

Classes will start on Berkeley Time!

(we are starting 10 minutes after the listed start (so we start at
8:40))

please talk to each other it will be less awkward

Discussion 0

Welcome to CS61A 🙄

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Announcements

- Welcome! 🎉
- HW 1 released Friday, due next Thursday (this schedule will be pretty consistent)
- First Lab next Wednesday 👁️

All slides can be found on

teaching.roux1.es

Agenda 🐱

- A bit about me
- Ice-breaker
- Logistics (Lab/Discussion)
- Lost on the Moon
- Course info + tips + Q&A

About me

- Second-year (Intended CS + Music Major)
- 2nd Semester on course staff
- From Hong Kong!
- I solve Rubik's cubes competitively
 - That's where my pseudonym comes from 🙄
- I love cats 🐱

Ice-Breaker!

- Turn to people around you! (in around groups of four)
 - Introduce yourselves - share your *name, major, pronouns (if comfortable), year, and something interesting about yourself*
- After 5-7 minutes, we'll share this with the whole class!
 - Additional question: What questions do you have on CS @ Cal
- This is a *great* opportunity to get to know people in this section!

Logistics



Discussions

- Discussion sections will have more conceptual review
- We generally won't finish all questions on the worksheet
- If you have a question at any point in time during the discussion, *please* ask!
 - Please be respectful of each other
- Attendance will be done during discussion, and you need to go to **10** out of **12** discussions to get full credit for discussion. (If you want a version of CS 61A without as much guidance, consider a mega section)
 - This means that you don't need to attend every single discussion!
- Worksheets can be found on cs61a.org.
- If for some reason you can't make my discussion (due to time conflicts), email another TA, or join the mega section
- Excused absences: email me!

Mega Discussion Sections

- Can switch to the mega section whenever
 - Just switch on sections tool
 - If you find that this section doesn't work for you, do this
- Time conflicts - join the mega section, and email your situation to `cs61a@`, or make a private post on Ed.
- This section is designed to be larger and have less peer-to-peer interaction
- Your call on whether you find this section more useful

Labs

- Labs are somewhat similar to discussions, except you code
- I'll start with a mini-lecture
- Labs are collaborative!
- Whenever you have a question, feel free to talk to your peers, or raise your hand up, and I, or one of the lab assistants, will come over
- Attendance for labs, similarly to discussions, is also required. (You need to go to 10 out of 12 possible labs to get full credit, and also complete the assignments for 1 point each.)
- To get full credit for labs, you need to attend (1 point), and also submit the lab (1 point)

Office Hours

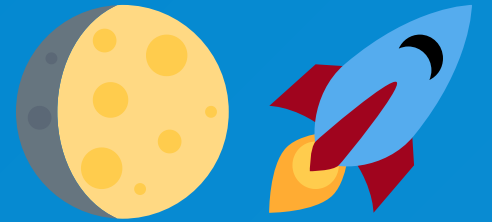
- Office Hours
 - My office hours have yet to be determined, but they'll be updated on my website once I know when they'll be.
 - This slide deck will also be updated 🙄
- There are 4 different types of office hours that you can go to in general
 - Advising office hours - not directly related to content
 - In-person office hours - go to a physical room (can work collaboratively!) and join a queue to get help from course staff
 - Online office hours - 20-minute session with course staff for debugging or conceptual questions.
 - Instructor office hours - no questions on assignments, only on concepts

Course Assignments

There are 3 different types of assignments:

- Lab
 - Due date is very close to the day of our synchronous lab.
- Homework
 - Generally due in on Thursday
- Projects
 - 4 different projects
 - Generally larger programming projects
 - You can work with someone else on them

Lost on the Moon



Lost on the Moon

Your spaceship has just crashed on the moon. You were scheduled to rendezvous with a mother ship 200 miles away on the lighted surface of the moon, but the rough landing has ruined your ship and destroyed all the equipment on board except for the 15 items listed below. Your crew's survival depends on reaching the mother ship, so you must choose the most critical items available for the 200-mile trip. Your task is to rank the 15 items in terms of their importance for survival. Place a number 1 by the most important item, number 2 by the second most important, and so on, through number 15, the least important.

