MATH 156-801: Mathematics for Computational Science, Summer 2024

Instructor: Mats Johnson (<u>mats.johnson@colostate.edu</u>) Office Hours:

- Mondays 7:00 AM 8:00 AM
- Wednesdays 7:00 AM 8:00 AM
- Fridays 7:00 AM 8:00 AM

Prerequisite

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

Course Overview

Sets; relations; number systems; functions; sequences and series; concepts of differential and integral calculus as relevant to computational science.

This online course is ASYNCHRONOUS (meaning you do not need to come to class meetings at a certain time) and SELF-GUIDED (meaning that your learning will take place by reading the textbook and reading the notes posted on MyOpenMath), but is NOT SELF-PACED (meaning that you will need to keep up with the due dates for assignments and exams on the dates listed below). If this class does not suit your needs, please consult the schedule of classes to find an alternative course which will better suit you.

Textbook

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

Calculators

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

June 10: Second 8-week term begins June 17: Last Day to Add; Last Day to Drop June 19: Juneteenth Observed (WEDNESDAY) July 4: Independence Day Holiday (THURSDAY) June 18 through July 23: May Withdraw from Course August 2: Second 8-week term ends

Exam Schedule

- Exam 1 (Chapters I-IV): Monday, July 8
- Exam 2 (Chapters V-VII): Monday, July 29
- Final Exam (Chapters I-VIII): Friday, August 2

Grades

Note that the MyOpenMath grade book can sometimes be wonky (especially as it pertains to grade weights before all assignments are in the grade book) and may not show the correct grade at all times.

Grading: Homework: 30% Exam 1: 20% Exam 2: 20% Final Exam: 30%

Grade Distribution

The grade distribution will be no stricter than the following: A: 90%-100% B: 80%-89% C: 70%-79% D: 60%-69%

F: Below 60%

Homework

We will use MyOpenMath for homework assignments. You will need to create a (free) MyOpenMath account in order to access the homework. Online homework assignments will be due most Saturdays during the semester. See at the bottom of the page for specific homework due dates.

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 but can be viewed in your MyOpenMath grade book.

One homework assignment will be dropped at the end of the semester.

Exams

There will be two midterm exams and a cumulative final exam. These will be timed and will be taken through MyOpenMath. The exam dates are listed above. No make up exams will be given, except for university excused absences with appropriate documentation.

Announcements

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 (Link) 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 <u>Student'</u> <u>Responsibilities page of the CSU General Catalog</u> and in the <u>Student Conduct Code</u>. 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.

University Resources and Policies

You can find some information on university policies and resources available to you at the following page: Link.