be **comprehensive**. That is, for the final exam, we will cover all the materials discussed in this course. There would be several problem-solving questions; you would need to answer all (no Multiple-Choice Questions). **The S1 Exam Period runs from June 23 to June 25, 2021** (inclusive). It is your responsibility as a student to ensure that you are available to write the exam online. No alternative date for the exam will be offered. Further instructions/details about the Final exam would be posted in the course page several days before the exam.

Your instructor reserves the right to re-write an exam. Exam questions would be similar to the end of the chapter questions from the textbook, ALEKS problem sets, and problems solved in our class. As such, no further sample questions would be provided. Students are expected to treat all exams and tests in this class as closed book exams. That is, exam questions would be designed to provide tight timing for each question, so that the timing is just enough to write the answer when a student knows the answer (the way they would need to know in a closed-book setting), and not enough time to look-up. Simple calculators are allowed. Exam questions will appear **sequentially** which means that you must complete the questions in order. You will not be permitted to go back, even if you left a question blank.

For Midterm 2 and Final Exam, you will be **required to submit answers that are handwritten, clearly readable, containing your full name, student ID and signature on top of each page**. If the appropriate answers are not submitted through eclass in due time and/or uploaded pictures are not readable, you will receive a grade of 0 on that assessment. If we have concerns about your work, we will withhold your grade until we establish that the writing of the test/exam was consistent with academic integrity standards.

Participation and presentation score would be determined from several participation tasks. For presentation, students would require presenting online with video and audio. Further details would be provided during class lectures and relevant instructions would be posted in the course page.

3.3 Missed exams/Tests and Other details

No permission is ever given to a student to write a test or exam in advance of its scheduled date.

No permission is ever given to a student to rewrite a test or exam to improve their grade.

There is no make-up for any quizzes. Since quizzes are asynchronous, it is in your best interest to attend the quizzes early enough (which means, do not wait till the last minute before the deadline). The marks from the lowest quiz will be dropped by default.

Students missing only one midterm may have the chance to write a make-up exam only if they were sick at the time of the test *and they did not attempt the original midterm*. Students would need to notify the instructor by email (seury@yorku.ca) of why they have missed the exam within 48 hours of the missed test (no doctor's notes required given our emergency COVID situation). Further instructions about missed exam would be provided in the course page. There is no option to write make-up of more than one missed exam. If a student misses both midterms, even if they attend the make-up exam, they will receive 0 (zero) out of the 2^{nd} missed midterm (0 out of 20%).

Midterm 1 make-up will be in ALEKS; it would be synchronous (during class time), consisting of multiplechoice / short answer / numeric questions. The probable date for this exam is June 15, 2021 (more details to be announced after Midterm 2). If you missed Midterm 1 and write make-up for Midterm 1, you cannot write make-up for Midterm 2, even if you miss Midterm 2 (students missing two midterms will get zero out of the 2nd missed midterm: 0 out of 20%). To discourage last minute cramming, Make-up midterm would consist of ALEKS algebra materials covered in Midterm 1 and Midterm 2 syllabus. Rest of the structure and duration of this test would be the same as our original Midterm 1. There are no other make-ups (that is, there is no make-up of a make-up exam).

Midterm 2 make-up will be in eclass; it would be synchronous (during class time), consisting of problem questions (no MCQs). The probable date for this exam is June 15, 2021 (more details to be announced after Midterm 2). If you write make-up for Midterm 2, you cannot write make-up for Midterm 1, even if you miss Midterm 1 (students missing two midterms will get zero out of the 2nd missed midterm: 0 out of 20%). To discourage last minute cramming, Make-up midterm would consist of materials covered in Midterm 1 and Midterm 2 syllabus. Rest of the structure and duration of this test would be the same as our original Midterm 2. There are no other make-ups (that is, there is no make-up of a make-up exam).

Students missing the final exam and requesting deferred exams would need to notify the instructor by email (seury@yorku.ca) of why they have missed the exam within 48 hours of this missed final exam and comply with the Department of Economics policy on deferred exams before a deferred exam will be granted. Deferred exam applications are handled directly by the department. The Deferred Final Exam structure may change according to the University's policy. There would be only one deferred exam date (likely to be held during the Summer term); the date of the deferred final exam is at the discretion of the course director and no other dates would be provided. Further details would be available in our course webpage before the final exam.

3.4 Grading and Re-evaluation Policy

To achieve a grade, you must earn it. Unless I made any record-keeping error regarding the scores you have earned, I will not be able to adjust your grade. The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A + = 9, A = 8, B + -7, C + = 5, etc.). Exams and quizzes will bear either a letter grade designation or a corresponding number grade (e.g. A + = 90 to 100,

A = 80 to 90, B+ = 75 to 79, etc.) Final course grades given by the instructor will use the standard York grading scale and may be adjusted to conform to Program or Faculty grades distribution profiles. Should there be any request for re-grading, your Instructor/TA/Grader reserves the right to re-grade the entire content of the exam (for example maybe your instructor/TA/Grader overlooked a problem/mistake in your answer during the first evaluation, but it might get noticed during re-evaluation). As such, your marks may increase, may decrease, or may remain the same after re-evaluation.

