



Computer Hardware
CNIT 103
Section: 931 CRN: 72102

Instructor Information

Name: Abigail Bornstein

Email: abigail.bornstein@mail.ccsf.edu

Office Number: Science Hall 34B, 50 Frida Kahlo Way, San Francisco

Website

<https://fog.ccsf.edu/~abornste/>

Office Hours

By appointment via ConferZoom

Course Information

Course Description/Overview

This course provides the knowledge and skills needed to install hardware, configure, repair, and maintain desktop and mobile computer systems in a typical office environment. Topics include hardware components and peripherals, assembly, maintenance, upgrading, and basic troubleshooting. Topics include: hardware components, fixed and mobile systems, terminology and function. Also covered are preventive maintenance and troubleshooting.

Transferability

CSU

Requisites/Advisories

RECOMMENDED PREP: CNIT 100

Grading Options

Letter, Pass/No Pass

This section of CNIT 103 is a 100% asynchronous online course. There are no required in-person or online meetings. There are however required weekly assignments with specific weekly due dates.

Prerequisites

CNIT 100 is an advisory to CNIT 103. This advisory can be waived, if you have a strong understanding of an operating system's file management, can use a browser to conduct research, and can format and manipulate a document using a word processing program such as Microsoft Word and a spreadsheet program such as Microsoft Excel. In addition, you will need the determination, discipline, and persistence to complete the work on a timely basis.

Student Learning Outcomes

1. Identify the major hardware and networking components, their functions, and their characteristics.
2. Describe proper handling, installation, configuration, and maintenance of the major hardware and networking components.
3. Analyze and resolve system faults using logical troubleshooting procedures.
4. Plan and design customized computer systems based on need assessment.
5. Explain virtualization and cloud computing concepts.

Class Meeting Information

Start and End Dates

August 31, 2026 - December 22, 2026

Important Dates:

Last day to add: September 22, 2026

Last day for refund: September 13, 2026

Last day to drop without W: September 22, 2026

Last day to drop with W: November 22, 2026

Last day to elect pass/no pass: 22-NOV-26

Communication Plan

Discussions:

Most questions can be answered within Canvas using the appropriate Discussions. Please always start with the appropriate Discussions. For private matters pertaining to a student's grades or other issues, you may opt for email.

Email:

Please use **Inbox** inside of Canvas. If you can not access Canvas, then use abigail.bornstein@mail.ccsf.edu. If you e-mail me at mail.ccsf.edu, be sure to put CNIT103 on the subject line of the message!

Online Expectations:

Although your instructor may log into the online class at other times, you can expect her to check in once per day Monday - Friday. Your instructor will not answer each and every forum posting, since students earn participation points for responding to classmates. Along with the instructor, students can look to his/her classmates who can ask and answer questions on the discussion forums.

Texts/Reading

eTextbook & online labs:

Covers CNIT 103 course materials & CNIT 104 course materials with a 12-month access license. CNIT 104 course materials become available to you, once you have enrolled in CNIT 104. If you plan to take CNIT 104, please make sure to do so either in Fall 2026 semester or Spring 2027 semester. After 12 months you will need to pay again for a new license. The license cannot be extended for any reason beyond 12 months. A new license will need to be purchased after 12 months.

Ascend Training Series: A+ 1201 & 1202 (V15), Ascend Education LLC. ISBN: 978-1-7363588-0-1.

Where to purchase: Students should purchase your Ascend Training Series A+ access code from within our Canvas course on the first day of class on August 31 in order to get the steepest discount. You can purchase inside of our Canvas course using a credit card for \$132. This grants a license for 12-months to both CNIT 103 course materials and if enrolled in CNIT 104, CNIT 104 course materials. If you have a school voucher to purchase your textbooks, then you must go through the school bookstore, which is charging \$185.50 + tax for the 12-month license. Given the HUGE price differential, students paying with a credit card should purchase inside our Canvas course. Students with a textbook voucher will need to purchase through the CCSF bookstore.

Note: The CNIT department uses the 1201 (Core 1) and 1202 (Core 2) or renamed as V15 course materials. These materials are pegged to the most current CompTIA A+ certification exam objectives. Attempting to purchase an access voucher outside our CNIT 103 Canvas course or outside of the CCSF bookstore may very likely get you the wrong access code. Please do not make the mistake of purchasing elsewhere and ending up with the wrong access code that cannot be refunded.

