

Course Introduction

CS 272 Software Development

Welcome to CS 272!

While we wait for everyone to join...

- Join Zoom to see shared screen (optional)
- Visit usf-cs272-fall2022.github.io for class website
- Respond to poll at PollEv.com/sjengle



Ask Me (Almost) Anything!

- **r/AMA** (ask me ananything) is a popular subreddit
- Ask instructor **almost** any question (must follow the student code of conduct)
- Ask via **raising hand** on Zoom or in-person, **chat**, or anonymous **poll**: [PollEv.com/sjengle](https://www.poll-ev.com/sjengle)



Why Should You Take CS 272?

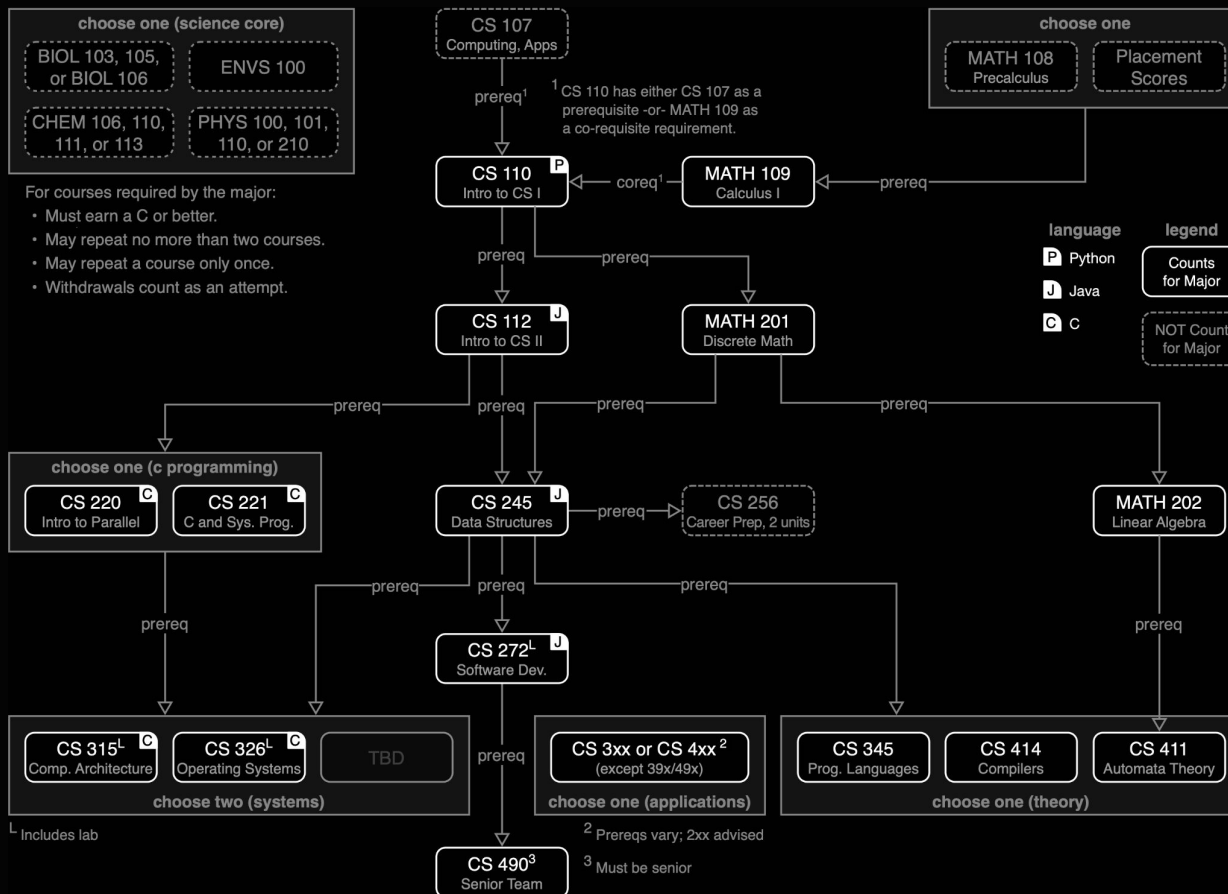
- Solve complex problems and write professional-quality code
- Learn core skills useful for engineers, developers, analysts, architects, administrators, scientists, researchers, managers...
- Create a full-stack (back-end and front-end) in-memory multithreaded web crawler and search engine
- Fulfill a CS major or CS minor requirement



Why Should You NOT Take CS 272?

