



Samueli
Computer Science

Fall 2021 Computer Science Town Hall

Ask questions and get your voice heard!

Wednesday, November 10
6:30 - 8:30 PM PT
Mong Auditorium and Online



Land Acknowledgement

UCLA acknowledges our presence on the traditional, ancestral and unceded territory of the Gabrielino/Tongva peoples.



Agenda

1. Introductions
2. Opening Statements
3. Diversity and Inclusion
4. Academic Curriculum



Introductions

Professors

Cho, Eggert, Gafni, Korf, Millstein, Mirzasoleiman,
Nachenberg, Reinman, Smallberg, Sun, Zhang

Staff

Alina, Cassandra, Peyton

Classes you teach

Favourite food



Structure

- Opening Statements
- Present survey results
- Ask questions through Slido (can be anonymous)
 - Upvote questions you want answered
- Guiding questions
- Open Slido Q&A
 - Ask questions live (in-person only): sign waiver, please **put your name down in slido**



slido link!

Live Questions

tinyurl.com/cs-townhall-f2021



Opening Statement

Vice-Chair Glenn Reinman

Live Questions

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Computer Science Department Commitments

1. Establish an EDI committee led by Prof. Yizhou Sun and include representatives of faculty and students
2. Hold biannual department town hall meetings with student input to address relevant issues and identify potential solutions
3. Improve faculty mentoring and teaching in classes and labs to promote an equitable and inclusive culture
4. Increase access to information on resources and support (faculty, staff, counseling, research and internship opportunities)
5. Incorporate student feedback in regular faculty meetings to ensure ongoing deliberations of progresses and challenges

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Opening Statement

Dean Veronica Santos

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Opening Statement Student Organizers

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Diversity and Inclusion

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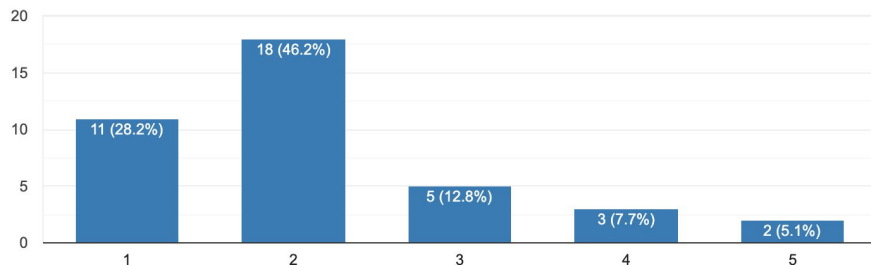


Diversity Survey: Overview

39 responses, anonymous

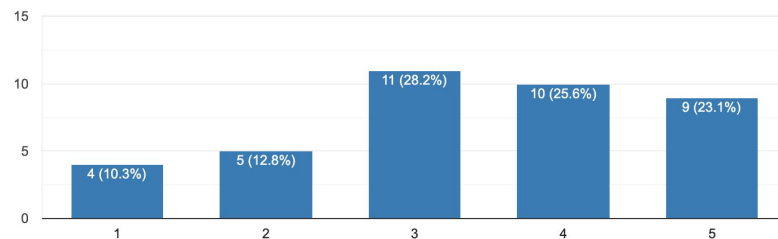
Do you feel that the image of the UCLA CS community is representative of all students, regardless of background, experience, etc?

39 responses



Do you feel like you belong in the CS major?

