MATH 156-002: Mathematics for Computational Science, Fall 2023

<u>Instructor</u>: Michael Epstein (michael.epstein@colostate.edu)

Office Hours: Mondays and Fridays 10-11am in the Calculus Center (TILT Great Hall)

Class Meetings: MTWF 2:00-2:50pm, Engineering E 205

Prerequisite: MATH 124 with a B or better; MATH 126 with a B or better or MATH 127 with a B or better.

<u>Course Overview</u>: Sets; relations; number systems; functions; sequences and series; concepts of differential and integral calculus as relevant to computational science.

<u>Textbook</u>: We will be using the Mathematics for Computational Science lecture notes by Dr. Alexander Hulpke et al. available at https://hdl.handle.net/10217/234999.

<u>Calculators</u>: You may use a scientific calculator in this class, however advanced calculators that perform symbolic computations are prohibited. You may not use a cell phone, computer, or tablet as a calculator on any quiz or test.

Important Dates:

Last day to add without override: Aug 27 Last day to add with override: Sep 6 Last day to drop: Sep 6 Last day to withdraw: Nov 10

EXAM SCHEDULE:

• Exam 1: Tuesday, October 10

• Exam 2: Tuesday, November 14

• Final Exam: Thursday, December 14, 11:50am-1:50pm

Grading: <u>Grade Distribution</u> The grade distribution will

Homework: 15% be no stricter than the following:

 Quizzes: 15%
 A: 90%-100%

 Exam 1: 20%
 B: 80%-89%

 Exam 2: 20%
 C: 70%-79%

 Final Exam: 30%
 F: Below 60%

<u>Exams</u> There will be two midterm exams and a cumulative final exam. The exam dates are listed above. No make up exams will be given, except for university excused absences with appropriate documentation. At the end of the semester, the lowest midterm score will be replaced with the final exam score if it is higher.

<u>Homework</u> We will use MyOpenMath for homework assignments. You will need to create a (free) MyOpenMath account in order to access the homework. One online homework assignment will be due most weeks during the semester. Unless otherwise specified, homework will be due on Monday evenings, and will typically cover the material from the previous week. Note that the scores will not automatically sync to Canvas; your overall homework score will be entered manually into the Canvas grade book at the end of the semester. Two homework assignments will be dropped at the end of the semester.

Quizzes We will generally have one in-class quiz per week, which will typically be on Tuesdays and cover the material from the previous week. One quiz will be dropped at the end of the semester.

<u>Announcements</u> Important course information, updates, and announcements will be posted to Canvas. Be sure to check Canvas regularly for the latest information and announcements.

Accommodations: Colorado State University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations must first contact the Student Disability Center before requesting accommodations for this class. The Student Disability Center (https://disabilitycenter.colostate.edu/) is located in TILT, room 121. Their phone number is 970-491-6385. Students who need accommodations in this course must contact the instructor in a timely manner (at least one week before examinations) to discuss needed accommodations.

Academic Integrity:

This course will adhere to the CSU Academic Integrity Policy as found on the Student' Responsibilities page of the CSU General Catalog and in the Student Conduct Code.

The following are all violations of the Academic Integrity Policy:

- Cheating; includes using unauthorized sources of information and providing or receiving unauthorized assistance on any form of academic work or engaging in any behavior specifically prohibited by the faculty member.
- Plagiarism; includes the copying of language, structure, ideas, or thoughts of another, and representing them as one's own without proper acknowledgment.
- Unauthorized Possession or Disposition of Academic Materials; includes the unauthorized selling or purchasing of examinations or other academic work; stealing another student's work; unauthorized entry to or use of material in a computer file; and using information from or possessing exams that an instructor did not authorize for release to students.
- Falsification; any untruth, either verbal or written, in one's academic work.
- Facilitation; knowingly assisting another to commit an act of academic misconduct.

You may not use the textbook, class notes, or other resources on any quiz or test. You may not receive assistance from another person on any quiz or test. Using any unauthorized assistance on a quiz or test will be considered cheating.

You may work with a classmate or tutor on homework problems but you may not submit the problems to homework help websites.

Violations may result in a grading penalty in this course and/or a report to the Office of Student Resolution Center.

<u>University Resources and Policies</u> You can find some information on university policies and resources available to you at the following page: https://col.st/2FA2g