

My time in the Undergraduate Teaching Assistant program with the UA math department has given me some of the most rewarding experiences in my undergraduate career. I have pushed myself to provide students with the best possible resources for learning. Through the UTA seminar training and discussions, tutoring and being a TA for the Vector Calculus class, and having the opportunity to give a lecture to a class, I have greatly developed my skills in teaching others and my understanding of higher education.

In the UTA seminar, we had professional development training to improve our skills as teaching assistants and our personal academic and career abilities. Through many seminars, we practiced creating rubrics and grading submissions of assignments to better understand how to evaluate students' work. We also had an introductory seminar on using LaTeX, a mathematical writing software, which has given me the chance to make clean documents in both math and physics. For personal development, attending a seminar on interviewing for positions or scholarships significantly boosted my confidence in preparing for these professional interactions. Additionally, a seminar on applying to programs or positions and requesting letters of recommendation provided me with a fresh understanding of the other side of the recommendation letter process.

My experience as a tutor and teaching assistant has been a great opportunity as an undergraduate and reaffirmed my passion for education and solidified my commitment to pursue a career as a professor. I wrote solutions for written homework assignments in the class, which required me to understand the concepts and explain the solutions in such a way to facilitate student learning. I also held review sessions for students before exams to help them prepare and ensure they understood concepts correctly. Improving my explanations of concepts and developing multiple ways of teaching the same thing showed me what it's like to be a teacher

and how different students learn in separate ways. It was extremely satisfying to see students connecting the dots and growing throughout the course and to help them towards that goal.

Perhaps the most rewarding and important experience I had as a UTA was giving a lecture to a class. This was my first time teaching in a lecture format as opposed to tutoring students one-on-one or holding a review session with most of the material already prepared for me. Preparing for the lecture I had to ensure that I understood the concepts inside and out, and then I created the lecture in such a way to introduce the concepts based on things that the students already knew. This experience gave me a newfound appreciation for how much work goes into preparing for and giving lectures as a professor. In the end, I felt like most of the students understood my lecture very well and I was able to answer all of their questions satisfactorily. I am very thankful that my first time giving a lecture went smoothly, and I will have more confidence and understanding of how to prepare for future lectures.

Overall, the UTA program was a fantastic opportunity as an undergraduate math major. Tutoring and being a teaching assistant for students of a similar age was a great chance that I think all undergraduates should try at some point. The professional development of the UTA seminar and the opportunity to give a lecture in a class were unique benefits of the UTA program that I feel will benefit the rest of my academic career. I am really thankful to have participated in this wonderful program.