Course Technology

Computer Access:

This is an online class. As such you are expected to have access to either a PC or MAC computer with an Internet connection that meets the minimum requirements as listed by Canvas. Your computer and Internet access should be dependable. Please note - Chromebooks may not be sufficient to complete the online simulation and virtual labs. For an online class it is the student's responsibility to have a backup plan in case the computer he/she normally uses to access this online class is not functioning properly or is not available or is insufficient to complete the online labs. Do not wait until the last hour to complete the twice weekly assignments. Exam and assignment deadlines will not be extended due to individual computer or Internet connection problems. For your information, CCSF has several [PC and MAC computer labs](#) available to students throughout the week.

CCSF Student E-mail Account:

All CCSF students have been issued a CCSFmail account which ends in @mail.ccsf.edu. All important information from your instructor and the school will be sent to this student e-mail account. It is your responsibility to monitor this account throughout the semester. For more information on this account and how to forward messages to an alternative account, please refer to [CCSFmail FAQ](#)

Software:

1. Chrome - fully supported by Canvas, although other browsers can be used
2. Microsoft Word, TextEdit or Notepad for writing brief reports
3. Image manipulation software such as IrfanView (freeware) or MS Paint

Attendance Policies

Class Attendance:

Class attendance is required. In an online class this means logging into the class as well as engaging academically in course activities such as quizzes, discussion forums, and lab

assignments. You are required to log into the class at least once per week, although 3 or 4 times per week is recommended. Your instructor reserves the right to drop any student who does not log in AND engage academically in the course activities for more than 16 days. Although your instructor reserves the right to drop any student for lack of attendance, students should not depend on your instructor to do so. It is the student's responsibility to complete the online form in myRAM Portal that is needed to drop or withdraw from this class. If you simply stop attending class, the student will probably receive a failing grade for the course.

SPECIAL NOTE:

1. Any student who does not complete all parts of the 1a homework assignment due by 9/3 will be dropped in order to make room for students who are on the waitlist and ready to get started.
2. Any student who does not complete the 1b lab assignment due by 9/8 will be dropped. There is no possibility of passing this course without the etextbook, which includes more than 50 reading, simulation, and virtual online labs.

The etextbook, which includes the online labs, must be purchased within the first week of this course.

Take time to learn how your financial aid works: If your instructor withdraws the student due to lack of attendance based on the above policy and it is after the standard drop with full refund period, then the **student most likely will be financially liable to pay for the entire cost of the course**. A student needs to be sure that he/she will be able to actively engage in the class on a regular basis from the start of the semester all the way through to the very last day. If the student cannot make this semester long commitment, then the student should make sure he/she drops the course prior to the deadline to receive a full refund.

Please be aware of the the Important Dates listed above. Pay particular attention to the date stated for the last day to drop classes with a full refund.

Grading Policies and Evaluation Methods

Letter Grades:

A = 90% +
B = 80% - 89%
C = 70% - 79%
D = 60% - 69%
F = 59% or below

Distribution:

%	Category
50%	Online labs and Assignments
10%	Participation in Discussions
15%	Quizzes
25%	Exams: Mid-Term & Final

Online Labs & Assignments:

Online labs and homework assignments make up 50% of your final grade and are due on Tuesdays by 10 p.m. Please see the Schedule for homework assignment due dates.

Please take special note on the course Schedule: week 1a, week 8a, and week 16 are exceptions to the Tuesday due date.

Late Homework: Homework may be accepted up to 1 week late but with a 15% penalty. I will allow only two late homework assignments from each student. Exams may not be completed late.

Please be aware this course uses simulation software that allows you to get a simulated hands-on experience with the hardware. Sometimes students will need to make multiple attempts at each lab before they successfully complete the lab. For this reason, you should not start the homework on the last day it is due. You will need time to troubleshoot and possibly make a second or third attempt at your labs. Do not wait until the last day to complete your assignment. You will be assessed a 15% late penalty, if any lab appears in the Canvas gradebook as late. Beyond the automatic 1 week late homework date, you will not get extended time on the labs for any reason. Set a goal to have all homework completed no later than Monday each week. If you then need to redo the lab or do some troubleshooting, you will have a full day to accomplish this before the homework cut off date.

At the end of the semester, a student's 2 lowest lab scores will be dropped.

Participation:

Participation makes up 10% of your final grade. Participation points are based on posting or replying to the weekly Discussions topic on a regular basis. You are required to participate in 10 of the 14 Discussions covering the etextbook readings. Only discussions posted by the assigned weekly due date will earn points. Late postings are not worth any points.

