

UTA Reflection

Samuel Johnson

Spring 2023

In the Spring semester of 2023, I had the pleasure of being a UTA for Math 323: Introductions to Proof, under Professor Sunhi Choi. Being that 323 is many students' first class that is proof focused, it is interesting to see from the perspective of a TA. In each homework assignment, I saw a general improvement from the students in the comfort and clarity of their proofs. Where a student would've been verbose or unclear in the beginning of the semester, they became more focused and organized near the end.

My responsibilities as a TA included holding office hours, making solution guides, grading homework, and tutoring calculus in the Math Tutoring Center. Although I had limited attendance in my office hours, I did have a couple students that showed up periodically throughout the semester. I learned that teaching 323 had an entirely different feel than teaching calculus from these interactions with students. Often it was necessary to discuss definitions and theorems, rather than methods for problem solving or computation. Still, whether proofs or calculus, my math communication skills improved greatly with the UTA program. I learned that some students take different approaches than others, and there is no one-size-fits all approach. Another great benefit to explaining a lot of math to others over the semester is that my own understanding has deepened. Nothing deepens your intuition of a subject like teaching it to others.

I would recommend this program to any Math Undergrad who is not only interested in what goes into communicating/teaching mathematics, but also wants to grow these skills so

that they can become a better mathematician. I have the opinion that you don't really have a deep understanding of a subject unless you can teach it to someone else, and the UTA program is a great place to grow these skills.