Welcome to CS 61A!
Lecture will begin at 2:10pm.
(Until then, you just get to watch us type.)

Looking for something to do? Try reading the "Syllabus" link at the top of cs61a.org
Feel free to ask questions in the Zoom chat.

Your Instructors
John DeNero
denero@berkeley.edu
CS 61A instructor every fall since 2011 (and some spring semesters as well)
Teaching professor in EECS and help with the Data Science undergraduate program
Research focused on machine translation
Office hours after next week (Aug 30):
• 2-3 Tuesday in 101A Warren Hall
• 8:45-9:30 Friday on Clark Kerr Track
• 16:15-16:45 Friday on Memorial Glade

Justin Yokota
jyokota@berkeley.edu
First semester teaching 61A!
Prior to this, taught 61C as a TA/Head TA/Instructor for 8 semesters
Master's at Berkeley working in computational game theory
Office hours after next week (Aug 30):
• 1-2 Tuesday & Thursday in 781 Soda
• 4-5 Tuesday in 101A Warren Hall
• 2-3 Monday & Wednesday in 781 Soda

61A Course Staff

About the Course
Lecture: Videos posted to cs61a.org before live lecture
Lab: Practice ideas from lecture on a computer (often in pairs)
Discussion: Practice ideas from lecture on paper (often in groups)
Assignments: Weekly homework + 4 large projects
Staff Office Hours: Get 1-on-1 help with assignments & work with peers
Online textbook: http://composingprograms.com

Monday-Wednesday: Attend lab and complete the lab assignment
Wednesday-Friday: Attend discussion
Watch (or to go) lecture before you show up to lab/discussion!
Sunday/Monday/Tuesday: Start on the homework or project
Wednesday/Thursday: Finish the homework or project
Friday: Finish projects you didn't finish on Thursday

Asking Questions
Ed: All staff (private posts) and students (public posts)
cs61a@berkeley.edu: Head TAs and both instructors
denero@berkeley.edu or jyokota@berkeley.edu: Often the slowest option
cs61a.org: Self-service answers to many questions
cs61a.org/contact/: Even more ways to reach the course staff

An Introduction to Computer Science
What is Computer Science?

- Systems
- Artificial Intelligence
- Graphics
- Security
- Networking
- Programming Languages
- Theory
- Scientific Computing

What problems can be solved using computation, how to solve those problems, and what techniques lead to effective solutions.

What is This Course About?

- A course about managing complexity
- Mastering abstraction
- Programming paradigms
- An introduction to programming
- Full understanding of Python fundamentals
- Combining multiple ideas in large projects
- How computers interpret programming languages
- Different types of languages: Scheme & SQL

A challenging course that will demand a lot of you.

Should you take CS 61A?

According to the Syllabus

There is no formal programming-related prerequisite for CS 61A, but...

- Taking the course without any prior programming experience is typically very challenging.
- Most CS 61A students have had significant prior programming experience.
- Students who take the course without prior programming experience typically must work substantially harder to master the material and tend to receive lower final grades in the course.

Students who take the course later often get more out of it due to increased understanding.

CS 10: The Beauty and Joy of Computing

Designed for students without prior experience

A programming environment created by Berkeley, now used in courses around the world and online

An introduction to fundamentals in Python that sets students up for success in CS 61A

It looks full, but seats are reserved for students currently enrolled in CS 61A


Data C88C (Formerly CS 88): Computational Structures in Data Science

Based on CS 61A, but covers only 3 out of 4 units worth of the content:

- Two programming projects (instead of four) that are adapted from CS 61A projects
- Everything you need to know to continue on to CS 61B
- Omits the unit on how programs run other programs

Designed for students taking Data 8 (Foundations of Data Science), but is now independent

The course might be full, but we're investigating expansion options.

Course Policies

Learning
Community
Course Staff

Details...
[https://cs61a.org/articles/about/](https://cs61a.org/articles/about/)
Collaboration

Working together is highly encouraged:
- Discuss everything with each other; learn from your fellow students!
- Some projects can be completed with a partner
- Choose a partner from your discussion section

What constitutes academic misconduct?
- Please don't look at someone else's code!
  Exceptions: lab, your project partner, or after you already solved the problem
- Please don't tell other people the answers! You can point them to what is wrong and describe how to fix it or show them a related example
- Copying project solutions causes people to fail the course
- We really do catch people who violate the rules, and we're getting better at it

Build good habits now

Getting Help

If you're struggling, let us know.
If you need more time, ask for it.
If you need special accommodations, make an appointment.

Let's Stop Harassment & Discrimination

Disparaging remarks targeting a particular gender, race, or ethnicity are not acceptable.

From the Berkeley Principles of Community:
"We affirm the dignity of all individuals and strive to uphold a just community in which discrimination and hate are not tolerated."

From the EECS department mission:
"Diversity, equity, and inclusion are core values in the Department of Electrical Engineering and Computer Sciences. Our excellence can only be fully realized by faculty, students, and staff who share our commitment to these values."

All faculty and staff members are mandated reporters. If we ever receive a report of harassment, we must report to the Office for the Prevention of Harassment & Discrimination.
- CS61A Anonymous feedback form: If you want to stay anonymous but make us aware of something happening in the course.
- EECS Student Climate & Incident Reporting Form: Informs the EECS department of any issues. You can also contact Susanne Kauer (skauer@berkeley.edu) directly.

The Best Approach to CS 61A

Help each other understand concepts in the class, whether in section, on Ed, or in study groups, without expectation of anything in return.

Be great project partners by listening to what your partner suggests and helping them understand the work you've done together.

Recognize that we're all valuable members of the CS community!

Composing Programs

Demo