

CS 70 at UC Berkeley

Policies

Technology

Piazza

We will use Piazza as the 'one-stop shop' throughout the semester: for a Q&A forum and for official announcements. Enrollment in Piazza is mandatory. If you have questions about anything related to the course, please post them on Piazza rather than emailing the instructors or TAs. Please do not post anything resembling a solution to a homework problem before it's due. If in doubt, you should make your post private (visible to course staff only). We always welcome any feedback on what we could be doing better. See the [Piazza Etiquette](#) section for more on using Piazza. To join the class on Piazza, follow [this link](#).

Gradescope

All homework will be submitted through Gradescope, and all homework and exam grades will be returned through Gradescope.

Email

Please use Piazza for all technical questions, and also all administrative questions about the course that are not personal to you: other students may also benefit from seeing the answers to these questions. If you have a more specific administrative question that relates to you alone, please either use a private post on Piazza (visible to course staff only) or send email to the course administrative account sp19@eecs70.org (read by instructors and head TAs only).

Instructional Servers

CS 70 does not make use of instructional accounts, but to get a computer account for this course, go to <http://inst.eecs.berkeley.edu/webacct>, or click 'WebAcct' on <http://inst.eecs.berkeley.edu>.

Exams

Midterm 1 is on Friday, February 22 from 8-10pm. Midterm 2 is on Tuesday, April 2 from 8-10pm. The Final is on Thursday, May 16 from 3-6 pm. Unfortunately, due to large enrollment, we are unable to accommodate final exam conflicts; we strongly discourage enrollment in another class with conflicting lectures and/or final exam; if you choose to enroll in such a class you will have to make arrangements for an alternate Final with the other class. Midterm conflicts will be accommodated only if the conflict is with another campus exam or comparable activity. You must fill out a form (available on Piazza) to request such an accommodation.

Materials

All materials can be found on [the front page](#).

Notes

There is no textbook for this class. Instead, there is a set of comprehensive lecture notes. Make sure you revisit the notes after every lecture, and multiple times thereafter: you should be aware that it will likely take several readings before you fully understand the material. Each note may be covered in one or more lectures. Note 0 is background material that you should make sure you understand before the first lecture.

Discussions

Release Schedule: Discussion solutions are published after all sections are completed.

The discussion sections will not cover new material, but rather will give you additional practice solving problems. You can attend any discussion section you like. However, if there are fewer desks than students, then students will be admitted to the section on a first-come first-served basis and others will have to attend an alternative section.

Homeworks

Release Schedule: Homework for the coming week is released on Friday by the end of the day. Homework is due on Gradescope the following Friday at 10:00 p.m.; the solutions for that homework will be released the next day. Homework is then returned to you, graded, approximately one week after the deadline. Depending on the availability of grading resources, we may grade only a subset of the problems on a homework. However, since you will not know this subset in advance, you are strongly advised to attempt all the problems.

Homeworks are graded for accuracy and it is highly recommended that you do them. You are expected to show your work and justify all of your answers. Your

lowest **two** homework scores will be dropped, but these drops should be reserved for emergencies. No additional allowances will be made for late or missed homeworks: please do not contact us about missed homeworks or late submissions.

Also, maximum credit for each homework will be awarded to any score of 73% or more. **Note that we do not intend this policy to mean you only attempt 3/4 of the homework but that you only write what you understand.**

Cheating

We have a zero-tolerance policy for cheating. Consequences of cheating include: negative points for the corresponding assignment, a failing grade in the class, and/or a referral to the Office of Student Conduct.

Collaboration

You are encouraged to work on homework problems in study groups of three to five people; however, you must **always write up the solutions on your own**. Similarly, you may use books or online resources to help solve homework problems, but you must **always credit all such sources in your writeup and you must never copy material verbatim**.

We believe that most students can distinguish between helping other students and cheating. Explaining the meaning of a question, discussing a way of approaching a solution, or collaboratively exploring how to solve a problem within your group are types of interaction that we strongly encourage. But you should write your homework solution strictly by yourself so that your hands and eyes can help you internalize this material. At no time should you be in possession of another student's solution. You may discuss approaches but your solution must be written by you and you only. You should explicitly acknowledge everyone whom you have worked with or who has given you any significant ideas about the homework. Not only is this good scholarly conduct, it also protects you from accusations of being a "free-rider" regarding your colleagues' ideas.