39 responses



Live Questions

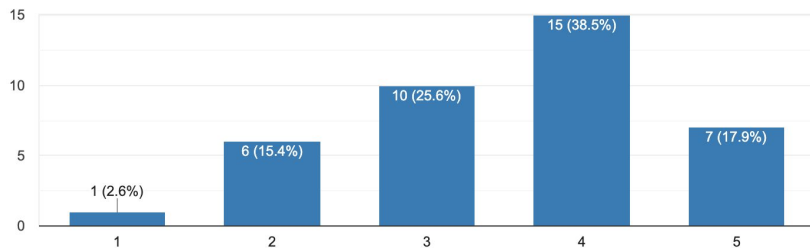
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Diversity Survey: Overview

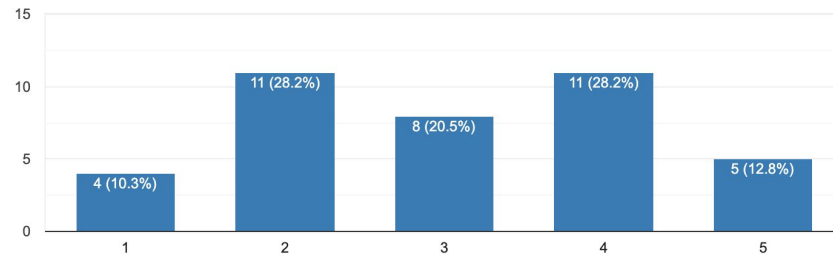
Do you feel like your professors, TAs, and classes are inclusive?

39 responses



Do you feel supported in UCLA CS?

39 responses



Live Questions

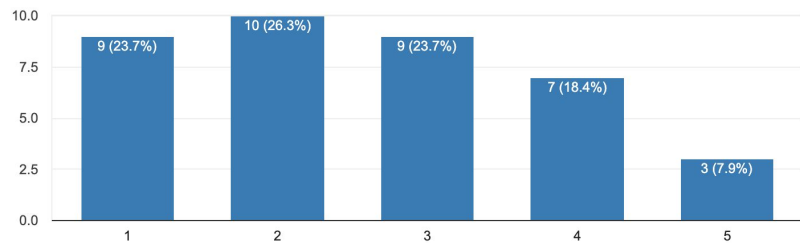
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Diversity Survey: Overview

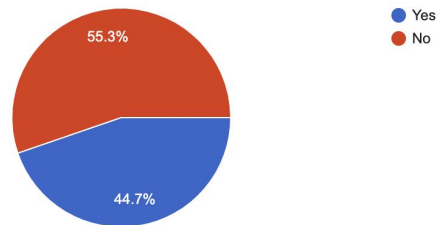
Is the CS major is welcoming to minorities?

38 responses



Have you ever experienced implicit bias from the UCLA CS community?

38 responses



Live Questions

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Survey Responses: Feeling Excluded

- **"Male students and professors are less respectful to female and non-binary students."**
- **"a clear gender imbalance/being only 1-2 females in a room** can feel really really really overwhelming"
- "I look around my 200+ lectures and there is **no one else that looks like me** or when I look at the professors for my classes and TAs and I dont see any that look like me."
- "I feel like people think my achievements were handed to me because I am a woman"
- **"I have been talked down to and treated differently than my male counterparts in multiple instances."**

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Survey Responses: Feeling Excluded

“As a female student, I get treated very differently from my male peers, both from professors and other students. They assume a lower level of competence from me. In several group projects, I have been consistently talked over or my ideas ignored. In general, professors tend to refer to any generic student as male. Sometimes, they remember to add a "or she" to a usage of "he" with a statement on how it is possible for anyone to be a generic student. It's not great to see a female name pop up once on a test when the rest of the example programmer names are male. **Female students are not seen as a default possibility.”**

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Survey Responses: Feeling Excluded

“A male CS student, unaware that I am in CS, **told me they thought women were handed internships at big tech companies simply because they are women.** This discounts the work I put in to earn my internship offers and makes me believe that I did not earn the internship purely off of my own merits.”

