Mathematical Software

MATH/COMP 3807 Early Summer 2019

School of Mathematics and Statistics, Carleton University

Instructor: Dr. Kevin Cheung

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Prerequisite: A grade of C- or higher in MATH 3806 or COMP 3806, or permission of School.

Description: Implementation of numerical methods using numerical software packages. Development of scientific and/or operations research applications using application programming interfaces of numerical or optimization libraries. Functional programming for data analysis and machine learning. Experience working with Python, C++, or Java is essential.

Textbook: There is no required textbook.

Lectures: Tue Thu 18:35 - 21:25

Tutorials: Thu 17:35 - 18:25

Instructor's Office Hours: Times to be announced.

Evaluation:

Weight	Type
10%	Class attendance and participation
25%	Quizzes (6 total, only top 5 scores count)
35%	Coding assignments (6 total, only top 5 scores count)
10%	Project presentation
20%	Final exam

Policies for quizzes and assignments

- Quizzes are held during tutorial. Each quiz is worth 5% with the lowest score dropped.
- Coding assignments are released in class on Thursdays. Each assignment consists of two parts. Part 1 requires submission by the end of the class. Part 2 can be submitted within 72 hours. Each assignment is worth 7% with the lowest score dropped.

Communication: Announcements on course-related issues are made in cuLearn. **It is the students' responsibility to check for messages on cuLearn and their Carleton email account every business day.** All email to instructors must be made from students' Carleton email accounts. **Messages originating from non-Carleton University email addresses are typically ignored.**

Final Examination: This is a **2-hour** exam scheduled by the University. The exam will take place during the Summer 2019 final exam period. It is the responsibility of each student to be available at the time of the examination. In particular, no travel plans should be made until the examination schedule is published. It is each student's responsibility to find out the correct date, time, and location of the exam.

A **single** handwritten or typed sheet consisting of **both sides** of an **8.5" x 11" page** serving as a memory aid will be **admissible** in the final examination. No other aids are permitted.

Additional policies: Illness (with doctor's note), bereavement (with supporting documentation), and other emergencies recognized by the University Regulations will be the only excuses accepted for any missed term work. Students who miss term work because of a recognized reason should bring appropriate documentation and contact the instructor as soon as possible and no more than two (2) business days of returning to campus. Failure to do so will result in a grade of zero for the missed term work.

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 three (3) 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.