Warning: Your attention is drawn to the [Department's Policy on Academic Dishonesty](#). In particular, you should be aware that copying or sharing solutions, in whole or in part, from other students in the class (or any other source without acknowledgment) constitutes cheating. Any student found to be cheating risks automatically failing the class and being referred to the Office of Student Conduct.

Grading

Grades will be determined according to the following weighting of homework and exam scores:

- Midterm 1: 25%
- Midterm 2: 25%
- Final: 49%
- Sundry: 1%

Test-only students will be asked to turn in reflections on the material on a regular basis in order that they pay some attention to this course. These reflections will form the basis of the sundry points. We envision it as a reminder for you ensure to keep up with the course through familiarity with discussion and homework questions and solutions. In detail, you will be required to write a response to one of the following prompts for one of the homework problems in the previous week:

- Write a new solution to the problem, or explain the solution to the problem more clearly than the official solutions (here, "more clearly" is subjective; we are just looking for you to demonstrate understanding of the solution).
- Explain why the solution approaches the problem in a particular way. Where would a different method fail?
- What is the key insight behind the solution? Can you summarize the intuition behind the proof or the proof strategy?

The submission of this reflection will be done through Gradescope each week. We will release more information about grading options soon. 1% extra sundry points will be awarded if you participate on Piazza, complete course surveys, write down the people with whom you collaborated, and etc. For those who choose the homework option, their grade will be determined by:

- Test-only score: 85%
- Homework score: 15%

Homework option students need not do the reflections that test-only students do in the sundry part of the test-only score. Each homework will be graded out of 73 points each (which is less than the 100 points available). No extra credit is available for earning more than 73 points. **We intend this policy to encourage you to spend time on understanding the homework instead of stressing to get full points. Even though you may be able to reach the 73 points full mark line by doing part of the homework, we encourage you to read, work on and eventually understand all the problems.** Lectures, notes, discussions and homeworks are all fair game for the exam, but homework problems tend to be the hardest conceptually so understanding and being able to write out solutions to homework problems is beneficial to your performance in this class. Everyone is required to submit Homework 0 and Homework 1. The homework 0

grade will be part of sundry and not part of the homework grade. The choice of test-only versus homework will be made after those homeworks are submitted.

Piazza Etiquette

Important Note:

We will encourage more student participation on Piazza rather than answering right away, that is, we will wait until other students step up and answer questions.

Of course, we will still provide clarifications on logistics, typos, subtle points, etc.

We want to make sure that you are helping each other out, and having instructors give away the answers isn't the most beneficial for your education either.

In order to make Piazza a better resource for everyone, we've outlined some guidelines for you to follow when posting your questions. Questions which follow these guidelines will have a higher chance of being answered!

1. Ask HW questions only in HW posts.

We've created individual posts for each problem from homework. Please ask questions, discuss problems, or help out in those posts only. Before asking a question, read through (or search) the whole post to see if your question has been answered.

2. Don't post answers in Piazza.

Please don't give away the answer on Piazza. You can explain things in a way that still lets other students figure out the essence of the problem on their own, but don't spoil the problem. For example, don't point to a useful YouTube link that works out essentially what the problem is asking about.

That is not cool.

Post such spoilers after the HW is due. That is totally fine. If you are not sure, post privately to instructors and then we'll let you know.

3. Try to make posts public.

While not violating Rule 2, try to make your questions public, because others might have the same question and we don't need to answer them multiple times.

4. Piazza is not OH. 5 minute-test.

If you think your questions may take more than 5 minutes to answer, please come to office hours or homework parties instead.

5. Neither Piazza nor TAs are for pre-grading.

Please do not post questions of the form:

- "Is this the correct solution to HW X problem Y?"
- "Would this receive full credit on HW X problem Y?"
- "Is this the right level of detail for HW X problem Y?"

Please do not use Piazza as a medium to ask instructors to check your homework in advance. We simply cannot check every student's homework through Piazza.

Feel free to ask questions of clarification, or ask questions about the course content to achieve a deeper understanding, but at a certain point, you must apply your knowledge, give it your best shot, and submit your answers with confidence.

6. Post a screen shot of any resource referenced.

Your question should be self-contained. The TAs (and other responders) should not have to scan through PDFs to even figure out what the question is. Ask yourself: am I referring to some lecture slide/lecture note/HW solution/discussion solution/past exam?

If the answer is yes, post a screen shot of the relevant part.

7. Post all your work.

Don't post one line saying:

At step n , I get XYZ, and I'm now confused.

This forces the TAs to guess:

What happened in steps 1, 2, ..., $n - 1$?

