Introduction to Programming and Computer Science

CS 110A

Section: 003 CRN: 73016

Is CS 110A the right class for you?

- CS 110A is a broad introduction to fundamental concepts in computer science. Investigate how computers store and transmit information, how to solve problems with computers by designing and implementing algorithms using a programming language (programming in Python), and how computing fits into larger social issues. It is a gentle introduction to computer science and programming for people who have never programmed before. We will be using the Python programming language, but the concepts we cover are the same as in other programming languages.
- Our main focus in the programming part of the course will be to write programs with if-statements, loops, and functions/methods. After students complete CS 110A, they should be able to do something like this:
  Write a complete function/method that takes in a single numeric parameter. If the number is positive, use a loop to print a "Hello world!" message that number of times. Otherwise, print a message such as: "Error: number must be positive!"
  If you already can write a program like that, then you can skip CS 110A and take CS 110B, 111B, or 131B, depending on your choice of language. If you don't know how to do something like that, then CS 110A is the right class for you.
- CS 110A is not required for most certificates or degrees, but it is an important first step for those who have never programmed, before they take other programming courses.

- If you are not ready for college-level English, please take ENGL 88 or ESL 188 before this course.
- Algebra Advisory: you need to be comfortable with order of operations, variables and functions from algebra. For example, you should know how to evaluate an expression like:
  f(x) = 5 + 3 * x
  when x=2, you should be able to calculate that f(2) = 11.
- If you want to transfer and get a Bachelors Degree, assist.org has official information about which courses transfer (articulate) between schools. For example, you can see there that SFSU wants CS majors to take CS 110A, and also to know Java (as covered in our CS 111B and 111C courses).

Course Requirements

- I will be teaching 3 sections of CS 110A for Fall 2025. All of them are face-to-face at the Ocean Campus, full-term (August 18 - December 19):
  - CRN 73014 Section 001: Mondays and Wednesdays 11:10 AM - 1:00 PM in Batmale Hall room 453 (Apple MacOS Computers available in the classroom for students)
  - CRN 73015 Section 002: Mondays and Wednesdays 1:10 PM - 3:00 PM in Batmale Hall room 453 (Apple MacOS Computers available in the classroom for students)
  - CRN 73016 Section 003: Tuesdays and Thursdays 12:10 - 2:00 PM in Batmale Hall room 453 (Apple MacOS Computers available in the classroom for students)
  - My classes will NOT meet on Zoom - Students must come to class in the first weeks, and for exams on campus. I encourage all my students to come to class, where we will work together on practice exercises on computers in the classroom. All course material will be available online, for students to read, watch videos, and complete the activities anytime, by the due dates each week.
- You will need to use a computer so you can do homework for this class. Only a web browser is needed, so a simple computer or Chromebook is fine, but a phone is not enough - you need a full-size screen and keyboard. (A tablet with an external

keyboard can work, but a Chromebook or simple computer is better.) You may be able to borrow a chromebook and/or get wifi from CCSF. You will also be able to use a computer lab on campus.

- The textbook for this class is required for your grade, and it costs $64. It is interactive, so must be used online. The link will be available after you register for the course, but it is from ZyBooks. You may be able to get money for textbooks from the AS Bookloan program, if you apply at the beginning of semester.
- Learning to write computer programs is a time consuming and sometimes frustrating endeavor of open-ended problem-solving. I expect an average student to spend about 12 hours per week on this class: reading, watching videos, attending class, studying, working on programming assignments and other class work. If you don't have the time or dedication for such work, this class may not be for you. **Make sure to keep up with the course materials and do all the assignments before they are due.** Everything in this class builds cumulatively, so if you get behind, it is very difficult to pass the class. I am available to help via office hours and email, plus there are discussions and lots of opportunities to practice in this class.
- **You must come to class in person within the first 2 weeks of class, or else I will drop you from the class.** The final exam (December 17, 18, or 19) must be taken in person, on campus (on paper, without the use of a computer).

Instructor Information

Name: Craig Persiko
Email: cpersiko@ccsf.edu
Office Number: L468
Office Phone: 415-239-3332
Website
http://fog.ccsf.edu/~cpersiko
Office Hours

- Tuesdays and Thursdays from 11:00 AM – 12:00 noon in Batmale 468 (my office)

(plus other times by appointment - email me to make an appointment)

Course Information

Course Description/Overview

Broad introduction to fundamental concepts in computer science. Investigate how computers store and transmit information, how to design and implement algorithms using a programming language, and how computing fits into larger social issues.

