

TEACHING STATEMENT

Jerry Alan Fails

Good teaching implies that learning takes place. This learning goes beyond what a student retains from a lecture; good teaching requires that the teacher is always learning too. A good teacher deeply understands current topics and research in their chosen discipline, but there more than the subject matter that they need to learn and understand. A good teacher learns from class to class how to improve his/her delivery, approach, evaluation schemes, interaction style, curriculum and philosophy. A good teacher also seeks to observe, and get feedback, which enables the teacher to learn how students in general and students in a particular class can best learn the principles being covered. A good teacher has a thirst for learning new things and sharing this knowledge with others, not just as rote recitation of facts, concepts, and principles. This is my approach to teaching. My personal drive to teach well allows me to continually learn as I seek to inspire learning in my students.

In order to connect, inspire, and challenge students, I have adopted an interactive approach to teaching. Three of the elements I have incorporated to achieve this include: the promising syllabus, frequent feedback (to and from students), and having a creative challenge.

In a *promising syllabus*, students are promised that they will receive certain skills and experiences and receive abundant resources to achieve those goals. I start by promising the students that I am committed to help them learn and that I expect their commitment as well. The key is to motivate why the class is important in the students terms. Along with my promise, I request their dedication, and tell them what we will do together to learn the concepts, and how I will know they are learning. Students are expected to uphold a high level of academic conduct – and this standard is clearly identified in the syllabus. I believe my students feel my passion and know that I not only want them to learn the material, but I care about their success, and that I will make sure they have several resources to help them as they learn. They know my expectations are high, but that I am also highly motivated to present information and help them practice the concepts so they truly understand them.

An important part of the learning process is *frequent and timely feedback*. In order to better support the learning needs of students I have incorporated several feedback mechanisms to allow students to receive and give feedback on a regular basis. I give ample opportunities for students to demonstrate their learning and give them prompt feedback on their work – within a one-week timeframe. I also sometimes use automated tools (such as online quizzes and coding tools) to give students more opportunities to practice. In terms of getting feedback from students, beyond the feedback I receive in class and office hours both explicitly and implicitly via observation, I use several surveys (generally after they have taken an exam and before I have returned them) and an open anonymous forum for students to give me feedback to improve my teaching, and the learning environment in general. I also respond to students' email within 12 hours (although it can be as slow as 48 hours over a weekend). My style of teaching includes a liberal dose of the Socratic Method to trigger thought and responses from the students, along with trying to cover main concepts multiple times from different perspectives. I also employ the think-share-pair method along with its variants. Students are asked to complete meaningful projects and get detailed prompt feedback.

Along with the promising syllabus and two-way feedback, another element I include in my courses is a *creative challenge*. This is often in the form of a project where I encourage students to use their creativity and challenge them to go the extra mile in applying what they learn. In my introduction to programming class where my students have tackled a Hangman game, several have gone the extra mile to be creative by exceeding the requirements and embellishing their games. Incorporating a creative challenge has allowed students to feel my commitment to their learning, and to engage more fully in their learning as they email me or show up during office hours; sometimes showing me what they added to their projects *after* a project deadline because they felt the desire to add and do more.

Research and teaching have a symbiotic relationship. Good research can impact teaching and teaching can impact research. Active research provides examples, applications, and new ideas that can be brought into the classroom especially in a situation where professors are teaching classes directly related to their research. Teaching provides an open forum where ideas can be developed through verbal expression and dialogue. Occasionally I have met professors who feel burdened by teaching, citing it distracts them from their research. Although research is important, the importance of teaching should not be minimized – and I feel strongly that professors not only have a contractual obligation, but an ethical and moral responsibility to provide inspiring instruction and guidance to students. Indeed, I believe that introducing and integrating research into courses – at an appropriate level for each course – is beneficial for students as well as the professors.

Although the classroom experience is important, teaching extends beyond the confines of the classroom. While formal and traditional means of education are important, informal, one-on-one opportunities that occur in office hours or mentorships have a profound effect on students. I recognize the profound impact such experiences have had on me personally, and am working to provide these opportunities to not only the students in my class, but also those who will be doing research with me. Providing students hands-on and one-on-one interactions with a mentor is my goal as it has tremendous impact and inspires them to progress and learn. Beyond teaching and mentoring the hundreds of students I have taught in classes, I have mentored more than twenty undergraduate students, and eight Master's students.

As part of my desire to continually improve the student experience, for the last five years I have taken a central role in leading the CS1 course at Montclair State University (MSU). I have chosen to do this to motivate and challenge the students from their first CS experience and to help them get a strong base upon which to grow. As this is my sixth year at MSU, I have seen students in the upper-level and even graduate courses that started out in my CS1 course. I have received numerous emails from students thanking me for helping them build that firm foundation upon which to build. I am pleased that several of my students feel that while I have high expectations, they enjoy having me as a teacher because they learn and know I care deeply about their learning. This has been reflected not only in my student evaluations, but also by the numerous emails of appreciation I have received from students.

While at MSU I have developed new undergraduate and graduate courses in Human-Computer Interaction (HCI) and Mobile Computing. HCI is my area of research and is one of the fundamental pillars to the CS & IT programs according to ABET. These courses have been well received by students and administration as these are growing areas of interest.

I have participated in several university-sponsored events with the goal of continually improving my teaching. The Research Academy for University Learning (RAUL) is an organization at Montclair State University that is focused on improving the learning experience. I was selected as an Engaged Teaching Fellow (2011-2012) where I learned several skills while RAUL was under the direction of Ken Bain. Subsequently I was selected to serve as an Engaged Teaching Mentor (2013-2014). I am pleased to share what I have learned and to continue to learn along with my fellow colleagues at the university. It is great to work side-by-side with so many faculty members who are interested in improving the teaching at Montclair State University. I have used knowledge gained from the Engaged Teaching Fellowship program to improve my syllabi and create a more engaging and interactive experience for the students.

A good teacher must always be willing to listen, sit back, and alter content and delivery as appropriate for the specific students and situations. As such I participate in as many teacher improvement opportunities as possible (see a list of some items on my CV). My participation in teaching enrichment activities in conjunction with feedback from students and my own self-reflection pushes me to continually improve my teaching. I look forward to inspiring and learning from students for many years to come. In this sense, I will be not only a teacher but also an eternal student, learning with my students and colleagues.