Teaching Statement
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I have a wide range of experience in teaching mathematics at the college level. Beginning as an undergraduate teaching assistant, where I led recitation sections for calculus classes and worked as a tutor in the math department’s help room. As a graduate student I have taught courses ranging from remedial algebra to multivariable calculus at Michigan State University and Duke University. In addition for the past two years I have been mentoring an undergraduate student on a research project. Since I began teaching I have worked on improving my teaching skills and my ability to develop a rapport with my students. While research has always been my primary focus in mathematics, I view teaching as an important part of being a mathematician and have always worked hard to fulfill this responsibility.

Since my undergraduate days, I have always felt that effective teaching requires communication in both directions between teacher and student. Because of this I try to foster a classroom environment in which students feel free to ask questions at any time. Also, I think that it is important to ask the students questions to keep them involved in the class. In fact, over my many years of taking and teaching classes, I have found that the answers that students give to the teacher’s questions, and in particular incorrect answers, are useful in both assessing the class’s understanding of the material as well as pedagogically (explaining why an answer is incorrect usually leads to a good way of explaining the correct concept). For this reason, I try to make my classroom environment as relaxed and informal as possible in order to keep the students at ease and willing to participate in class even if (or especially if) they are not sure of their answers. In addition, I feel that it is important to be accessible to the students. If possible, I like to come to class early and stay late to answer any questions the students have, and I also strongly encourage the students to avail themselves of my office hours or make an appointment to talk with me if they are having trouble. I like to avoid the use of calculators in the classroom, as I think they often interfere with the students learning the mathematics. However, I do employ technology where appropriate, while trying to keep it as transparent as possible so that the focus remains on the mathematics rather than the technology.

In the past semester (Fall 2003) I was given the opportunity to teach multivariable calculus and found it to be one of the most enjoyable and rewarding teaching experiences of my career. Also, I have been mentoring an undergraduate student on a research project supported by an NSF VIGRE grant. In part due to these experiences, I am looking forward to teaching advanced classes and working with upper level undergraduates and graduate students. I would especially like the opportunity to teach courses in biological modeling or non-linear dynamics so I could share my enthusiasm for my research with the students. In addition, my background in applied mathematics qualifies me to teach courses in calculus, linear algebra, real analysis, ordinary or partial differential equations, numerical analysis and other applied topics.

Through my interactions with students both in and out of the classroom, I have found teaching mathematics to be a rewarding experience which I hope will continue throughout my career.