

UTA Reflection

In the Spring 2021 semester, I took an opportunity to become an undergraduate teaching assistant and aided Dr. Alex Farrell with teaching the MATH 355 *Analysis of Ordinary Differential Equations* course. My duties as a UTA included checking slides for the upcoming class for errors and providing suggestions on areas that could be improved, grading the homework, holding office hours, working for two hours every week with the calculus tutoring center, and providing a student perspective on an exam's design.

One of the greatest takeaways from the UTA opportunity was the confidence that I built-up through my weekly office hours and calculus tutoring. Communicating one-to-one with a student was an extremely nerve-wracking task at the beginning of the semester. However, through experience, I was able to build enough courage to hold a mathematical dialogue with a student, keep my head cool while trying to think about concepts that I couldn't remember off the top of my head and eventually lead the student to a solution to the question they were asking. It was tough sometimes not to show them the answer right away, but I was able to help them find the answer themselves many times. Moreover, through this, I was able to find a way to solve my own doubts whenever they came up.

Dr. Farrell did not expect an intensive method of grading homework and asked me to just grade on the effort put in by the students. This inadvertently forced me to provide more suggestions for the homework to reflect the mistakes that were made. By doing so, I learned to analyze mathematical work and put it to words in a way I didn't

think possible before. I was also able to understand the procedure of designing an exam paper from Dr. Farrell, which was really enlightening. In the early stages of the course, Dr. Farrell also explained his philosophy of teaching as a professor to me. He talked about the ways in which he structured the course contents and the graded portions. This gave me a behind-the-scenes insight into the education industry and I am very thankful to Dr. Farrell for that.

However, the most engaging part of the entire experience was the error-checking of slides which I did twice a week for each slide deck that Dr. Farrell created for the classes. It not only showed a professional method to create presentations with respect to the audience, but also displayed the choice of content that the professor desired to provide to the students. It showed the careful deliberation of the professor and made me realize many details that went into teaching a single topic.

I am really grateful to the Math Department of the University of Arizona, Dr. Tiffany Jones and Dr. Christina Duron for providing me such an enjoyable experience and also to Dr. Alex Farrell for being such a great mentor. It never felt like a burden to be a UTA and gave me many great experiences with my mentor, even though I was working from a completely different continent with these online conditions. Admittedly, one of the most fun moments of this experience was attempting to fool people who came to tutoring hours that you knew your math (but probably failing at that), while googling up the concepts quickly to jog up the memories of them.