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UTA Program Fall 2023 Reflection

Working as a teaching assistant this Fall with Dr. John Peca-Medlin and Michelle Ort for Math 195M, I have had the opportunity to connect with students, improve my knowledge and proficiency in certain skills, and become better at explaining topics. Math 195M is a colloquium for freshman or transfer math and data science students that is only offered in the fall semester. Therefore, despite enjoying this semester I am going to have to find a new position.

While in this position I held office hours twice a week and also did tutoring for Math 129 (Calc II). These were both new experiences for me and I was initially pretty nervous. It was much less scary after the first few times because the students are quite friendly and just trying to learn. The vast majority of questions were something that I was familiar with and could answer right away. Other times I was able to recall the information just by glancing through their notes or looking at another example. Students appreciate the help even if it might take you a moment to be able to explain it to them. My main advice for incoming TAs would be to not fear office hours and tutoring. For my office hours, there were some days when no students showed but there was one day when almost 20 students came in. Attendance fluctuated quite a lot throughout the semester, but some students became regulars, and it was nice to connect with them and adjust my explanations for their learning style.

Tutoring had much more predictable attendance than my office hours. Both of my tutoring hours were online, and I did not particularly enjoy that experience. I found that it was much more difficult to gauge students' level of understanding through a zoom meeting. It was also more difficult for them to show me their work or for me to write out and give examples

because of the online environment. My office hours in person allowed me to connect with students, see their work, and give better explanations so in the future I will choose to do my tutoring in person.

In this class, students are expected to learn how to use Latex and create a research project and presentation throughout the semester. I really enjoyed helping with this project because in addition to teaching math concepts I got to learn what my students were passionate about and interested in. I think encouraging students to independently research topics they are interested in is a very important skill, especially in a field like mathematics. Helping students with LaTeX was very fun but tricky at times. A lot of students had no programming experience and were overwhelmed by the experience or any errors. Additionally, because everyone was completing independent research projects some people needed things that we hadn't taught in class. I found this to be difficult at times, but I enjoyed problem solving to debug code or give people the tools they needed to finish the project. Working as an UTA this semester has been very enjoyable and beneficial in helping me develop certain skills. Being able to explain content to others is a valuable skill that this job has absolutely helped me hone. I would recommend this position as an undergraduate teaching assistant to anyone who is interested in teaching or improving their presentation abilities.