The Last Post - What's Next?

Congratulations on finishing this course! You may be having mixed feelings at this point in time, depending on how you did on the final and in the class in general. We hope that this document helps to alleviate some of your worries and/or get you excited for more courses down the road!

Here are some questions you might have:

How do I become an Academic Intern?

Fill out this form for Fall 2016: http://goo.gl/forms/mjptTGrHbUHVnO7Z2

Elevator pitch: Becoming an Academic Intern is a great way to reinforce what you've learned, help students (as you were helped), become a better teacher, and keep in touch with the community. You may lab assist for units, and if you're interested in reading or TA'ing in the future, this is the first step.

I passed and want to take more related courses. What should I take?

The next CS courses to take:

- CS 170 (Algorithms) is often the next step, although the content of CS 170 is not directly related to CS 70 material.
- CS 188 (Artificial Intelligence) ties together many of the concepts in CS 70 (such as Bayes's Rule and expectation) and applies them in the exciting field of AI.

For more discrete mathematics, here are some options:

- If you would like to learn more about the theory behind modular arithmetic ("What is a Galois Field? Why is Euler's totient function multiplicative? How can the Chinese Remainder Theorem be generalized?"), take Math 113 (Introduction to Abstract

Algebra). CS 70 provides all of the requisite mathematical background, although Math 113 is not for the mathematically light-hearted.

- If you enjoyed learning about uncountability and undecidability, try Math 136 (Incompleteness and Undecidability) or CS 172 (Computability and Complexity).
- You may have enjoyed the rigor of discrete mathematics, in which case taking more mathematics courses would be your best bet. The standard ones to take are Math 110 (Linear Algebra) and Math 104 (Introduction to Analysis).

For more probability, here are some options:

- CS 70 covers much of the material in Stat 134 (Concepts in Probability), although Stat 134 goes into more detail for continuous probability.
- If you feel comfortable with continuous probability and enjoyed confidence intervals and linear regression, take Stat 135 (Concepts of Statistics).
- To delve deeper into Markov chains, among other topics, try Stat 150 (Stochastic Processes).
- EE 126 (Probability and Random Processes) covers more theory (including many proofs of theorems that we left out of CS 70), as well as more applications.

I barely passed, and I want to pursue CS. What do I do next?

This is tricky, but doable, and requires two steps:

1. Talk with Chris Hunn, the CS adviser, as soon as you get back. You can make an one-on-one appointment here: https://hunn.youcanbook.me/
2. Also, here is his address if you want to email him (expect email lag over the break): cthunn@eecs.berkeley.edu
3. Figure out why you performed the way you did this semester. Did you have a hard time in just 70? Did you have a hard time in all your classes? Did you slack off? Where there bigger things happening? Why did you struggle? And most importantly, how are you going to change for next semester? Chris can also help you try to answer these questions if you ask him.

I failed, but I want to learn more CS. What do I do next?

For starters, your resilience is very admirable. Second, read and follow the answer to the previous point. Finally, retake CS70 next fall! I know it's scary to have to do this, but many students that take the course the second time around find that things click more. I would recommend going through notes over the summer and speaking with course staff in the fall to make sure you're starting off right.

I failed and I don't think CS is for me. Is this bad?

Many students who failed CS 70 feel ashamed of themselves. This is especially true for some of those who feel like they've "given up" or "quit" by choosing not to pursuing CS. It needs to be said: You don't have to feel bad if you decided this field isn't for you.
It's no secret: CS 70 is a tough course. Personal circumstances also play a big role in your performance throughout the semester. Just because you failed a course does not make you a failure as a person. We sincerely hope that you will pick yourself up and find success in the future.

How do I keep in touch with the CS community?

If you have a Facebook, the CS Facebook group is a pretty good place to start. A lot of students, past and present, who study CS keep track of this group:
https://www.facebook.com/groups/berkeleycs/
You may see the occasional CS adviser or Professor pop on too.

Any last advice?

Consider how much you've learned this semester, everything from proofs to error coding, combinatorics, probability, and more. It's rather impressive, and as this forms the foundation of higher-level mathematics, you are poised to do great things. Regardless of your grade in this class, you've accomplished a great feat.

- Remember what you've learned instead of what grade you've received.
- Remember to make and keep making learning fun. Grades follow.