

UTA Reflection
Spring 2020
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For this semester as an undergraduate teaching assistant, I helped Professor Sandler teach Vector Calculus for her two sections. It was a very valuable experience that helped solidify my knowledge of the subject, improved my communication skills, and helped me learn how to solve problems quickly.

This last fall semester, I had helped Dr. Neville teach calculus 2 and I had enjoyed the experience so much that I decided to do it again this spring. I am happy to say that the experience was just different enough under my new mentor this semester to keep things interesting, while also being just different enough to be quite challenging. The duties I did with Dr. Sandler were mostly grading and holding office hours both before and after the semester transitioned to an online Zoom format. The office hours were especially helpful to learn from because they were held in the vector calculus, statistics, and calculus 2 mixed tutoring room. I found this setting to be useful because you would get all types of questions and you really had to jog your memory to remember how to do them. You also had to learn how to solve these problems fast, so that students weren't just staring at you for minutes as you struggled with the problem! These office hours really helped my mathematical understanding of these subjects as well. It is one thing to be in a class and solve problems and entirely another to try and explain the problem to someone else. I found that in order to explain something well, I had to understand it very well in the first place which was challenging at times but very helpful. In addition, I learned how to better communicate math by helping students on many different problems and learning by trial and error about what worked and what didn't.

My favorite experience in this program was when I got to teach a full class early on in the semester. This ended up being on polar coordinates. What I really liked about this is it gave me a chance to try and teach in front of a large group of people. There is a bit more that goes on when teaching at a board than first meets the eye. I found it somewhat difficult to plan out where each section should go on the board, and how to preserve space for finishing questions ect. Beyond the difficulty of board work, I think it was very valuable because it also let me see what it is like to stand in front of a group of people and talk through material and answer questions.

I would strongly recommend this program to anyone considering it. It has strengthened my mathematical foundations and helped me communicate in ways that I hadn't seen before. In addition, it has let me work closely with math faculty and given me insight into what being faculty is like. This has been very useful because this was a career path I was considering before this program, and after the program has become my planned choice.