



## Lectures

Lectures will be delivered synchronously online.

## Tutorials

The tutorials are an integral part of the course and are important to its successful completion. The tutorials will be delivered synchronously online. In each tutorial, the assignment submitted earlier that day will be discussed and solutions will be provided. Additional questions and problems that are relevant to the topics covered in the lectures may also be discussed in the tutorials. Students are strongly recommended to participate in the tutorials and are required to have webcams to do so.

## Course outline and coverage

The topics will be covered as time permits and the order is subject to change. The instructor will indicate which topics will be subject to testing on the final examination.

### ***Mathematical methods***

1. Linear algebra
2. Calculus
3. Optimisation

### ***Statistical methods***

4. Probability, random variables, and distributions
5. Estimation, hypothesis testing, and inference
6. Linear regression

## Recommended texts

Chiang, Alpha C. and Kevin Wainwright. *The fundamental methods of mathematical economics*. McGraw-Hill. Any recent edition.

Keller, Gerald. *Statistics for management and economics*. Cengage Learning. Any recent edition.

Sydsaeter, Knut, Peter Hammond, Atle Seierstad, and Arne Strom. *Further mathematics for economic analysis*. FT Prentice Hall. Any recent edition.

Tan, Soo. *Applied calculus for the managerial, life, and social sciences: A brief approach*. Cengage Learning. Any recent edition.

Wooldridge, Jeffrey M. *Introductory econometrics: A modern approach*. Cengage Learning. Any recent edition.

These textbooks are available from the [CU Bookstore](#) and many online book retailers.

## Online resources

This course is structured to follow selected chapters of the textbooks listed above. Online resources are available from the publishers' websites for new purchases of the Keller, Tan, and Wooldridge textbooks. These materials consist of practice problems, online

assignments, and practice tests. Access to these resources is not mandatory for the completion of the course.

### **Communications policy**

To contact the instructor or the T.A., please use the email function available on the cuLearn course page.

### **No distribution of course materials**

Posting of course material to Internet websites is prohibited. Materials created for this course, including presentations and posted notes, assignments, and examinations, remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

### **Academic support**

The [Centre for Student Academic Support \(CSAS\)](#) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning. CSAS offers academic assistance with online student success, course content, academic writing and skills development.

### **Plagiarism**

Please be aware that plagiarism is a serious offence at Carleton and should be recognised and avoided. For information on how to do so, please see "[Pammett on Plagiarism and Paraphrasing](#)."

### **Requests for academic accommodation**

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

#### ***Pregnancy obligation***

Write to the instructor with any requests for academic accommodation during the first week of class, or as soon as possible after the need for accommodation is known to exist. For more details, please visit [Equity Services](#).

#### ***Religious obligation***

Write to the instructor with any requests for academic accommodation during the first week of class, or as soon as possible after the need for accommodation is known to exist. For more details, please visit [Equity Services](#).

#### ***Students with disabilities***

Students with disabilities requiring academic accommodations in this course must contact a coordinator at the [Paul Menton Centre for Students with Disabilities \(PMC\)](#) to complete the necessary Letters of Accommodation. After registering with the PMC, students must make an appointment to meet and discuss their needs with the instructor in order to make the necessary arrangements as early in the intersession as possible.

For a complete list of accommodations see the following link:

<https://students.carleton.ca/course-outline/>.