

## Statement of Teaching Philosophy

If you would thoroughly know anything, teach it to others.  
Tryon Edwards (1809 - 1894)

This quotation reminds me how important teaching human factors engineering is—the discipline that I have devoted my lifelong study to. It also reminds me how much I love human factors engineering and how happy it makes me to teach it to my students. It all started when I was a student in my mentor's classroom who possesses a deep love of human factors engineering. It was contagious and I hope to contagiously spread my knowledge and love for the field to my students. My goal is to share my knowledge and my love for the knowledge.

I treat my students as equals and impart in them engineering ethics, a broad and thorough knowledge of human factors engineering for undergraduate students, a deep and theoretical knowledge of the current research for graduate students, and to prepare each of them for a future in engineering that maintains either a focus on human factors engineering or a consideration of human factors engineering.

My lessons combine current events, classic theory, issues of student interest, and real world application. Students are evaluated through a combination of discussion contribution, written class feedback, project participation, and examination. Human factors engineering demands a discussion based class and evaluation of case studies to illustrate the wide range of applications the general principles can be applied to.

Undergraduate courses utilize an introductory textbook, case studies, and current events written up in news articles. Students would be encouraged to participate in discussion by asking them to take a moment to think about an answer to a question, then students that do not often contribute to class will be asked to share their response they have had a chance to prepare. Discussion will build upon the initial responses. Graduate courses use a high-level discipline-specific textbook and a wide range of journal articles that illustrate cutting edge research in the field. Projects investigate applications of human factors principles to product design and processes that violate human factors principles.

My teaching environment establishes an equal playing field among myself and my students. I gain respect from my students by respecting them and seeing them as my equal, assuming we both have something to learn from one another. I listen to what my students have to say so that I can truly answer the questions that they have. By listening to their verbal and nonverbal feedback, I am able to adapt my teaching style and content to what is most effective in communicating the relevant information in the most effective way. This environment is comfortable yet challenging and is not intimidating or scary. I find that transparency, and being upfront and honest initially intrigues my students. They appreciate honesty and in turn I gain their trust.

As a woman engineering professor, I take pride in being a role model to women in engineering, encouraging all students to take an active role in class discussion. I also aim to inform all students of the possibilities of graduate studies, as a professor informed me of the merits of graduate school when I was an undergraduate student.

I see the key challenge in the teaching-learning process as being various students have differing learning styles and paces. As Edwards' quote above indicates that if you possess knowledge you should pass it on, so I am willing to make any and all efforts to maximize the amount of learning that takes place in my classroom. The pace of the material in the class ideally includes the bottom students of the class while maintaining challenging for all members of the class. Additionally, as my course content is often interdisciplinary, I will make an effort to attract students from several disciplines and accommodate students taking my course from various departments by making prerequisite skills very explicit in the beginning and offering opportunities for students to make up their deficits by teaching special sessions outside of class that will catch those students up.

I look forward to continuing the teaching of human factors engineering to students throughout my career, all the while challenging my students, and challenging myself in the meantime by evolving the material and teaching styles course after course and maintaining a high level of expectations for my students, both while they are in my class and beyond.