

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

**AP/ECON 1530 3.0 D: Introductory Mathematical Economics I**  
Fall 2020 Course Outline

**Instructor:** Ke Gu

**Email:** kegu@yorku.ca

**Office Hours:** Monday 7:00-7:30pm (after lecture time)

**Classes:** Monday 4:00-7:00pm; Location: **ZOOM** online

Teaching Assistant: TBA

Office Hours: TBA

Email: TBA

**Course Web Site:** <https://moodle.yorku.ca/>

**Prerequisites:** Grade 12U Advanced Functions or equivalent

**Co-requisite:**

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

**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 1930 3.00, GL/MODR 1930 3.00.

**Technical requirements for taking the course**

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](#)

### **Online Course Information:**

**\*Important:** 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. Technical requirements for taking the course are provided on the course web of Moodle

### **Organization of the Course:**

The entire course, including the participation/discussion and test-taking, will take place on the course's Moodle. The course has both synchronous and asynchronous elements. The lecture materials are first delivered synchronously during the lecture time through ZOOM. The class notes will be posted on our Moodle web each week for students to review the lecture materials especially for the students who could not attend ZOOM online lecture to study the course. Although we are scheduled to meet at scheduled class times and days of the week, this course has no live virtual meetings outside of lecture hours. Like an online course, you can learn the course material at your own pace through the textbook and class notes, following the syllabus of the course.

Several platforms will be used in this course (e.g., Moodle, Canvas, Zoom, etc.) through which students will interact with the course materials, the course director / TA, as well as with one another. Please review the syllabus to determine how the class meets (in whole or in part), and how office hours and presentations will be conducted. Several platforms will be used in this course (e.g., Moodle, Canvas, Zoom, etc.) through which students will interact with the course materials, the course director / TA, as well as with one another. Please review the syllabus to determine how the class meets (in whole or in part), and how office hours and presentations will be conducted.

Students shall note the following:

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

Technology requirements and FAQs for Moodle can be found [here](#).

## Course Description:

This course is designed to provide students necessary mathematical knowledge for the further studying of economics. The course starts from the review of algebra, linear equations, Functions of one variable, differentiation and derivatives in use. The second part of the course introduces the concepts of limits, continuity, series and L'Hopital rule, the method of single-variable optimization and the operation of integration. Some typical economics questions such as the demand/supply functions, the equilibrium point and consumer/producer surplus are examined.

## Required Text:

Knut Sydsaeter and Peter Hammond, Essential Mathematics for Economic Analysis, Fifth edition (ISBN 9781292074719), Pearson.

The text is available in both hard copy and digital version and can be bought or rent in York University bookstore.

## Course outline:

- The course covers Chapter 1-4 and 6-10 of Sydsaeter-Hammond textbook.
- The lecture are mainly based on the textbook, and all additional materials are included in slides. Therefore, the most priority should be on lecture slides and then the text.
- After the lecture, the slides are available on the moodle course web and it will be the main source of your study.

## Evaluation:

|                   |            |            |          |
|-------------------|------------|------------|----------|
| Quizzes           | 10%        | Bonus      | 2% (Max) |
| Two Midterm tests | 25% (Each) | Final Exam | 40%      |

- Quizzes: Starting from the second week of the lectures, there will be weekly on-line quizzes held on the moodle. When the quiz is available, I will post an announcement on the discussion board of moodle. You will have 5-day window to complete each quiz. Two quizzes with the lowest grades will be excluded from calculating of the quiz grade component.
- Midterm Tests: There are two midterm tests and each of them will be one-hour long during the regular class time on the following dates:
  - Midterm test 1: October 5th in class
  - Midterm test 2: November 9th in class

- There are no deferred midterm tests or exams. Students absent from the first midterm test will automatically have their final exam 65% and 90% if the second midterm test is missed.
- Final Exam: During Final Exam Period: December 9th-23rd. The final exam will be cumulative and will cover all materials discussed in class and the assigned problems. The date of the final exam will be scheduled by the Registrar's office.
- Students absent from the final exam will have to petition to the Faculty of Liberal Arts and Professional Studies (or their own faculty if they are not LAPS students) for a makeup exam.
- To prepare exam and familiar to the materials that we discussed in the class, I strongly encourage students to try your best to practice questions at the end of each sections and chapters.
- The first student who indicates my typo on the slides and post it on the discussion board will earn 0.5 point for each verified post. The maximum bonus points is 2.

### **Important Dates:**

|  |                   |
|--|-------------------|
| Classes start / end  | Sept. 14 - Dec. 7 |
| Examination period   | Dec. 9 - 23       |
| Reading week   | Oct. 10 - 16      |
| Last date to add a course without/with permission of instructor                            | Sept. 22 - Oct. 6 |
| Last date to drop a course without receiving a grade                                       | Nov. 6            |
| Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript) | Nov. 7 - Dec. 8   |

### **Important Information:**

The Senate Committee on Curriculum & Academic Standards (CCAS) provides a [Student Information Sheet](#) that includes:

- [York's Academic Honesty Policy](#) and Procedures / [Academic Integrity Web site](#)
- [Access/Disability](#)
- [Religious Observance Accommodation](#)
- [Student Code of Conduct](#)

Additional information:

- Academic Accommodation for Students with Disabilities
- Alternate Exam and Test Scheduling
- Grading Scheme and Feedback Policy

The Senate Grading Scheme and Feedback Policy stipulates that (a) the grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) be announced, and be available in writing, within the first two weeks of class, and that, (b) under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for ‘full year’ courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade.

- **”20% Rule”**

No examinations or tests collectively worth more than 20% of the final grade in a course will be given during the final 14 calendar days of classes in a term. The exceptions to the rule are classes which regularly meet Friday evenings or on Saturday and/or Sunday at any time, and courses offered in the compressed summer terms.

- Final course grades may be adjusted to conform to Program or Faculty grade distribution profiles.