Advice from Students Who Took Foundations in Fall 2024

- Read the textbook and at least try to prove each theorem. Stuff sticks with you if you prove it!
- When attempting a difficult proof, sometimes you need to take a step back and look it at again with fresh eyes
- I hope future students prepare for quizzes more
- Do not treat it as a math class. Think of it as a logic & language class. Learning to be logistic is very interesting.
- Read and spend 20 minutes reviewing the reading for the next class on the day of previous class. Then do more the next day, and do more the day of. My short term memory did not do well for them.
- Actually do the reading and at least try the proofs, it makes everything easier.
- Review the material more than once and try to prove in different ways and understand what you are proving
- Learn the definitions!!!
- You cannot succeed unless you understand. Everything in this course is to be understood, and no shortcuts will aid you –neither skillswise nor gradewise. Study until you understand
- Prepare before class as much as you can. Proofs cannot be learnt by heart, i.e., you should better understand why you do that way or each step. How would you go from one step to another.

Things The Found Interesting, Surprising, or Important

- Elegance of certain proofs & getting to uncover the theory behind certain things like functions
- Prime numbers do not include 1
- I learned the joys of self motivated study and formalization of seeming complexity
- There are countable and uncountable infinities
- I’ve learned ways to prove problems and some statements using theorems and different concepts.
- Proofs are a funny thing. You can basically make up rules to prove something but if you can back it up, then your made up stuff is true.
- The usage of induction is extremely interesting to me, instead of so on and so forth. I also found myself talking a lot about the weather compared to past weather. Did not think that would happen.
- I learned about induction which formalizes the “and so on” sort of argument with agreeable axioms. It feels like the most super-mathematical part of the course.
- Went thru the content step by step.
- I think presentations are so interesting