Tips for Doing Well in 61A - Revised for Fall 2018

- Personally, the readings are less helpful than the labs and homeworks, but you can't do the labs and homeworks without first seeing lecture. And to understand lecture easily, you should do the reading.

- The only reason the optional questions in the labs are optional is because we want people to spend only 1.5 hours in lab--not because the material is in any way, truly optional. Treat the optional questions as required. They're **very** good practice.

- Discussions are not meant to be covered in their entirety during the allotted 1.5 hours. There's too much material. Review anything that's missed on your own time. However much balance a TA decides between finishing the worksheet and allowing time for students to think is up to the TA.

- TAs have different teaching styles. Some prefer to lecture a lot, or to blitz through the worksheet, or encourage a lot of group/partner work, or other quirks. I myself prefer to teach fast sections, with a lot of lecturing and walking students through the entire worksheet, at the expense of leaving little time for students to work in pairs/groups or think very much. Other TAs speak very little and let students work in groups.

- If you want to go fast in the class, go alone. If you want to go far, find people you can talk about 61A with outside of class. Make friends. Jive with the people around you in lab or discussion. They're the people who will support you when you're up at 12 midnight working on the Scheme project, and not me, because I go to bed at 9 pm.

- Take care of yourself. Sleep 7.5+ hours a night. Eat healthy. Schedule time for friends and fun. Anecdotal: I went to the Tang Center earlier this summer because I couldn't sleep due to racing thoughts, and the good doctor told me I was working too hard and not having enough fun. "Is that an official diagnosis, Doctor?" "Yes. Also you need vegetables." It's stupid, but I needed that permission to relax and take care of myself. Here's me giving that permission to you. Please take care of yourself. You, just like I did, will find that you are so much more productive when you feel good all the time.

- Yes, the course is webcasted. Try not to fall behind lecture. You can do this by attending lecture. But make sure you're engaged--if you're playing Hearthstone during lecture, you might as well not be there. Increase engagement by following the live lecture thread and asking questions the moment you're confused. Webcasts are like home-cooked meals. They're best when they're fresh, and decrease in usefulness (and tastiness!) the longer they remain undigested.

- The kinds of students that do the best in the course *and* have a lot of fun are not the ones who study very hard, but those end up thinking about computer science in their

free time and then go bug their TAs/instructors with interesting ideas or questions--not because they want to suck up, but because they really are that curious. I don't what causes this effect. I had it with English and Rhetoric, but not with Computer Science unfortunately…!

- Budget your time *very* wisely. For me, I can only do ~55 or so hours of productive work a week for 16 weeks and then burn out just after finals. Sure, my technical limit is 12 hours of work a day, but I can only do that two days in a row and then am useless the third day. So in the end, working 9 hours for 3 days beats 12 hours for 2 days, and I get to avoid the feeling of hating absolutely everything and everyone the third day. 55 hours is, admittedly, not much, especially since I recommend students to spend **about 18** hours a week on 61A to get an A+. College is the first time you're likely going to have to face the fact that you can't do everything you want anymore. :(At the start of this semester, I ended up wanting to do 120 hours of stuff a week but had to very aggressively cut that in half.

- Here's that 18 hour breakdown:
    - 3 hours of lecture
    - 1.5 hours of discussion
    - 1.5 hours of lab
    - 2 hours of optional lab questions
    - 5 hours on the project
    - 2 hours on the homework of the week
    - 1 hour on midterm/finals level questions
    - 2 hours clarifying questions on **EVERYTHING** with TAs/instructors/Piazza.

- When studying for midterms/finals, you don't need to do more than **three** practice MTs and finals, as long as you *really* learn from your mistakes on them. Any more than that is probably extremely unhelpful and a waste of time. With 3 hours to take each exam, and then 2 hours of reviewing the solutions and learning what you need to know… 15 hours of studying should be enough!

- How to Become a Straight-A Student was the reason I got straight As my first year at Berkeley. I followed it religiously. Contrary to popular belief, you actually want to spend as *little* time possible on everything (while still getting the most out of it).

- Psychologically, if you're several days ahead in the material, it's easy to want to stay ahead. But if you're several days behind, it's so hard to want to catch up.

- When starting projects, start very strong, and start early. I'll tell my students when they know enough material to begin the projects. That way you can avoid the office-hours rush, the TAs are more available to help you over email/Piazza, and you have the

opportunity to help other students more.

- Get help as soon as you're even the tiniest bit confused. Everyone, when they're confused, gets a twinge of *something,* and unfortunately by this time a lot of us have learned to ignore that twinge--such that we barely or even don't feel that it at all anymore. I call it "failing to notice confusion." This is very dangerous behavior. It's **always** 200% faster to just ask for help after you've put 15 minutes of effort into trying to solve the problem yourself. It's unproductive to spend time on problems you will never FULLY understand without help. In my labs, I'll enforce a 10-minute rule: if you've been stuck for 10 minutes, you **must** ask for help.

- Depression and anxiety are real, and are serious. I ended up having to take a semester off to due to improper management. I don't regret it, because I am frankly now a badass for having overcome it. Here are my suggested *and personally-tested* resources for management, what worked for me:

    - If you want someone to talk to, avoid the people at Tang, who don't really *get* engineers. Talk to Christine Zhou (Ctrl+F her name), who is familiar with the EECS department and the culture. She's also in Bechtel so you don't need to hike all the way Southside! You may see her **5** times a semester for free, an hour each. She's awesome, the chillest, snarky, and honest.
    - Medication is very easy to get from Tang. Just ask very firmly for it, and you can get your pills the same day for maybe $15 with SHIP. Remember they take 6 to 8 weeks to have an effect, so don't forget to take them, and be patient.
    - I love *The Alchemist* by Paul Coelho because it's such a simple read, but nonetheless touching and bright. It gave me a new way to look at what I considered to be my misfortunes, and something that felt like hope.
    - Acknowledge that it's okay to be "bad"/underperforming. I would still love and serve you. (Non-depressed/anxious folks, you're probably thinking, "uh depressed/anxious people aren't bad" but when you're in the grip, you find it hard to believe anything else.)
    - You will get DSP accommodations for mental health disorders if you submit the proper documentation. Get more time for exams and due dates.
    - Giving helps so much. It takes the mind off the dark things, even for just a little while. I give by teaching. It served me when medication didn't. Also you learn how to lead and inspire and be empathetic (especially towards yourself) and helps you realize that not getting As is pretty normal at Berkeley.