California State University, Sacramento
College of Engineering and Computer Science

Computer Science 35: Introduction to Computer Architecture

Spring 2026 Syllabus

Instructor

Devin Cook, M.S.

Contact Information

I use the same e-mail address to answer questions and to receive your coursework. So, please use a descriptive subject in your e-mail. I get quite a bit of e-mail, and the subject helps a lot.

E-Mail	dcook@csus.edu
Office	Riverside Hall 5009

Website

All the information in this syllabus – as well as other helpful information presented during the course – can be found online.

Website	**athena.ecs.csus.edu/~dcook/35**

Course Description

Catalog Description

Internal representation of numeric and non-numeric data, assembly level machine architecture, addressing modes, subroutine linkage, polled input/output, interrupts, high-level language interfacing, macros and pseudo operations. Lecture two hours, technical activity and laboratory two hours.

Prerequisites

CSc 15

Textbook

None

Major Topics

- Numeric and non-numeric data representation. Representation of Elementary Language Data Types: integer, real, Boolean, character
- Processors, registers, and instruction encoding
- Von Neumann architecture and processor design philosophies
- Memory location alignments and data movement instructions
- Conditional logic
- Modules: defining subroutines, calling subroutines
- Addressing modes: registers and memory locations
- Interrupts, vector tables, and interaction with the operating system
- High-level language interfacing, inline assembly, introduction to code generation

Crashing the Course

- **All** student adds are done, in-person, during the second week of the Semester.
- Wait-listed students will be added first. But, only students who are physically present will be added.

Lectures

- Attendance is vital to your success in the course. If you miss a class, you are responsible for checking with a classmate about the material we covered.
- Please ask questions or give comments. I enjoy back-and-forth interactions with students.
- During lectures **no** electronic devices, of any type, are allowed. This includes laptops, phones, and other texting devices. **Only** tablets are allowed.
- I will provide all the lecture slides in PDF format on the website. So, you don't have to take notes.

Assignments

- You only get to submit each assignment **once** – so make sure you did it correctly!
- Late assignments are penalized. I will take off **25%**, per day, starting immediately after the assignment is due. Weekend days are counted.
- **Do not ask other students for help.** All assignments are individual work only.
- Any assignments done in prior semesters, *even if you took this class*, are **not** allowed. Any prior work will receive an automatic zero.

Academic Integrity

- Do **not** plagiarize. Plagiarism is the act of incorporating another person's work into yours and claiming it as your own.
- Do **not** aid any student to commit academic fraud. This means you **cannot** show your solution to another student or show how to do it.
- Do **not** use Discord for any channel related to the course. This will be considered cheating.
- In **any** minor case of cheating, both the student that copied the solution **and** the student who allowed it, will receive a zero. Any subsequent cheating will result in an automatic **F** in the course.
- Cheating on an exam, downloading code, having another student do your work, or using AI (in any way), will result in an automatic **F** in the course.
- Any cheating offense **will be reported to the Dean of Students.**

Grading

Title	Percent
Labs & Attendance	20%
Project / Quizzes	10%
Midterm Exams	45%
Final Exam	25%

- The Final is comprehensive.
- Any material covered in the lectures, or the notes can be included in the exams.
- **Note:** Depending on how much material is covered during the semester, the percentages may vary.