

PERSONAL STATEMENT OF TEACHING PHILOSOPHY

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During my first semester of graduate school I took a “teaching seminar” class. Having been a tutor/student-teacher in college, I was very confident in my teaching skills and volunteered to do my presentation first. After I instructed the fake class on the glories and pitfalls of integration by parts I awaited the peer review of my performance. Tanya, an elder graduate student, commented in a heavy russian accent, “All that you have here...” she waived her hand toward the blackboard, “is crap!” I guess she was less than satisfied with my handwriting and overall board work. I took the criticism to heart and over the next few years I have improved this aspect of my teaching dramatically. This is what I expect from my students; learning from one’s mistakes is a good way to study mathematics. The most important thing that I want my students to take from my course is how to study and enjoy mathematics. I employ several techniques in trying to accomplish these goals.

I like to keep my courses light. Precise definitions and theorems are accompanied by a colloquial version that students will find easier to conceptualize. Motivation of each subject is as important to me, as a teacher, as the subject itself. Subsequently, before every exam, I like to give my students a rough outline or study guide that highlights the important concepts and theorems for those sections. I encourage my students to write out a detailed version of my rough outline which fills in the holes. Whether the class is a lower division calculus class or a graduate-level seminar, writing the main ideas down carefully helps one to see the *big picture*. The understanding of how all of the parts come together makes learning mathematics more enjoyable.

Another important tasks a teacher must accomplish is a rapport with his students. With that in mind, learning every student’s name is crucial. The first few minutes of each meeting during the first few days of class are devoted to an ice breaker I call the “categories game.” Each day, the students must collectively choose one of three question topics which must be answered by several students. The questions are used to give me

something to remember about each student besides the obligatory, “What’s your major?” types of questions. This technique works very well in a smaller class setting but may be employed in some sense in a large lecture environment. I always come to class early so for the rest of the term this rapport is perpetuated by some informal small talk I like to have before the formal class period. I feel like my students find me very approachable which is very rewarding for me both outside the class room as well as in it.

Math courses, especially lower division undergraduate courses, do not have to be something that people “have” to take. They should be something that students like. My philosophy is that this is done by promoting good study habits to help learn the main concepts in a fun environment.

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