Christine B. Masters Teaching Philosophy
Associate Professor of Engineering Science and Mechanics

“When we educate people, if we use the word seriously, we do not stuff something new into their minds; rather we lead this something out of them; we bring it forth from the unconscious into their awareness. They were the possessors of the knowledge all along.” M. Scott Peck, *The Road Less Traveled*, 1997.

I believe this quote expresses the core of my philosophy on teaching and learning. As an educator I view my role less as a ‘provider of knowledge’ and more as a coach, trainer, mentor, and even cheerleader. The students themselves are the only ones in control of how much they learn. The most important thing I can do as the instructor is inspire them to want to learn, and then structure my courses with appropriate assignments and incentives to encourage them to put in the effort.

Each semester I supply students at the start with a comprehensive set of clear and measurable learning objectives. Throughout the semester, these objectives drive my choices of classroom activities, homework assignments, and exam questions. Coupled with a detailed course syllabus, my students know exactly what is expected of them and what steps they should take to be successful in learning the course concepts.

Class participation is vital to student success, especially in a large class like mine. I use a variety of technologies such as clickers and a tablet PC as well as a variety of active learning techniques such as think-pair-share to engage students in discussion. In addition, I bring examples and physical demonstrations to help students visualize abstract concepts. It is amazing how many engineering concepts can be illustrated using a swim noodle.

As with any meaningful endeavor, nothing can be mastered without hard work. Students work on group exercises during class and solve homework problems for practice outside of class. And through a series of on-line assignments, students are encouraged to read the textbook before class and assess their knowledge after.

I also believe it is my job to be accessible to students, not only through office hours but also by arriving to class 10 minutes early and staying 10 minutes after class when students are most likely to ask questions. One of the most fulfilling parts of my experience as an instructor is when a student has one of those ‘Ah-ha’ moments, times when things finally click and they realize that they understand what is going on. To encourage students to share those moments with the entire class, I bring an ‘EASY’ button for students to push that declares for all to hear, “That was easy.”

And finally, I believe students need to enjoy coming to class. My role as instructor has to include some showmanship, some silliness, and most importantly abundant enthusiasm. To show students how much I enjoy being there for them, I start each lecture with the phrase, ‘Welcome back to another EXCITING week of statics!’