Transferability

UC/CSU

Requisites/Advisories

RECOMMENDED PREP: (Intermediate algebra or higher) and (Readiness for college-level English or ESL 188)

Grading Options

Letter

Student Learning Outcomes

1. Write and predict the results of code using standard input and output and test and debug such programs
2. Evaluate and design algorithms that use selection, repetition, and decomposition to solve quantitative problems
3. Implement algorithms that feature conditionals, loops, and functions with parameters and return values using a programming language
4. Defend possible positive actions that address issues related to the impact of computers in society
5. Articulate how a variety of types of information can be stored in and transmitted by a computer using the binary number system

Class Meeting Information

Start and End Dates

August 19, 2025 - December 19, 2025

Important Dates:

Last day to add: September 5, 2025

Last day for refund: August 29, 2025

Last day to drop without W: September 5, 2025

Last day to drop with W: November 13, 2025

Last day to elect pass/no pass: NA

Class Meeting Information

Dates	Days	Times	Location
	08/15-12/19	12:10 pm - 02:00 pm	Batmale Hall 453

The final exam must be taken in person, on campus (on paper, without the use of a computer), at one of the following times:

- Wednesday, December 17 from 10:30 AM - 12:30 PM
- Thursday, December 18 from 1:00 - 3:00 PM
- Friday, December 19 from 1:00 - 3:00 PM

Communication Plan

Sharing ideas with each other is one of the best ways for you to learn, so when you have a question or problem, ask your classmates for help. You can email me anytime: please send me your entire program by email, and specify exactly what error messages or

output your program is producing, along with your question. I'm also available during my office hours listed above.

There is free tutoring available by advanced CCSF Computer Science students, via the CS Tutor Squad.

Texts/Reading

The textbook for this class is required for your grade, and it costs $64. It is interactive, so must be used online. The link is available in Canvas, but it is from ZyBooks. You may be able to get money for textbooks from the AS Bookloan program, if you apply at the beginning of semester.

Course Technology

Software and Computer Access

All your coursework and programming for this class can be done using free resources on the internet:

- For an easy web-based Python development environment, I recommend OnlineGDB.com. The free account is all you need for this class, so you can save your programs there.
- If you prefer, you can install Python on your own computer by downloading it from: https://www.python.org/

Use of CCSF computers, including remote access, is regulated by the CCSF Computer Usage Policy. Do not give passwords and other sensitive information to unauthorized persons. This means you shouldn't tell anyone your personal passwords and you shouldn't give class account passwords to people who aren't in this class.

Attendance Policies

You must come to class in person within the first 2 weeks of class, or else I will drop you from the class. You are expected to participate in class every week and submit all

assignments on time. I may drop you from the class if you don't post or submit anything, nor come to class for over two weeks, without explanation.

If you are feeling sick, please stay home, and email me. I'll be happy to help you keep up while you're away from class.

Grading Policies and Evaluation Methods

Your final score will be made up of the following components:

- 28% - Assignments (homework)
- 20% - zyBooks online textbook participation activities
- 5% - zyBooks challenge activities
- 10% - zyBooks Labs (programming exercises)
- 15% - Discussions in Canvas (includes some programming exercises)
- 7% - Midterm Project
- 10% - Final Examination on Python programming and related topics
- 5% - Circle of Champions project (communication with people who support your college goals)

Midterm and final grades will be assigned on the following percentage scale:

- 90% - 100% A
- 80% - 89% B
- 70% - 79% C
- 60% - 69% D
- 0 - 59% F

Students who do not take the final exam will be assigned a grade of "FW". An "FW" is an "F" grade that also indicates that the student did not complete the course. It is the same as an F for the purposes of Free City and financial aid.

Programming Assignments (Homework):

The best way to learn how to program is to do it! Assignments will be given once a week, but you should try to complete each assignment early, so you can ask questions and get help. You will each encounter problems that require more time than you anticipate to fix -- that's the nature of programming. So think of the assignments as due in the morning. Then you can ask questions in office hours or via email on the due date if necessary. Late submissions are accepted without penalties, but if you get behind in this course, it becomes very difficult to understand what's going on. So it's important to submit assignments on-time.

I will employ student workers to grade assignments for this class. If you have any questions or concerns about this arrangement or a particular grading decision the grader makes, please don't hesitate to tell me. I will be happy to review grading decisions on request.

Late Assignments:

Late submissions are accepted without penalties, but if you get behind in this course, it becomes very difficult to understand what's going on. So it's important to submit assignments on-time. You will get no credit for turning in my solution as your own. All programs you turn in must be your own, even after we have gone through a solution in class.

Academic Honesty:

Cheating of any kind will not be tolerated. It will result in a grade of 0 on the assignment or test in question and can be cause for disciplinary action, including suspension or expulsion. Cheating on assignments means copying code or answers from another source - that includes copying code from a web site, or submitting work written by someone else (including AI). Getting help from other sources is not cheating as long as you're not copying their work or allowing them to copy yours. All code and work that you submit must be written by you. On the exams, it is cheating to use a phone or computer, or to copy from other students.