- Work 5 minutes by yourself
- Work 10 minutes in groups of 4 (in the group from earlier)

NASA Rankings

Ranking	Item	Ranking	Item
1	Oxygen	9	Self-inflating Life raft
2	Water	10	Signal Flares
3	Stellar Map	11	Pistols
4	Food Concentrate	12	Dehydrated Milk
5	FM Receiver/Transmitter	13	Heating Unit
6	Nylon Rope	14	Magnetic Compass
7	First-aid Kit	15	Matches
8	Parachute Silk		

Reasoning

EGN-1002

Engineering Orientation

Lost on the moon – NASA rank

The answers below were based on NASA's best judgments given the information and knowledge available to them at the time.

NASA rank	Items	Comment
15	Box of matches	No oxygen to sustain flame, virtually worthless
04	Food concentrate	Efficient means of supplying energy requirements
06	50 feet of rope	Useful for climbing and for tying things together
08	A parachute	Shelter against the sun's rays
13	Solar-powered portable heater	Useful only if party landed on the dark side
11	Two 0.45 caliber pistols	Possible means of self-propulsion
12	One case of dehydrated milk	Bulkier duplication of food concentrate
01	Two 100-pound tanks of oxygen	Fills respiration requirement
03	A map of the Moon	Primary means of navigation
09	Self-inflating life raft	CO ₂ bottle in military raft may be used for propulsion
14	Magnetic compass	Magnetic field on moon is not polarized; worthless for navigation
02	5 gallons of water	Replacement for tremendous liquid loss on lighted side
10	Signal flares	Distress call when line of sight is possible
07	First-aid kit with injection needles	Needles for vitamins, medicines, etc., will fit special aperture in NASA space suits
05	Solar-powered FM receiver-transmitter	For communication with mother ship; but FM requires line-of-sight transmission and short ranges

Attendance

links.roux1.es/zero

(Attendance forms after this one won't be nearly as long 🙄)

(that's an I rather than a 1)

Course Advice

Course Website

- The course website is *super* useful!

EdSTEM

- How to ask questions
- How to ask a private question (with the template!)
- The resources/index button

61A General Information

- This class is not designed for people without prior coding experience
 - Something like AP CS A is enough to get started with 61A
 - If you don't have prior experience, consider taking something like CS 10 or Data 8 instead (CS 10 is recommended)
 - It's still possible to do well in this class without prior experience
 - Prior data has shown that only around 10% of people without prior experience can get a B+ or above

61A Resources

- This class is most definitely difficult, but it also has the most resources out of any CS lower division class here (everything can be found on cs61a.org)
 - Office Hours
 - Tutor Sections
 - Video Walkthroughs/Past Exams
- Please don't stress 😓
 - 61A has the infrastructure to help students, so please reach out to anyone on course staff if you're looking for advice or just want general help
 - **Everyone** struggles in this class
 - There are Lab + HW drops as well as opportunity for extra credit!

61A Resources

- I'm also a resource!
 - I took this class in Fall 2021 (very recently!), so I still remember what it was like to struggle through this class, and have seen other people go through those same things.
 - Please feel free to email me whenever you have anything to ask - I'll respond within 24 hours (if you don't see a message then, please bump the email thread). I'm always available to talk (not just related to CS61A!), give advice, and help out in any possible way I can
- Your classmates can help too!

61A Resources

- cs61a.org/contact
 - Contains different ways to contact course staff - some of them might be more useful to you in certain situations - please take a look at them
- [Extension Request Form \(go.cs61a.org/extensions\)](https://go.cs61a.org/extensions)
 - If you want to request an extension, please do it here!
 - 24-hour extensions (past an assignment deadline) are guaranteed to be approved!
 - They take time to show up on `okpy`

Mental Health Resources

- CAPS:
 - If you need to talk to a professional, please call CAPS at 510-642-9494.
- After Hours Assistance
 - For any assistance after hours, details on what to do can be found at [this link](#)
- Me!
 - While I'm not a professional in the slightest, I'm more than happy to talk to you about anything.

Thank you! 🎉

I'm excited to be here this semester! I hope you all have a good one!

Anonymous Feedback Form

links.roux1.es/feedback

Please give me feedback on what to improve!