

Teaching Statement

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My life-long passion for mathematics and enthusiasm for exploring the field are two forces which shape my approach to teaching. As a teacher I believe I have the obligation to pass on the knowledge and skills that I have obtained in the most efficient and accessible manner possible. Further, as a student of my field, I am also compelled to try to impart to my students some of the intrinsic beauty of the subject and a deeper curiosity about mathematics.

In considering my own education at both the undergraduate and graduate levels, two professors stand out as exemplary of my own goals as an instructor. One of them consistently demonstrated his depth of knowledge by providing extremely well thought-out examples which enabled him to sharply illustrate the topic at hand, and which removed ambiguities and made it more easily understood. The other would write a problem on the blackboard and then stand in silence for a few moments, allowing the class to ponder the problem that we were about to explore. This brought about an enthusiasm in the classroom as well as made it interactive which made for a very stimulating learning environment. To me, these two professors embodied the hallmarks of a good teacher: a keen knowledge of one's subject, the enthusiasm and personal style to make it interesting and accessible, and a dedication to providing a meaningful, quality learning experience. These are values I try to bring into my own classroom.

My classroom is an atmosphere of mutual respect, and I express this at the outset of each semester in terms of our mutual commitments to one another; preparedness, punctuality and fairness. Though my class sessions are very structured from the perspective of content, I maintain a relaxed and personal style in which students are encouraged to interact with me and each other by both asking and answering questions.

Recognising that not all of my students are math majors or even science majors, it is important to me that I not only help them to understand the course material, but also increase their analytic skills. The goal of university education is not to drill students in how to complete a particular task but rather to broaden their intellectual capacity. I strive to give them intellectual tools to take a disciplined approach to analyzing complex problems. This of-

ten involves giving pertinent examples that are beyond those in their text books that students will find interesting and thought provoking. I have two goals in such examples. First, I want to motivate students to think about the example in front of them and thus provoke in them the desire to understand it and therefore study the material. Secondly, it encourages students to ask questions to clarify any ambiguity that may exist in their mind creating an interactive and enthusiastic classroom.

I take teaching to be a very serious responsibility and a privilege. I find it extremely rewarding to observe my students as their understanding of the subject evolves and grows. As they gain an appreciation of how mathematics is used in the world around them, whether in daily life or in new technological advances they might read about in the news, my hope is that I have given them the skills and perspective to enable them to start asking mathematical questions of their own. This is what I strive for, and to me is the ultimate satisfaction in teaching.