Live Questions

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Survey Responses: Inclusive Professors and TAs

- "John Cho made me feel very included in CS 143, took student feedback very seriously"
- "Kai-Wei Chang has a very inclusive and supportive lab!"
- "Jon Eyolfson [...] such an amazing instructor as well and makes me feel included."
- "Miryung Kim has been so welcoming to students, especially in her advising sections and for inviting international students to thanksgiving with her!"
- "[TA] Hadley Black really helped me in trying to pursue grad school."
- "Dr. Eggert and Dr. Yang have been phenomenal."
- "George Varghese, John Cho, & [TA] Pradeep Dogga. They really value mental health and inclusion and it shows!"
- "Smallberg and Carey are quite possibly the greatest people in the CS department."

Live Questions

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Survey Responses: Inclusive Professors and TAs

- “**Carey Nachenberg** has made me feel more at home as a queer student in computer science. I attended QWER Hacks a few years ago and even though he had to call in sick for his keynote speech, we still got to see his slides and it felt good to see someone who I already looked up to owning his identity as an LGBTQ+ computer scientist.”
- “**Carey Nachenberg** does a wonderful job of making sure women's voices are heard during his lectures! He makes an effort to use varied pronouns when using examples instead of "defaulting" to just using he/him pronouns.”
- “**Carey** brought lots of people from varying backgrounds in during his lectures, which gave a nice tone to the class”
- “**Carey Nachenberg** for making CS 32 fun, which is probably a way to be inclusive”

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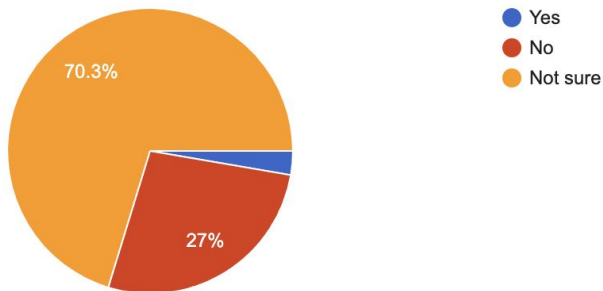
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Survey: Disability and Accessibility

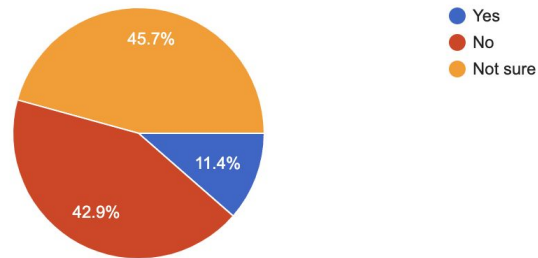
The CS Department provides ample support for people with disabilities

37 responses



The curriculum and course structure of UCLA CS are friendly to everyone, regardless of access to resources or disability

35 responses



Live Questions

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Survey: Accessibility and Disability

- "UCLA CS should **record all lectures** and make slides available before class."
- "Course websites and powerpoints should be **visually accessible!**"
- "having all classes be recorded is super helpful for disabled students, especially if physically getting to class is very hard."
- **"Most content (ie for classes) is not visually accessible at all."**
- "Certain classes require so much time and effort that it doesn't feel like the class is accommodating to individuals who require working a part time or have certain disabilities."

Live Questions

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Survey: Accessibility and Disability

“The strict deadlines set by many of the professors in the department are not very accommodating to students with health conditions. For example, **I have a health condition that ensures I effectively cannot think for around 4 days a month.** If one of those days happens to be before a CS project deadline, I have lost valuable time and need to crunch projects in time, as there aren't flexible deadlines. The same goes for any other student who is ill for any reason, or dealing with emotional or mental health issues. **Eggert's usage of a late deadline has been extremely helpful to me and other students in that regard, allowing us more time to understand our progress but recognize the delay with the percentages cut off from our grades.**”

