CS 210: Scientific Computing

Syllabus

Fall 2023

General

- MWF 12:00 PM - 12:50 PM, Student Success Center 308
- Discussion A21: Thursday 1:00 PM - 2:50 PM, Chung 143
- Website: `http://www.cs.ucr.edu/~craigs/courses/2023-fall-cs-210/index.html`
- Textbook: Numerical Algorithms, by Justin Solomon
- Textbook: Scientific Computing, by Michael T. Heath

Instructor

- Craig Schroeder
- Office Hours: MWF 1:00 PM - 2:00 PM (after class), Chung 309, or by appointment
- Email: craigs@cs.ucr.edu

Structure

Website   The course website contains the course schedule, topics, and notes. Homework will be distributed and collected through eLearn. Announcements will also occasionally be made through eLearn.

Exams   This class will include one midterm and a final. The final will be cumulative, but it will be biased towards material after the midterm. There are no make-up midterm or final; there is simply no fair way to do this. If you know you will not be able to take one of the exams, you will need to make arrangements with the instructor in advance.

Homework   There will be weekly homework assignments, which are due on eLearn by end of day Sunday. Additionally, the lowest-scored homework will be dropped when computing your course grade.

Piazza   This class has a Piazza page: `http://piazza.com/ucr/fall2023/cs210/home`. This is a great place to ask questions. This is also a good place to seek clarifications or point out mistakes on the assignments. Chances are good that if you have a question, someone else has the same question. If you need to post code or other solutions to Piazza, please do so privately.

Grading   Your grade will be computed according to the grading scheme below. All students **must** complete the academic integrity quiz in order to receive a nonzero grade for the course.

Item	Contribution
homework	40%
midterm	30%
final	30%

Academic integrity

All graded items must be completed individually. The following are **not allowed** in this course. For the purposes of this course, they are violations of academic integrity. Violations of academic integrity will result in a score of 0 for the relevant assignment **and** a lowering of the final course grade by one letter grade (e.g., from A to B). In more severe or repeat cases, violations will result in an 'F' for the course and a referral to the campus academic integrity committee.

- Working on homework with another student or sharing solutions with another student.
- Asking or paying anyone to complete any portion of the course for you.
- Copying or referring to homework solutions, code, or pseudocode from any source (other than course resources such as lecture notes or the course textbook).
- Working on homework in a *public* Github repository (or anything else that results in your work being visible to other students or visible publicly), whether during or after the course. Working in a *private* Github repository is permitted, provided that repository stays private forever and is never shared. If you wish to share your code from this course with potential employers, please do so privately.
- Looking up answers/hints to homework or coding problems online. ("Researching the question.") The Internet is a very useful resource, and there are many reasonable places for it in this course (python library reference, as a supplement to lectures, further information on interesting topics, etc.) But there is a fine line between using the Internet as a tool for learning and using the Internet as a tool for cheating. **If you are not sure, ask.**

The following are explicitly **allowed**.

- Office hours (TA or instructor) are a great resource if you are stuck on a problem or otherwise struggling.
- This course has a Piazza page; please take advantage of it. If your question would contain code, solutions, or hints, please make the post private.
- There are no restrictions on using resources from the course (course textbook, lectures, lecture notes, course website, etc.).
- There are no restrictions on studying for exams with other students.

If you find yourself struggling in the course, *seek help early.* The longer you wait, the fewer options will be available.

Start homework early, especially coding parts. If you start the night before, your chances of successful completion are slim. Although the coding is not intended to take a long time, the time required for debugging is unpredictable and varies wildly from student to student.