

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.

- August 23, 25, 29, and 31, 2:00 to 3:30 p.m. ET

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, Resources, and Academic Accommodations

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found [HERE](#).