

*Giri Joshi*

*E-mail: sushil2035@outlook.com*

*Phone: (857) 364-7145*

### **Statement of Teaching Philosophy**

Physics knowledge provides students the opportunity to apply their learning to useful contexts and also promote their problem solving as well as critical thinking skills. Mainly because of these reasons, I enjoy teaching physics and engineering to provide students ample of opportunities to solve context-rich problems, engage them in-group discussions requiring critical thinking and designing small projects.

Research suggests that materials science learning is enhanced by hands-on and minds-on involvement. Thus, I actively engage my students in a student-centered environment by facilitating their own knowledge construction. My teaching style engages students by starting with questions relevant to the topic. I also scaffold them with interactive physical models or demonstrations whenever possible. Instead of answering their questions directly, I provide hints and ask questions back to empower them to find the answer. Additionally, from my teaching experience, I have observed that students are more enthusiastic about learning only if they know the purpose and relevance of their learning. Thus, I incorporate discussion about useful devices or natural phenomena to enhance students' interest by showing the relevance of physics to their lives or careers.

I firmly believe that all students are capable of learning science irrespective of their learning styles. Moreover, there is no universally accepted best way to teach. From my teaching experience, I have learned that the best teaching style for some students may not work for others. Hence, I continually change, adapt and adjust my teaching methods as needed. I rely on multiple representations and seek alternate strategies to help students learn. I solicit candid feedback through surveys and conduct focus groups multiple times during the semester and continually assess students' learning progress.

For me, an effective teacher needs to have strong academic knowledge, clarity of delivery and enthusiasm for teaching as well as learning. My education has given me the academic background as physicist while my research in materials physics and engineering has trained me to understand students' difficulties in learning physics and the tools to empower their learning. My more than 3 years of teaching experience and manager experience of research of development has shaped me into a teacher capable of addressing the needs of diverse students in a wide range of instructional settings. I use materials science education research-based instructional strategies and multiple modes of presentations in my class in ways that I have found to be effective.

Overall, I am passionate about teaching and learning. Teaching satisfies my love to inspire students to grow intellectually. Moreover, the best moments of my life have been those spent in the classroom with my students and discussing the scientific problem and solutions with my colleagues. Hence I look forward to pursuing my goals as a teacher and making a difference in the lives of my students at an institution that values teaching and learning.

Sincerely,  
Giri Joshi