Live Questions

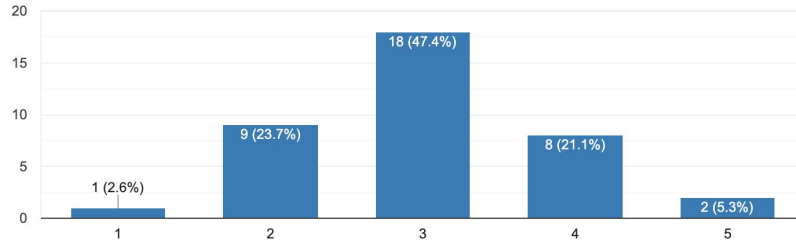
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Survey: Imposter Syndrome

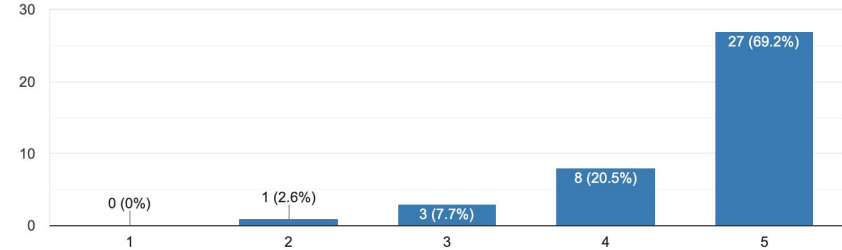
There is too much pressure in the CS major regarding GPA

38 responses



There is too much pressure in the CS major regarding internships

39 responses



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Survey Responses: Inadequacy

- “I absolutely have felt extremely inadequate in UCLA computer science. I have been surrounded by high-achieving students who are going to work at FAANG”
- I feel as though there is way too much pressure on grades, and it stresses me out to much to the point where I have too much anxiety to even start my hw
- “[...] the overwhelming pressure for getting internships / going into industry.”
- **“if you feel like you're not willing/able to go through the internship grind, there's an underlying attitude where you are looked down on by your peers.”**
- Have felt like my research output was insufficient to get into grad school

Live Questions

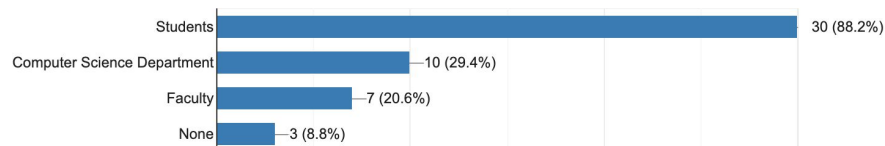
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Survey: Diversity and Inclusion in the CS Department

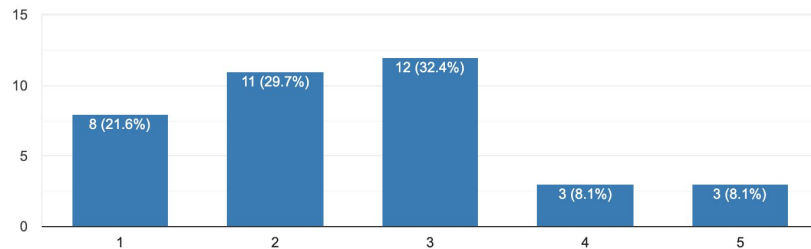
Who do you feel comfortable raising concerns to about diversity and inclusion?

34 responses



The CS Department is actively listening to student input about diversity and inclusion

37 responses



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Survey Responses: on Student Input

- “I would like to see professors and administrators put in a better effort to understand student problems. **I have never (in my 4 years here) been asked by a professor or administrator on how they can do better, and to me that's quite upsetting.** In addition, the department needs to do a better job of **showing actionable steps taken from feedback!**”
- “Treat student feedback more seriously, **tell us what changes have been made from such feedback** (like end of quarter student course evaluations)”
- “Something I really like is when professors offer more opportunities for feedback throughout the quarter (I've heard that **John Cho** and **George Varghese** both do this).”

