

Linear Optimization

MATH 5801W (MAT 5303), Winter 2020

[School of Mathematics and Statistics, Carleton University](#)

Instructor: Dr. Kevin Cheung

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Prerequisite: Course in linear algebra and permission of the School

Textbook: An official set of course notes is available for free through cuLearn. Supplementary videos accompanying the course notes are accessible online via in [cuLearn](#).

Lectures: The course is web-based with **no face-to-face lectures**. The scheduled meet time on Fridays from 12:35 to 13:25 is for written quizzes and special info sessions.

Instructor's Office Hours: Times to be announced.

Evaluation scheme:

The final mark consists of 100 marks distributed as follows:

Online quizzes (maximum 20 marks):

- top ten (out of eleven) quiz scores, maximum 2 marks each

Assignments (maximum 20 marks):

- four assignments, maximum 5 marks each

Written quizzes (maximum 20 marks):

- four written quizzes, maximum 5 marks each
- the dates for the written quizzes are Jan 24, Feb 14, Mar 13, Apr 3

Final exam (60 - W marks) where W is the total marks earned on the written quizzes

- This is a 3-hour exam scheduled by Carleton University. The exam will take place during the Winter 2020 final exam period. It is each student's responsibility to find out the correct exam date, time, and location and be available at the time of the exam. In particular, no travel plans should be made until the exam schedule is published.
- A **non-programmable calculator and a single sheet consisting of both sides of a letter-size page serving as memory aid will be admissible in the final examination**. No other aids are permitted.

Policies for online quizzes and assignments

- Students are required to make an Honour Pledge before they can access any of the online quizzes. Details on how to submit the Honour Pledge are provided in cuLearn.
- There are eleven online quizzes in total. Only the top ten quiz scores (up to 2 final marks each) will be used towards final mark calculation. For each quiz, three attempts are allowed and only the highest score over all the attempts will be counted. There is an enforced five-minute delay between successive attempts. Students are not permitted to consult anyone or any material other than the course material during each attempt of a quiz. Discussion of and inquiries on quiz questions in person or online are strictly prohibited before the final deadline of the quiz. However, between attempts, students

may consult the instructor regarding the course material on which the quiz questions are based. Detailed questions about specific questions on a quiz can be directed to the instructor only after the quiz has closed.

- Solutions to each assignment must be submitted in cuLearn as **a single PDF file** viewable using Acrobat Reader or Preview on macOS 10.15. Failure to follow these requirements and the instructions given in each assignment will result in a deduction or complete rejection of the submission, leading to a grade of zero for the assignment. There will be **no credit given for late or missed assignments**.

System requirements: Students must have reliable internet access and are **fully responsible for resolving their own computer/connection issues and learning how to create proper PDF files for problem set submissions**. **Students must also have an access to a printer**. The course content has been tested on Firefox version 68 with Javascript enabled on Windows 10 and macOS 10.15. Students having **technical issues** with cuLearn should contact the **ITS service desk**.

Communication: Announcements on course-related issues are made in cuLearn. In case of cuLearn system malfunction, communication may be made through Carleton's email system. **It is the students' responsibility to check for messages on cuLearn and their Carleton email account every business day. Communication between students and the instructor is through electronic means only except for PMC students with a letter requesting accommodation for other available means of communication.** All email to instructors and TAs must be made from students' Carleton email accounts. **Messages originating from non-Carleton University email addresses are typically ignored.**

Additional policies: There is **no** make-up for missed written quizzes. If you miss online quizzes or assignments due to illness or other conditions recognized by the University, you will need to provide appropriate supporting documentation for the missed work within two business days of returning to campus to qualify for make-up work. The manner or nature of the make-up work is decided by the instructor.

Students may request to have any evaluated term work regraded if it has been incorrectly graded. Such a request must be submitted to the instructor in writing (briefly describing what has been incorrectly graded) no later than five business days after the work is first returned. All regrades are final.

Time slots for final exam viewing will be available for sign up soon after all the final grades have been released in Carleton Central.

Plagiarism and Cheating: *Plagiarism* is defined in the undergraduate calendar as an instructional offence that occurs when a student uses or passes off "as one's own idea or product, work of another without expressly giving credit." This includes plagiarism involving material lifted from the Internet. Plagiarism is a serious offence and the penalties for students who are found to be plagiarizing or cheating may be **a failed grade and/or academic probation**.

Pregnancy/Religious Accommodation: Write to the instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the **Equity services website**.

Students with disabilities requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities could include but are not limited to mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC, 613-520-6608, every term to ensure that I receive your Letter of Accommodation, no later than two weeks before the first assignment is due or the first in-class test/midterm requiring accommodations. If you only require accommodations for your formally scheduled exam(s) in this course, please submit your request for accommodations to PMC by the deadlines published on the [PMC website](#).