

Background & Experience

My teaching experience is fully detailed in my CV, but I will outline it briefly before explaining my teaching philosophy. I have, in some form or another, taught since Fall 2008; my formal teaching experience began with student teaching in the Spring of 2011, as requirement for earning my B.S. in Mathematics Education that May. Since then, I have taught over 20 courses, in subjects ranging from sixth-grade-level arithmetic to ordinary differential equations, at the middle school, community college, and university level.

General Philosophy

In my opinion, the best teaching is done from a place of *passion*. My favorite instructors were those who modeled enthusiasm for the material, patience in approaching the material, and humility in interacting with the material. To the best of my abilities, I attempt to model this for my students.

In my classroom, I endeavor to create an environment where effort is rewarded and supported more than “getting the right answer”. Mathematicians learn from mistakes more often than successes, but students often feel the reverse is true. Teaching mathematics requires fostering the idea of a productive failure—one in which students become accustomed to using failure as a means for progress, rather than an obstacle to progress. People are more likely to open themselves up to make mistakes if they feel comfortable, so making myself approachable both in and out of class is a priority for me. This often occurs in the form of making jokes, getting to know the students by name, or chatting with them about non-math related things.

I value analytic thinking over teaching the student to be a computer. Ultimately, this is the most portable skill from a mathematics class, and I try to incorporate its development in my lesson plans.

For a calculus course of any flavor, analytic thinking is fundamental. The STEM calculus sequence relies heavily on the ability to think about why or how a particular process should be applied to a given problem, and the business calculus sequence emphasizes the ability to critically analyze what a process does or what an answer truly means. For either track, continuing to grow this skill will only benefit the students. I firmly believe that a student with analytic problem solving skills can “recover” material forgotten or material never learned better than those students who simply parrot material.

The vast majority of my teaching has been done in coordinated courses. I understand that the purpose of coordination is to provide a more uniform experience to all students; as a faculty member in a coordinated course, I would endeavor to support that goal. I am more than happy to help the coordinator with tasks such as writing, proofing, or grading exams.

Content Delivery

In the past few years, I have shifted away from pure lecture-style delivery and more toward an active learning or growth-mindset style of management. Lecture is quite frankly

boring—students are asked to remain passive in their own learning, and instructors are isolated at the front of the class. Active learning, on the other hand, has the potential to make the material vital to the students. I have found that this is key to student engagement, and ultimately student achievement. I feel comfortable in both lecture-style and active-style environments, and am perfectly willing to be flexible according to the desires of the department or coordinator. I also think that there is no terminal level in delivery; one can always improve. Any opportunity to hear constructive criticism, learn about new techniques or tools, or observe others who excel in their teaching is welcome.

I understand students' frustrations with the bloated price of textbooks. In the last few semesters, as much as possible, I have transitioned away from relying on expensive textbooks and toward providing written material for the students, in form of workbooks. I have written (and successfully used) worksheets for the 1743, 2123, 1914, and 2443 courses here at OU. Additionally, I have developed and taught a workbook-centered Calculus II course at Oklahoma City Community College. I have found that students prefer this style of delivery (in conjunction with active learning techniques) to traditional methods, and have also found that I much prefer it as well.

I thoroughly enjoy teaching, and I have for a long time. I am not perfect, and I don't think I ever will be. That doesn't mean the attempt is in vain, however. Every class presents its own unique challenges and rewards, the likes of which I have never seen in any other line of work. I look forward to reshaping my teaching philosophy, improving my skills, and engaging with my passion for teaching math for a long time.