- You have a full semester with other courses
 - Avoid too many time-consuming major courses at once
 - Must write THOUSANDS of lines of code for this class
- You want more programming experience first
 - Can take other 200 and 300-level courses before this one
 - Only need to take this one semester before CS 490





Open Major Requirements

- CS 221-02/03 C and Systems Programming
- CS 272-03/L03 Software Development
- CS 315-01/02/03 Computer Architecture
- CS 336-01 Computer Networks (Alternative to CS 315/326)
- CS 345-01/02 Programming Language Paradigms

*As of Tue Aug 16th



Open Applications + Electives

- CS 256-01 Career Prep (2 Credit Elective)
- CS 360-01 Data Visualization
- CS 462-01 Intro to AI
- CS 463-01 Machine Learning
- CS 486-02 Cloud Computing (2 Credits)
- CS 486-03 UX Design

*As of Tue Aug 16th



Advice from Past Students



Student Survey Results

Most surveyed students felt that...

- CS 272 was **more difficult** and **more time consuming** than CS 110, CS 112, CS 220/221, and CS 245
- Despite this, CS 272 was **worth the effort**



Time Management

"The hardest part of this class is to start. Trust me just **start early!**"

"DO NOT PLAGIARIZE! It is better to submit late!!"

"I highly recommend starting the projects early, or even in chunks! Project **deadlines will catch up to you** and will add stress to your life as the semester goes on."



Ask Questions

"It's **never too late** to reach out for help. I missed a few deadlines and I felt like it was too late to do anything about it. But the TA's and Sophie are super helpful."

"Work smarter not harder, **if you get stuck, just ask**, someone is willing to help."



Build Confidence

"It would be to let students coming into this class know they got it. I am a very nervous person, and at the beginning of this class I had almost **no confidence** in myself.

Professor Sophie, and TA's do miles more than enough to help, but each student has to meet them halfway! If you give the slightest sliver of effort, I think every student will learn a lot, and **flourish** in this class."



Rewarding Experience

"If you can be engaged and stay one step ahead (which you can!), **this class is a joy.**"

"..you will feel **amazed** how much you are capable of"

"Buckle up, because it's going to be a lot of work, but [this class] will by far be the **most rewarding experience** of your CS education to date!"



Being Successful

- Manage your time well; start early
- Don't get stuck; ask for help
- You belong here; build confidence
- Have fun; don't forget to sleep



Self-Care &
Community

Ask why.



Breaks



Importance of Breaks

- Research shows that even brief breaks improve focus and downtime helps with productivity and memory
- Opportunity to check in, socialize, and build community
 - Problem solving can feel isolating otherwise!
- Opportunity to add follow-up questions to poll



Fifteen (15) Minute Breaks

- Spend break doing **something different** with your body and your mind than during lecture
- Spend at least 5 minutes away from computer
 - Move around, stretch, breath, grab drink or snack, etc.
- Spend at least 5 minutes on participation
 - Socialize, post a question, take quiz or survey, etc.



15 Minute Break

- Quiet Space: inside classroom
- Social Space: outside classroom
- Post question at [PollEv.com/sjengle](https://www.poll-ev.com/sjengle)
- Complete participation (quiz, intro post, forum setup)

15:00

Stop



Course Syllabus

CS 272 Software Development
Professor Sophie Engle

Department of Computer Science
<https://www.cs.usfca.edu/>



**UNIVERSITY OF
SAN FRANCISCO**

Course Websites

- **Simple Syllabus**: Required for official course syllabus
- **Canvas**: LMS used to track assignments and grades
- **Course Website**: Faster (better?) access to course schedule and materials (also links to everything else)
- **Zoom**: Used for synchronous remote interaction (livestreams and recording, labs, office hours, and code reviews)



Course Websites

- **Github**: Version control system used for storing and sharing code, as well as submitting homework and projects
- **Piazza**: Course forums for asynchronous communication, occasionally synchronous in-class Q&A sessions
- **PollEverywhere**: Fully anonymous synchronous polls that do not require course enrollment



usf-cs272-fall2022.github.io



Questions?