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Survey Responses: Actionables

- “**more diverse faculty**, people with different experiences”
- “I would love to see more **diversity among professors.**”
- “**I have not taken a single class with a female professor.** I feel like having a female professor in one of my earlier classes would have helped me feel like I belonged more and decreased my sense of imposter syndrome.”
- “By actually publicizing and supporting D&I work done by students while it's happening”
- “**Use gender-neutral words when referring to made-up people.**”
- “Do not treat female students patronizingly and treat them like they are any different from the rest of the CS student body.”

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Survey Responses: Actionables

“Treating everyone “equally” is not enough :/ make sure to acknowledge the ways you and the school are trying to support Black, Latinx, and Indigenous students, LGBTQIA+ students, and neurodivergent people. Make your service diversity and inclusion-oriented. Stop placing the burden of mentoring minoritized students on minoritized professors. Talk about how your research impacts diversity and inclusion. Recruit minoritized students to your lab.”

Live Questions

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Guiding Questions

- What actions or initiatives have been or are currently being taken on a departmental level to address diversity, equity, and inclusion in computer science? What is the impact of these initiatives?
- Virtual instruction has shown the accessibility benefits of recording lectures. Is this something that will continue after the pandemic?

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Statement Professor Yizhou Sun

Live Questions

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Diversity and Inclusion: Slido Q&A

Live Questions

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5-Minute Break

Up Next: Academic Curriculum

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Academic Curriculum

Live Questions

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Recent Curriculum Changes

Lower Div

- Updated CS 35L curriculum
- Added CS 30
- Overhauled Physics 4AL/4BL
- Introduced Learning Assistants

Upper Div

- Added Digital Humanities Tech Breadth
- Added new offerings of CS 188
- Added CS M148 (Data Science)
- Reintroduced CS C174C (Computer Animation)
- New projects and curriculum are being trialled for CS 111

Live Questions

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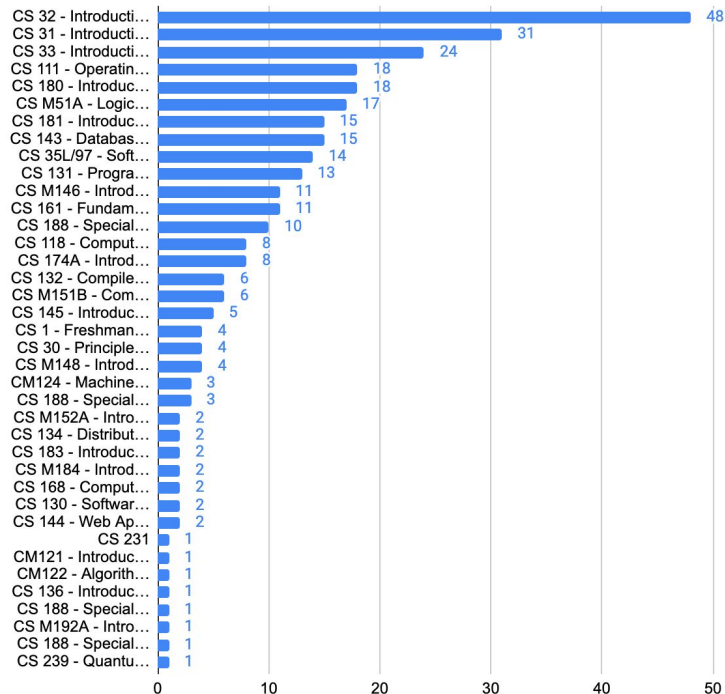
Survey: Students' most enjoyed CS classes

Top 10:

- CS 32 - Introduction to Computer Science II
- CS 31 - Introduction to Computer Science I
- CS 33 - Introduction to Computer Architecture
- CS 111 - Operating Systems Principles
- CS 180 - Introduction to Algorithms and Complexity
- CS M51A - Logic Design of Digital Systems
- CS 181 - Introduction to Formal Languages and Automata Theory
- CS 143 - Database Systems
- CS 35L/97 - Software Construction Laboratory
- CS 131 - Programming Languages
- CS M146 - Introduction to Machine Learning

Note: skew towards lower div and required courses

Which course(s) did you really enjoy? (74 responses)



Live Questions

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What made these courses enjoyable?

