Course Syllabus – Winter 2022

CSC 225: Introduction to Computer Organization

Course Objectives

- To understand how machine instructions are used to control a computer.
- Assembly programming
- To understand how high-level languages correspond to assembly and machine code.
- Introduction to architecture
- Introduction to compilation
- Introduction to C programming (and pointers!)
- Understanding the runtime stack

Prerequisites: CSC/CPE 101.

Recommended Texts:

- Introduction to Computing Systems (3rd Edition), Yale N. Patt and Sanjay J. Patel, McGraw Hill, 2020
- The C Programming Language (2nd Edition), Brian W. Kernighan and Dennis M. Ritchie, Prentice Hall, 1988

Email

I frequently post announcements on Canvas, and they get forwarded to your Cal Poly email account (if you have this setting enabled). Expect to check this account regularly so that you do not miss an announcement.

Class Attendance

I will not take roll, but I would like to think that you would do better if you attend my lectures as they are given. Slides will be available online, and older, recorded versions of lectures from previous virtual quarters will also be available.

Grading

NOTE: Regardless of the grade breakdown, **you must average at least a 65% on the quizzes/exams (midterms and final) or get at least a 70% on the final exam to receive a C- or better in the class.** If your exam average is less than 65% and you receive less than a 70% on the final, the highest grade that you can receive is a D.

40% - Assignments (8 total, 5% each)

Programming assignments will consist of short- or moderate-length programs which **must be completed individually**. The source code of your solution must be submitted electronically via GitHub Classroom for automated grading by the end of the day the assignment is due. I reserve the right to review your submitted code manually and adjust your automated grade accordingly.

On the day an assignment is due, your submission will be automatically graded 8 times:

- 3:00am, 6:00am, 9:00am, 12:00 noon, 3:00pm, 6:00pm, 9:00pm, and 12:00 midnight. **Make smart use of the automatic grading!**

Programming assignments may be submitted **one class day** (MWF) late for up to 70% credit; **one week** late, 50% credit.

15% - Midterm Exam #1

15% - Midterm Exam #2

30% - Final Exam

Grade Breakdown

I will *not* round:

93.0-100.0	A
90.0-92.99	A-
87.0-89.99	B+
83.0-86.99	B
80.0-82.99	B-
77.0-79.99	C+
73.0-76.99	C
70.0-72.99	C-
60.0-69.99	D
< 60.0	F

Plagiarism

Cooperative work is an important part of learning; you are encouraged to study together, discuss the lectures, laboratory concepts and computer architecture issues. But **DO NOT**,

- turn in duplicate work (even one line or code or comment)
- copy work (even one line) from another student's assignment or student's write-up.
- copy work (even one line) from a published source without credit.
- lend another student your assignment or write-up.
- look at someone else's working code to fix your problem
- write part (even one line) of another student's assignment.
- e-mail or transfer any of your files to another student.

If you violate these rules, you will receive a grade of F and a letter will be sent to the campus Judicial Affairs Office