4.1 Academic honesty and integrity

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 (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. The following sample statement, to which you must agree, shows you how to be academically honest.

ACADEMIC HONESTY STATEMENT/AGREEMENT

- You will complete all your graded assignments, quizzes, tests, and exams solely by yourself unless explicitly directed by me as your instructor to do it differently. No other person will assist or complete the graded assignments/quizzes/exam/test for you. Impersonation, and receiving or giving any form of assistance, paid or not, from or to another person during the exam is cheating and breaches academic honesty principle, and will be subject to academic penalty. More specifically:
- You will complete the graded quizzes/exams/tests without any testing aids that are not approved by me as your instructor. This means that you are NOT ALLOWED to use your notes, the textbook, or any other paper or digital resources (including consulting others), unless explicitly allowed to do so by me as your instructor.
- You will not discuss the graded assignments/quizzes/exam/test questions or potential answers with anyone, including other students both in this course and elsewhere. This includes future online and in-person communication.
- Copying other people's words in your answers is not allowed and will be considered plagiarism/cheating. This means that you must put answers in your own words if you are using sources you have not written such as the course slides or other study notes.
- All test/exam materials are the property of the Department of Economics, York University, and unauthorized dissemination or recording of the test (including, but not limited to, unauthorized posting/emailing of any part of this exam) is prohibited. You will not replicate, copy, print, take picture or record any lecture and/or questions on the graded assignments/quizzes/exam/test to share with others.
- It is your responsibility as a student to conduct your academic work, including your exams, in the manner that adheres to the university's standards of academic integrity, as outlined in: "<u>https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/</u>".
- You must comply with the above Academic Honesty Statement to be allowed to write any exam/test/assignment/quiz. For that reason, the above information would be presented as a one-question quiz format for every graded component.

4.2 Letters of Accommodation

If you require accommodations or have any accessibility concerns about the course or course materials, please contact Student Accessibility Services (https://accessibility.students.yorku.ca) as soon as possible. If you have an accommodation letter, please submit it to me via email (<u>seury@yorku.ca</u>) as soon as possible, so we

can make the necessary arrangements. Please be sure to include your first name, last name, student number, course and section in which you are registered in the email.

4.3 Important Dates and ADD/Drop Deadlines for Winter 2021	S1 2021	
S1 Semester Start date [Note: our class starts on Tuesday, May 11, 2021]	Monday, May 10	
Last date to add a course without permission of instructor (also see Financial Deadlines)	Friday, May 14	
Last date to add a course with permission of instructor (also see Financial Deadlines)	Friday, May 21	
Last date to drop a course without receiving a grade (also see Financial Deadlines)	Monday, June 7	
Last Day of Classes – S1 Term		
The S1 classes end on Monday, June 21. For our course, the last class will be on Thursday, June 17, 2021.		
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on	June 8-June 21	
transcript – see note below)**		
S1 2021 Final Exam period (our exam date, TBA by registrar's office)	June 23-25	

******Policy and Guidelines on Withdrawn from Course:

http://secretariat-policies.info.yorku.ca/policies/withdrawn-from-course-w-policy-and-guidelines/

4.4 Other 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; <u>http://secretariatpolicies.info.yorku.ca</u>

- Senate Policy on Academic Honesty and the Academic Integrity Website: https://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
- Ethics Review Process for research involving human participants: <u>https://secretariat-policies.info.yorku.ca/policies/ethics-review-process-for-researchinvolving-human-participants-policy/</u>
- Academic Accommodation for Students with Disabilities (Policy): <u>https://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-studentswith-disabilities-policy/</u>
- Religious Observance Accommodation: <u>https://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-studentsreligious-observances-policy-guidelines-and-procedures/</u>
- Religious Observances Dates: <u>https://registrar.yorku.ca/enrol/dates/religious-accommodation-guidelines-2021-2021</u>
- Grading Scheme and Feedback (Senate) Policy: <u>http://secretariat-policies.info.yorku.ca/policies/grading-scheme-and-feedback-policy/</u>
- Important Sessional Dates: <u>https://registrar.yorku.ca/enrol/dates</u>
 Recordings and Copyright: 1) the audio-visual recordings provided as part of course material should be used for educational purposes only and as a means for enhancing accessibility; 2) students do not have permission to record, duplicate, copy and/or distribute the recordings outside of the class (these acts can violate not only copyright laws but also <u>FIPPA</u>); and 3) all recordings are to be destroyed after the end of classes.

Student conduct standards: <u>http://oscr.students.uit.yorku.ca/student-conduct</u>

GOOD LUCK! I wish you all the success in this course and in your future endeavour.