Free CS Tutoring

The CS Tutor Squad provides free tutoring to CS students on campus and on Zoom. Tutors are current and former CS students and industry professionals who have

expertise in a variety of classes.

You can find more info, including their Zoom link and on-campus location, on their CS Tutor Squad website.

Equity Statement

The CCSF CS Department is committed to promoting equity, diversity, and inclusion in the field of computer science. We strive to make computer science accessible and exciting to all, particularly those who are often excluded from or face frequent identity discrimination in the field. If you have a suggestion for how we can better support you and/or your classmates, please reach out to any CS instructor or to the Department Chair. We will make sure your voice is heard.

For more information and resources outside of our department, please visit CCSF's Office of Student Equity.

Accommodations for Students with Disabilities

Students seeking disability-related accommodations are encouraged to register with Disabled Students Programs and Services located in Room 323 of the Rosenberg Library. DSPS can be contacted in person (Rosenberg 323), via phone (415) 452-5481, or via email at dspsacom@ccsf.edu. Please see the DSPS website for more information about office hours, and alternate locations.

If you already have approved accommodations for classroom or testing because of a disability, be sure to submit your DSPS accommodation document to the instructor as soon as possible. If you have emergency medical information to share or need special arrangements if the building needs to be evacuated, please make an appointment with the instructor as soon as possible.

Non-Discrimination and Anti-Harassment Policy

The San Francisco Community College District adheres to all applicable federal, state, and local laws and regulations that uphold the principle of equal opportunity and prohibit

discrimination and harassment on the basis of race, color, ancestry, national origin, ethnic group identification, religion, age, gender, gender identity, marital status, domestic partner status, sexual orientation, disability, AIDS/HIV status, medical conditions, status as Vietnam-era veteran, or past, current, or potential pregnancy or pregnancy-related conditions such as lactation, or on the basis of these perceived characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics.

These laws and regulations include but are not limited to the California Education Code, the California Code of Regulation Title 5, the Equal Employment Opportunity Act, the Americans with Disabilities Act, the Rehabilitation Act (1973) §504, and Title IX, which defines sexual harassment of students, including acts of sexual violence, as a form of sex-based discrimination. For more information about students' rights to access to the College's programs and activities, or if you believe you have been subject to discrimination or harassment, please contact CCSF's Title IX Coordinator: Tony Brown, J.D. Compliance Officer/Title IX Coordinator/Section 504 Coordinator Phone: 415-452-5123 Email: gabrown@ccsf.edu.

Standards of Conduct

Students who register in CCSF classes must abide by the CCSF Student Code of Conduct. Violation of the code is basis for referral to the Student Conduct Coordinator or dismissal from class or the College. See the Office of Student Affairs.

Collaborating on or copying of tests or homework in whole or in part will be considered an act of academic dishonesty. See these links on Plagiarism:

Encourage Academic Integrity and Prevent Plagiarism

Citing Information Sources

Library

City College of San Francisco's Library offers many services to help you with your classes.

Take online library workshops, learn how to get started on a research project, borrow textbooks and other instructional materials, and much more.

Borrow Technology from the Library - Chromebooks, laptops, and hotspots can be borrowed from all CCSF Libraries.

Visit City College libraries in person at Rosenberg (at Ocean Campus), the Chinatown/North Beach Center, the Downtown Center, the Evans Center, the John Adams Center, and the Mission Center.

A librarian is on-site and available to help during open hours.

Academic Tutoring

As a City College student, you can access many free services to help you succeed in your classes and navigate college. Please come to the STAR (student tutoring and resource) Center for free Peer and Professional tutoring and mentoring, individual or group study spaces, workshops that center your learning needs, an open-access computer lab with printing, and a welcoming community. Our centers and labs are free and available online and in person. Please join us: we care about your success!

Visit the STAR Center within the Learning Assistance Department.

Student Services

Financial Aid

Unlock Your Financial Aid Potential: FAFSA/CADAA Adventure Awaits! Learn more about FAFSA and CADAA. We encourage you to apply to maximize all Financial Aid resources! Come visit us in the Financial Aid Office located in MUB 270 or email: finaid@ccsf.edu

Counseling

Counselors are here to help you find your way through City College and support you in completing your educational goals. Please make an appointment to see a counselor by

visiting Counseling. To view your education plan, please visit Degree Works.

Admissions and Records

The Office of Admissions and Records/Registration is the beginning and the end, along with everything in between in your journey at CCSF. From getting started to registering each term to completing your degree and accessing your academic records, we provide the services to help ensure a smooth transition in achieving your educational goals. We want to be your partners on this journey. Visit us in MUB 130 (Registration) or MUB 188 (Admissions & Records).