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## TEACHING STATEMENT

I have always loved learning and the classroom, and my own academic path has been strongly influenced by excellent teachers and mentors. Yet, I never realized that I wanted to teach until I began graduate school at the University of Florida in 2008. Since then I have had the opportunity to be a discussion section leader, instructor, “large” lecturer and a course coordinator, a position rarely held by a graduate student in my department. Throughout those experiences I have developed a love for teaching and interacting with students. I have also begun to shape my views on teaching and to focus my efforts on four important goals: engaging the students, fostering interaction, improving their technical skills, and instilling an appreciation for mathematics.

Engaging the students begins with my attitude in the classroom. I am very enthusiastic which translates into the students becoming more interested as well. Flexibility and creativity in presentation of the material is also critical; incorporating technology and “real world” applications is useful. I also find that students are more motivated when they feel responsible for their own learning. I like to have my students set personal goals at the beginning of the semester and periodically monitor their progress to keep them engaged in the process.

Fostering an interactive environment is also vital to learning. I have students come up to the board, lead me step-by-step through examples, and participate in group work whenever possible. To promote discussion, I make an effort to be patient and careful in answering questions, always showing the value of the question. In addition, I am readily available to my students outside of class and strongly encourage them to attend office hours where they can interact with me or their peers on an individual basis.

Besides the overarching goal of improving the students’ understanding of the mathematical material, I try to develop a broader range of technical skills. Focusing on the overall approach to a problem, rather than the details, develops their problem solving skills. I also put a strong emphasis on mathematical writing skills such as logical flow, organization, and thoroughness.

Lastly, I always strive to instill an appreciation for mathematics. Revealing the proof be-

hind a notion they have taken for granted or exploring the deep connection between theory and applications can be eye-opening for students. Giving students a glimpse into more challenging problems can spur their curiosity beyond the scope of the current course which may lead them to do undergraduate research or pursue higher level courses.

Technology can also be incorporated into the mathematics classroom in a meaningful manner that contributes towards each of my goals. For a large lecture, I have used the H-ITT Classroom response system which allows students to actively work a problem and submit their answer via a clicker. Webassign and Pearson's MyMathLab are programs I have implemented for online homework and quizzes, which aid learning by allowing immediate feedback and explanations. In a smaller class I taught, we allocated an hour in the computer lab each day following lecture. Here, the students could individually work online problems or review the interactive "e-book". These tools were very helpful in providing a hands-on experience and allowing the students to learn at their own pace.

At the University of Florida I have taught classes from College Algebra to Calculus II and have enjoyed interacting with the students at each level. My assignment as a College Algebra instructor for AIM, a scholarship program for students from underrepresented populations, has been perhaps my greatest teaching challenge to date. Many of the AIM students have a limited mathematical background and thus struggle to appreciate the subject or understand its usefulness. When these same students tell me at the end of the semester that they now enjoy math, it is perhaps my greatest reward.

I also look forward to teaching more advanced classes in the future. My specialty area, mathematical biology, provides many tangible applications to engage students and provide an interdisciplinary experience. Biological problems span a wide range of difficulty and thus can be used as examples in many classes. In particular, I would be interested in teaching a biomathematical modeling class or a calculus course for the life sciences. I also look forward to the opportunity to mentor undergraduate and graduate students and advise them on research projects.

I was recently honored by the UF Mathematics Department with a teaching award. I believe that recognition is a testament to the large amount of effort I have put into teaching throughout my graduate program. I only hope that I will be given an opportunity at another great institution to continue my teaching development and to continue to convince students of the beauty and utility of mathematics.