Teaching Statement

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I would like to start by saying that I enjoy teaching. The interaction with students is a pleasure and there success provides me with a lot of satisfaction. I am capable of teaching most undergraduate mathematics classes immediately, and am willing to teach anything.

I have had a wide variety of teaching experiences and roles, ranging from that of high school mathematics teacher, to assisting with senior algebra classes. As part of this I have worked as a mentor for new teaching assistants and as a course captain for small group sections of second semester calculus. I have been ranked as excellent by my students on several occasions.

I consider my role as a teacher to be that of a guide, leading the students through the course. On the way I try to point out the highlights and assist with difficult passages. To accomplish this I provide a clear outline of what I expect from the students and make it easy for them to ask for assistance when they require it.

At the University of Illinois I have had the opportunity to try a variety of teaching methods including traditional lecture classes, computer aided instruction, as part of the Calculus and Mathematica program, and small group classes emphasizing the use of calculators. The classes I enjoyed teaching the most were the small group sections. I liked to start each class with a brief lecture and then structure a work sheet to lead the students through what would have been covered in a standard lecture, letting the students assist each other as much as possible, and only interrupting when necessary. With this structure I consider it important that each student be able to see their progress and have a list of accomplishments for each class. This will be different for each student, but the positive nature of regular success helps me to get each student to strive for more. Especially in the work sheets, most of the introductory examples have to be very approachable, letting the students know that it is something that they can do. I try to give the student the confidence to use the tools they are learning, and then start challenging them.

I like to see the students learning as much as possible for themselves. They learn more from getting a wrong answer themselves than getting a correct answer from me. Until the regular exams, all I am interested in seeing are legitimate attempts, not necessarily correct solutions.

Finally I like to make a class interesting and fun. My favorite example of this is when discussing the limits of numerical accuracy I like to bring in baking ingredients, including eggs, make a batter, and discuss how accurate the other measurements have to be when they consider the range of sizes a standard egg can be. This is one piece of the course that my students always understand.

Conclusion

As long as I can get the students to attempt the material they can learn it. To do this I try to make it as approachable and fun as possible. Finally I gave them clear and consistent guidelines so they know what is expected of them and when I expect it.