Themes:

- lecture material that's relevant to homework
- projects with real-life applications
- balanced workload
- clear and sympathetic communication from professors

The hands-on approaches that they had, especially the revamped 35L/97 and 111

CS 33: The labs were fun and I liked learning about the lower-level parts of computers

Korf's M51A offering adapted very well to the virtual format, and I appreciated him writing and drawing everything by hand. This made the content super easy to follow and really easy to take notes. Definitely the best professor for M51A.

Professor John Cho is such a gem, he is a really great communicator and is the only professor who seems to understand student questions the first time they're asked. He make 143 and 144 really enjoyable and they are my favorite CS courses at UCLA.

Live Questions

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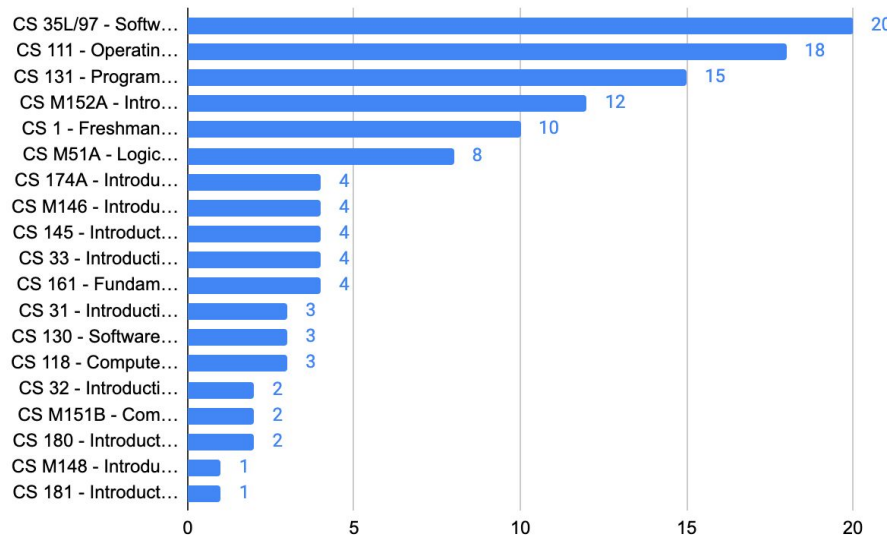


Survey: Students' least enjoyed CS classes

Top 5:

- CS 35L/97 - Software Construction Laboratory
- CS 111 - Operating Systems Principles
- CS 131 - Programming Languages
- CS M152A - Introductory Digital Design Laboratory
- CS 1 - Freshman Computer Science Seminar
- CS M51A - Logic Design of Digital Systems

Which course(s) do you think needs revamping? (74 responses)



Live Questions

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What changes would you make to these courses?

Themes for CS 111, 131, and 35L

- Heavy workload / too much info to cover in one course
- Desire for lecture and projects to correspond more
- Desire for projects to be split up into more checkpoints with testing between each

I took 111 with Harry Xu and I do not know if it is better now with Eyolfson, but I felt that the projects and lecture were not very relevant to each other. I appreciate it much more when the projects actually help me think that I'm applying some lecture principle. (Especially if the project is not the focus of the course, unlike John Cho's 144.)

131: Reorder course content so that students understand that main principles behind developing a programming language early on and THEN discuss each language on a case by case basis (explaining the choices made in that languages design and how it works), make programming assignments simpler - it's not reasonable to expect us to write a parser with 2 weeks of OCaml knowledge (maybe put that at the end of the quarter, might be helpful with prepping for the final)

CS 35L has too much content everywhere, in my opinion. I think that it should focus more on a few topics, rather than spread out so much over so many. Maybe remove python + lisp and focus more on html, javascript, node/react, shell, and git since these things are what people will primarily use for their group project.