Most likely, the TAs will guess wrong, and we run into a mess of followup questions trying to figure out what steps 1, 2, ..., $n - 1$ were.

Instead, post:

Starting out, we have:

Then, I do ..., and I get ...

Next, I do ..., and I get ...

Next, I do ..., and I get ...

Now, I get $\&\%&\#($, and this makes no sense.

Then, the TA can respond:

The mistake is at step 3, you're not allowed to apply ABC to XYZ because ...

8. Post narrow, precise questions.

Questions of the form "Can someone please explain stable marriage to me?" are not helpful.

There's an entire lecture note written on it. There are multiple parts to stable marriage:

- actual algorithm
- proof of termination
- proof of stability
- proof that it's male optimal
- proof that it's female pessimal

No TA is arrogant enough to think they can rewrite the lecture better than notes that have evolved over decades of teaching. Instead, the question should be precise, like:

Title: Can someone please explain this step of the proof of stability?

Body:

[Image of Stable Marriage Algorithm]

[Image of Proof of Stability (with an arrow draw in)]

In the proof of stability, I get that we have:

- fact 1 in your own words
- fact 2 in your own words
- fact 3 in your own words

However, I don't get how we get:

- fact 4 in your own words

Survival Tips for CS 70

These tips have been collected through the years from professors, past and present. You can also check out the [Learning How To Learn](#) Coursera for other general tips.

Don't fall behind.

In a conceptual class such as this, it is particularly important to maintain a steady effort throughout the semester, rather than hope to cram just before homework deadlines or exams. This is because it takes time and practice for the ideas to sink in. Make sure you allocate a sufficient number of hours every week to the class, including enough time for reading and understanding the material as well as for doing assignments. (As a rough guide, you should expect to do at least one hour of reading and two hours of problem solving for each hour of lecture.) Even though this class does not have any major projects, you should plan to spend as much time on it as on any of your other technical classes.

Read the lecture notes before lecture.

The material takes some time to sink in. You'll be able to pick up the nuances if you've already got a gist of what will be covered.

Take the homeworks seriously.

The homeworks are explicitly designed to help you to learn the material as you go along. Although the numerical weight of the homeworks is not huge, we work hard to make them instructive and interesting. Do read the sample solutions, even for the problems on which you received full points. You may well learn a different way of looking at the problem, and you may also benefit from emulating the style of the solutions. (In science, people learn a lot from emulating the approach of more experienced scientists.)

Don't procrastinate on homework.

Our best advice is to read through the homework problems as soon as they are available, and let them percolate in your brain. Think through possible approaches while you are waiting in line, or stuck in an elevator. Sleeping on a problem, or taking a walk has often helped people to come up with a creative approach to it. Definitely do not wait until the night before it is due to start working on the homework.

Make use of office hours.

The instructors and TAs hold office hours expressly to help you. It is often surprising how many students do not take advantage of this service. You are free to attend as many office hours as you wish (you are not constrained just to use the office hours of your section TA). You will also likely get more out of an office hour if you have spent a little time in advance thinking about the questions you have, and formulating them precisely. (In fact, this process can often lead you to a solution yourself!)

Take part in discussion sections.

Discussion sections are not auxiliary lectures. They are an opportunity for interactive learning, through guided group problem solving and other activities. The success of a discussion section depends largely on the willingness of students to participate actively in it. As with office hours, the better prepared you are for the discussion, the more you are likely to get out of it.

Form study groups and/or come to homework parties.

As stated above, you are encouraged to form small groups (two to four people) to work together on homeworks and on understanding the class material on a regular basis. In addition to being fun, this can save you a lot of time by generating ideas quickly and preventing you from getting hung up on some point or other. Of course, it is your responsibility to ensure that you contribute actively to the group; passive listening will likely not help you much. And recall the caveat above that you must write up your solutions on your own. Homework parties are an alternative vehicle for working with others in a nice atmosphere, and can be a good place to find a group to work with regularly.

Pay attention in lectures.

As the semester proceeds, many of you will no doubt feel the urge to 'daydream' during lectures, or to skip them altogether, on the grounds that you can catch up by reading the lecture notes. If you follow this strategy, you should be aware that reading mathematics is NOT the same as reading a novel or a news article: each page of mathematics needs to be read many times before it is fully understood, and needs to be backed up by examples and discussion. Following the material in class should save you several readings; even just watching it go by without fully understanding it makes your later reading easier. And you also get the benefit of student questions, examples etc. Exactly how you handle lectures is up to you. One strategy is to print out the lecture notes in advance, bring them to lecture, and add a few additional notes during class.