

1. Teaching Philosophy Statement

My passion for teaching is rooted in my desire to make a meaningful impact on students' lives, fostering both intellectual and personal growth. Teaching allows me to fulfill what I believe to be the fundamental responsibilities of engineering educators: application of class material to 'real-life' to prepare students for a diverse workplace, nurturing students' capacity for critical thinking, and fostering a drive for life-long learning. I strive to make my classroom a supportive environment where all voices are valued and heard, encouraging a sense of belonging and respect among students from all backgrounds. As an immigrant and minority, I am particularly attuned to the unique challenges facing underrepresented groups and actively work to empower all students to succeed and contribute meaningfully to the engineering field and society. I am committed to ensuring that all students have equitable access to the opportunities and resources provided in my classes. I actively consider the varied challenges and advantages that each student may bring, working to create a learning environment where everyone can thrive. I implement these principles through a dynamic teaching approach, integrating lessons learned as well as feedback from students and peers.

Preparing the students for a diverse workplace - skills training meets practical application:

As an engineer and educator, one of my paramount goals is to help students transform into qualified engineers who possess a mastery of their core skills as well as the ability to apply their knowledge in the workplace ethically and confidently. I create an environment, both in and out of the classroom, that exposes students to practical applications of what they are learning, and I leverage my industrial and research experience to accomplish this. In the classroom, I enhance course content by providing hands-on demonstrations of engineering concepts, theories, and principles. I use a variety of means to supplement theory, which has proven especially relevant in design and manufacturing courses. Many of my examples are cases in which I was personally involved during my three-decade career in both industry and academia.

Today's society and workplace are becoming increasingly diverse. In my classes, I speak openly about the importance of diversity, acceptance, and inclusion. Thus, I implement group assignments within my engineering courses as well as interdisciplinary group projects. I also provide opportunities and encourage student participation in activities such as international exchange and internship programs.

Developing students' capacity for critical thinking and collaboration:

While engineering concepts remain relatively constant, the technology for application of these concepts is ever evolving. An engineer's education should move students beyond acquisition and retention of information. I believe this is best achieved through development of critical thinking, problem solving and collaboration skills. I support this through a variety of means. I assign articles on contemporary issues and facilitate discussions in and out of the classroom that require students to analyze and problem solve. I create group assignments to develop collaboration skills. I also promote collaborative authorship as demonstrated by my extensive engagement with undergraduate students outside of the classroom in research and collaborative work. I always respect and respond to student requests as evidenced by my open-door policy.

Life-long learning and on-going professional development:

Life-long learning is crucial within the field of engineering – I teach this to my students and practice it myself. My students are required to look outside their textbooks to find related industry standards. I highlight the importance of becoming members of professional organizations and keeping current with licensing requirements. I encourage them to become active members of society and support them through academic mentoring, early career counseling, and professional development advising.