Quizzes, Mid-Term, & Final Exam:

There will be 9 short chapter quizzes which make up 15% of your final grade. Please refer to the Schedule for quiz dates and material covered. The quizzes will be multiple choice, true-false, and fill-in-the-blank. You get 2 attempts at each quiz. The highest score counts.

Your midterm and final exams combined make up 25% of your course grade.

The Mid-Term Exam is based on any materials covered during the first half of the course. The mid-term exam will be multiple choice, true-false, and fill-in-the-blank. The mid-term exam must be taken during the scheduled week - Wednesday, October 21 - **SATURDAY, October 24 by 10 p.m. PST** - no exceptions. There is no make-up mid-term exam. Please mark your calendar. Please take special notice of the SATURDAY due date.

The final exam is comprehensive and will be multiple choice, true-false, and fill-in-the-blank. The final exam must be taken during the scheduled week - Wednesday, December 16 - **SATURDAY, December 19 by 10 p.m. PST** - no exceptions. There is no make-up final exam. Please mark your calendar. Please take special notice of the SATURDAY due date.

You are responsible for knowing these dates and completing your mid-term and final exam by the due date. **Do not wait until the last minute to take your online exams.** If you run into technical or other difficulties at the last minute, you will still be responsible for completing your exams by the due date.

Accommodations for Students with Disabilities

Students who need disability-related accommodations should register with Disability Services & Programs for Students (DSPS). DSPS can be reached in person on the first floor of the Student Success Building, by phone at (415) 452-5481, or by email at dspsacom@ccsf.edu. Visit the [DSPS website](#) for office hours and information about services at the John Adams and Mission Centers.

If you have approved accommodations, please provide your current DSPS accommodation letter (CATAV) to your instructor as soon as possible. Accommodation letters must be renewed each semester. If you have disability- or medical-related needs, including emergency evacuation accommodations, please contact a DSPS counselor.

DSPS also offers accessible computer labs located in Batmale 231 and John Adams 104 and are open to all students.

Non-Discrimination and Anti-Harassment Policy

CCSF 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, sex, gender, gender identity, gender expression, marital status, domestic partner status, sexual orientation, disability or medical conditions, AIDS/HIV status, military or veteran status, pregnancy or pregnancy-related conditions, 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 prohibits sex-based discrimination including sexual harassment, sexual assault, domestic/dating violence, and stalking. For more information about students' rights to access the College's programs and activities, or if you believe you have been subjected to discrimination or harassment, please visit the Office of Civil Rights Compliance (OCRC) webpage to submit an online report or contact [CCSF's Title IX Coordinator, Alex Brouwer](#) at TitleIX@ccsf.edu. If you are a pregnant student, please contact the Title IX Coordinator to learn more about your rights including how to request reasonable accommodations.

Equity Statement

Education is for all who enter the doors of this college. Students of varying backgrounds, races, abilities, nationalities, genders, sexual orientations, beliefs, religions, and socio-economic status are welcome. Diversity in experience and perspective related to the topics covered in class are encouraged to be brought into discussions.

Standards of Conduct

Students who register in CCSF classes must abide by the [CCSF Student Code of Conduct](#). Violation of the code is the basis for referral to the Office of Student Conduct & Discipline and may result in 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 resources on plagiarism:

[Encourage Academic Integrity and Prevent Plagiarism](#)

[Citing Information Sources](#)

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 [Tutoring Centers](#).

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](#).

Student Services

Ram Resources

[Ram Resources](#) is a searchable resource hub to help you navigate CCSF programs, services, and resources.

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. Visit the Financial Aid Office located in SSC Building 112. Email: finaid@ccsf.edu or [Financial Aid Virtual Counter](#).

Counseling

[Counselors](#) are here to help you find your way through City College. Create an [Educational Plan](#) with a Counselor and make progress towards your academic goals.

Admissions and Records

The [Office of Admissions and Records/Registration](#) can help with applying to CCSF, registering for classes, accessing academic records, and completing your degree. Visit SSC 1124 for assistance.

THE INSTRUCTOR RESERVES THE RIGHT TO CHANGE ANY PORTION OF THIS SYLLABUS & CLASS SCHEDULE AT ANY TIME.

This syllabus and the class schedule is subject to change throughout the semester due to emergent student needs, important new learning opportunities, or other unforeseen situations. In the event a change must be made, the instructor will notify the students as soon as practically possible, and provide an updated syllabus and schedule within Canvas.

Last updated: 8/17/2026