I'm not sure what should be cut from 35L and 111, but both courses seemed impossibly full of information at the time I took them; so much so that there was no way I could retain any or even most of it. For M152A,

Currently, I think there's too much information being covered in the course of 10 weeks and while Emacs takes 2-3 weeks to cover, I find that NodeJS, Python, Bash, React, Git, and other technologies are a far more valuable use of that time.

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What changes would you make to these courses?

Themes for CS 1

- Students don't have enough requisite knowledge to fully understand material
- Homeworks are not always representative of lectures
- Discussions should be actual discussion and not just quizzes

CS 1 just didn't feel very effective as a course since some speakers talked to us as if we had prerequisite knowledge of what they were talking about so I just didn't know what was happening some days, but also I don't know if it'd be interesting if everything got "dumbed down". The homework was beyond the scope of the class sometimes.

CS 1 - There needs to be more effort put into this seminar. Professors coming once a week, and TAs giving homework that scales from easy to needing to perfectly understand the material (which the professors said was okay not to understand) and quizzes that were just copy pasted from the slides. Why have the quizzes in that case? And since it's a seminar, why not have more effort in discussion to delve on the topic? What is the point of grading that class? It's supposed to be an exploration into possible topics. Maybe do Homework during discussions as exploration. I would've learned more that way than having to self teach the entirety of the content in order to do a single homework assignment

CS 145, CS M146, CS M148 are 80% the same class

Themes for CS 145, M136, M148

- Too much overlap between course material

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Survey: How can UCLA CS further improve the curriculum?

Themes for Miscellaneous Feedback

- Desire for more access to testing scripts
- Desire to use more up-to-date tools like Git
- Desire to keep recorded lectures around after the pandemic ends

- grading scripts for projects would be nice
- recording lectures is great; when it has auto-cc it's even better
- more project-based classes that teach industry skills??
- 2-unit technical interview prep crash course?????

Available grading scripts for projects is a great idea. Palsberg and Cho doing it in their classes makes the class much more enjoyable and grading more fair.

Recording all lectures!!! Recorded lectures have helped so much with my time management+being able to follow along in lecture, slow down when I need to take my time to digest the material, speed up when the material is review so I don't lose focus.

Use Git rather than zip files for uploading code! Use GitHub organizations to track who pushed code and for students to see what commits were made. Use Gradescope for grading assignments and to be able to give feedback on written assignments/homework.

Live Questions

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What is your opinion on our coverage of data science and machine learning classes in undergraduate courses?

Themes for Data Sci / ML

- Not enough breadth of material
- Desire for material to be more relevant to industry applications rather than theory

I think the machine learning side has really good coverage, but based on my internship experience I think more emphasis on the data science part could be helpful for students looking to work in industry. In particular, the data science courses could focus more on data engineering, extracting useful information from "messy" data, and augmenting data with additional data sets. This would also help differentiate the various data science and machine learning courses a bit more since there would be a bit less overlap in topics covered.

Concepts are too similar between 145, 146, 148.

We should have more breadth of coverage on ML topics instead of just 1 algorithms course and 1 data science course that have large amounts of overlap in contents.

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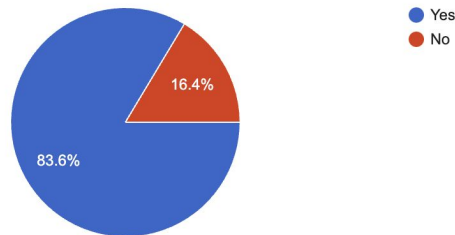
Survey: Tech Breadth

Desire for more diverse tech breadth options

- DESMA
- Political Science
- Game Development
- English, Gender Studies, LGBTQ+ Studies (for sci-tech)

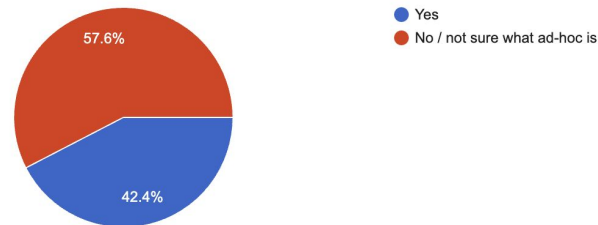
Are you satisfied with current technical breadth offerings?

