

## TEACHING STATEMENT

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Teaching is a great responsibility because it fundamentally changes the student. In my life, I have had the privilege to be taught by many great teachers. In trying to become a good teacher, I started by adopting the traits that most affected me as a student. My most influential teachers have been those who have shown a genuine interest in my education. This is the most important thing that I can offer my students. I try to show my students that I believe in them and will work as hard as they do to achieve our goal of learning.

I find that the classroom environment and my personal interactions with students have an impact on the learning process. In the classroom we are all learners, with the students learning the course material and me learning how to become a better educator. So I do not believe in establishing a barrier between my students and myself. To avoid this barrier, I speak to my students on a personal level, establishing interest in their lives outside of class. The first few minutes of class are often spent discussing our weekend activities, or sharing funny stories. I find that this type of interaction at the beginning of class establishes an open channel of communication between everyone in the class. I have also become known around George Mason as the cookie professor. This nickname comes from a classroom policy I have regarding cell phones. I personally find cell phones ringing in class very distracting. So, if a cell phone makes an audible noise during class, the owner must bring cookies for the class the next time we meet.

I teach through a typical lecture style, however the lecture is more of a dynamic conversation in which the class participates. I feel active learning engages and motivates students. I tell my students “mathematics is not a spectator sport”. I assign problems for students to establish and maintain skills. To periodically assess how skills are being acquired, quizzes are given. Typically, quizzes assess how well ideas and concepts are integrated, as opposed to testing a single concept.

I became painfully aware early on in my teaching career that most of my students are not as excited to learn mathematics as I am. The reality of the situation is that most students would rather undergo a painful medical procedure without anesthesia than sit in a math class. One of the lessons I’ve learned is that enthusiasm is contagious. If I am not enthusiastic in class, why should they be enthusiastic to learn? My love for mathematics is evident in my teaching. From student evaluations, this enthusiasm has a positive effect on

the students, as evidenced by comments such as “His enthusiasm made the class want to learn” and “The professor showed a real passion for the material, which made me want to learn it”.

Much of my teaching style is based on having clear examples to key concepts that can be drawn upon to deal with problems. Since most of the classes I have taught are comprised of students from a wide range of majors, I have to find examples from various fields that tie together the concepts of the course. In this way, I foster critical thinking skills across a broad range of disciplines. On several occasions I have had students visit me several semesters after taking my class to tell me they encountered a new situation where they applied a particular example or concept from class.

I am looking forward to expanding my teaching experiences. Thus far, I have taught classes at the freshman and sophomore level. I enjoy teaching general education courses as well as courses for science and mathematics majors. I am looking forward to teaching more advanced courses such as Linear Algebra, Real Analysis and Complex Analysis. I am also looking forward to increasing the amount of technology I use in the classroom. I have recently taught multivariable calculus, and felt the use of Maple to visualize surfaces would have been a huge benefit. I want to integrate technology to enhance critical thinking, not replace it.

There have been many instances where I felt my teaching was making a difference. However, the following story stands out in my mind as one of the best examples. I once had a student share a story of standing in line at Chipotle and overhearing someone ask “I wonder how many different types of burritos there are?” My student began to do the calculations in her head. At the end of her story, three other students said the same thing had happened to them. At the end of the discussion, the students all agreed that mathematics does have a place in everyday life. With this being a general education course in quantitative reasoning, I felt that I had achieved a major victory.