

## Robert Muth

**Sponsor:** Mosey Brio

**Course:** Math 475A

As an Undergraduate Teaching Assistant for Dr. Mosey Brio's Math 475 Numerical Analysis class during the Fall 2009 semester, I was doubly fortunate to gain some experience in not only teaching and grading, but to learn more about the course material itself. I had never taken the course before, but had a decent amount of experience in the MATLAB coding side of the course, so I had a chance to learn the theoretical side at the same time as I was attempting to help others learn it. Since I needed a deep enough understanding to not only apply theorems and formulas but be able to justify and explain the ideas behind them to others, I feel like this deepened my own understanding, and may have been useful to the students I assisted since my own struggles with the material were still fresh in mind.

My duties as a UTA included holding office hours three times a week, grading all homework, and leading review sessions before exams. It was during office hours, one-on-one with each student, helping them work their way through exercises and learn the intricacies of MATLAB, when I felt like I could be of the most use to the class. During office hours I learned a little about how to guide students through problems, as opposed to simply solving things for them (which is my gut instinct) and I still have a ways to go in this area. Leading review sessions was the most difficult part of my duties, but these helped me gain confidence standing in front of the class and answering questions on the fly, and increased my appreciation for the difficult job professors perform every day.

I'd like to thank the University of Arizona and VIGRE for providing me with this invaluable experience, Dr. Brio for sponsoring my teaching assistantship and providing a few private lessons that helped me understand the new material, and Drs. Carrie Wright and Vita Borovyk for their administrative assistance and for leading thought-provoking and informative UTA meeting sessions.