Thomas J. Fisher

I have had the opportunity to teach over 500-students, ranging from freshmen taking service courses, to upper-level mathematics majors, and to graduate statistics students. Each experience has brought its own set of challenges and helped me develop my personal teaching strategy. I believe an effective instructor should: have knowledge and confidence in the material, possess a willingness and eagerness to improve, be able to adapt to the personality of the class, and establish realistic but ambitious expectations for the students.

As a student I took approximately two-hundred credit-hours of total coursework, mostly in the mathematical and other sciences. While an undergraduate, I had a full-time job as a computer security assessor where I picked up practical knowledge of applied mathematics and computing. With a degree in computer science, a general interest in the sciences, and work experience, I possess a unique understanding of mathematics and statistics beyond that of graduate-training; particularly in the applications of statistics. My experiences and coursework have given me the confidence in the material from both a theoretical and practical aspect.

I began teaching as a second year graduate student. This early experience gave me the opportunity to improve my public speaking skills, my preparation and overall effectiveness as an instructor. After some learning pains, tweaking my approach a few times, utilizing the feedback from my teaching evaluations and interacting with senior faculty, I believe I found a solid balance of examples, intuition, interaction and workload for the students. My work was rewarded with the 2005-2006 Department of Mathematical Sciences Graduate Teaching Assistant of the Year Award. By my fourth year as a student I was entrusted with courses where I was solely responsible. This experience prepared me for my teaching duties as an Assistant Professor. I continue to look for ways to improve as recently I have implemented a suggestion from Dr. Charles J. Wurrey, a Emeritus Professor of Chemistry at UMKC, to assign an Assignment #0 on the first day of class. The assignment is the typical information index card, however I require students to turn it in at my office during designated hours. Not only does it require students to learn the location of my office, it allows me to meet each student individually for a few minutes.

Each class has its own personality. I try to adapt my teaching style to match the personality of my classes. In lower-level service courses I attempt to connect the material to the big picture and how it relates to other disciplines through many applications. In upper-level and graduate classes when the students turn in the assignment #0 to my office hours, it gives me the opportunity to meet the students, learn their expectations and goals in the course and beyond. This allows me to potentially adjust the course to cover additional applications, or provide additional insight and rigor into the theoretical aspects of the methodology. To improve the rapport with the class I generally ask for their feedback and utilize their input when appropriate.

The most challenging aspect of teaching is the setting of expectations for the students. Not only do I expect students to demonstrate basic competence in the curriculum, but I hope to show the applicability of the material and strive to inspire critical thinking and transference of skills. I use the first day of class each semester as an opportunity to show the relevance of the course material to the respective disciplines of the students. Generally, I assign at least one project in which the students are expected perform statistical analysis on a real world problem and report their findings in a well-written paper. Depending on the course, I encourage students to pick projects within their intended areas of focus in order to help students see the relevance of the skills learned in the course. This approach has allowed me to personalize the course for each particular group of students and set achievable expectations.

My experiences have nourished my philosophy of using an adaptive style that I continue to use. Now in my eighth year of teaching, the feedback received from students has assured me I am an effective lecturer but I still look to improve in all areas. I've learned you cannot please everyone, but overall I find my teaching evaluations to be encouraging. The teaching experience has been exciting and rewarding and I look forward to continue teaching, improving my style and fulfilling my ambition for a life-time of learning.