61 responses



Are you aware that undergraduate students are allowed to create an ad-hoc track for their tech breadth requirement?

66 responses



Live Questions

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Are you satisfied with how we teach ethics?

Themes for Ethics

- Include an ethics component alongside other topics instead/in addition to the ethics class

No, I would prefer not having the ethics requirement and working it in small portions into other classes instead

I think it would be more useful if ethics was sprinkled into our classes where it can be applied so that it is more clear where ethical boundaries exist. For example in the AI class or operating systems we could talk about where ethics is important

Yes I took 182 with Villaseñor and I thought it was interesting+eye opening.

Ethics should not be a class that students take only once. It should be integrated into the curriculum of every CS class, where applicable. For example, Professor Sarrafzadeh talked about how data science might be used to mislead people or cause negative outcomes in the first few lectures of CS M148.

Live Questions

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Survey: How does UCLA Computer Science compare with the curriculum offered at peer institutions?

Curriculum offered by other universities:

Stanford

- iOS development course
- Teaches JavaScript (modern languages) in intro courses
- Offers more distributed systems / infrastructure courses
- Not ABET accredited

UC Berkeley

- Teaches discrete math as a CS class
- More hands-on application / industry courses
- A wider range of courses in CV/ML
- DeCal program

USC

- Game design / development courses

UCSD

- A wider range of computer vision and graphics courses

Live Questions

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Survey: Student comments on desired classes

Common themes:

Development based classes

- Games
- Web/Mobile
- Software Engineering

Advanced exploration

- UI/UX
- Quantum
- Computer Vision
- Blockchain



Live Questions

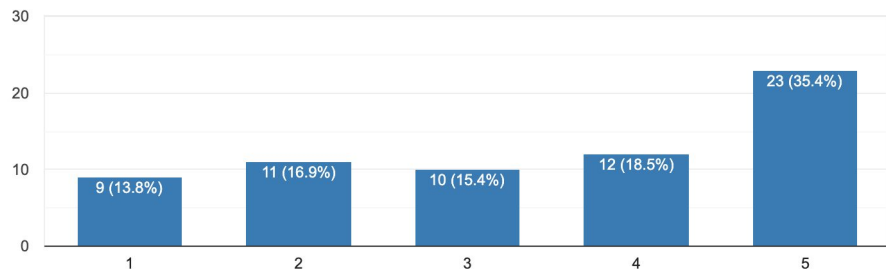
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Survey: Research

How interested are you in doing CS research?

65 responses



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Roadblocks

- **"I'm not sure where to start.** It's intimidating to cold-email a professor or graduate student at a lab when I feel like my knowledge as an ungrad just doesn't measure up, but I don't see any listings for positions specifically for undergrads, so I don't know how else to get involved."
- **"I don't know where to get started.** Also, because most of my peers were focused on going into industry, I hadn't even considered the research path until now (I am a third year). Feeling "late" to research makes it harder to get started."
- "I think the primary roadblock is just experience, especially early on in the major."



Guiding Questions

- Are there talks among professors on developing and releasing **grading scripts** so students can get **immediate feedback** on projects and homeworks? Professors Palsberg, Cho, and Reinman have implemented this; many students have expressed interest and support for other classes to take this on.
- Is the department able to offer courses like **game development** and **graphics courses** in the CS 174 series more often? What are some limitations that students may not be aware of in providing elective courses?

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Academic Curriculum: Slido Q&A

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Closing Statements

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Thank you / Group Photo

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