

**Teaching interests:**

I look at teaching as a three-fold issue. First, I am paid to instruct students at UTD; second, I enjoy teaching and third, teaching is a wonderful opportunity to review old material or learn new material.

While I am paid to teach, it is more important that it is something that I greatly enjoy. I have strong desire to be an excellent teacher and I have tried to model my teaching style after some of the professors that I had as a student. An example of this would be Dwight Nicholson (U Iowa). At no point was his class simple – he always pushed you to excel. However, despite the fact that he was busy as the department chair, Prof. Nicholson was always willing to help students who were stuck. (The other excellent professors I had had similar traits.) As such, I do a number of things. First, I push the students as hard as I reasonably can. (On average, I have found the UTD students to be highly motivated but slightly overworked, as many have full time jobs outside of school.) Second, while I have ‘official’ office hours, I tell my students that they are welcome to come for help any time between 8 and 5. (Many of them take advantage of this – I just had 4 students in my office.) Finally, after having recently looked at my notes from my class with Prof. Nicholson, I find that he insisted that I not only could ‘do’ homework problems but that I could understand and explain the physical picture that the equations described. I find that I am doing the same thing with my students. Finally I remember that he tried to make the class exciting. I try to do the same. Some day, I hope to be as good an instructor as Prof. Nicholson was.

In addition to my desire to be an excellent teacher, I have a desire to teach a broad variety of microelectronics related classes. Thus far I have taught three different classes, UG Mathematics II, G Plasma Sciences, and UG Electromagnetism. Of these three, I have only taught one class UG Electromagnetism on a repeated basis. (This is because I love Electromagnetism and there is a dearth of professors who are willing to teach it.) In addition to those classes, I will be teaching a new plasma technology class and lab this coming spring. This new class is the result of a grant from NSF to UTD to build a plasma teaching and research laboratory. (The PIs on that proposal were LJ Overzet, myself, A Cunningham, R Heelis and G Earle.) By teaching this lab and class, I will be able to experiment with plasma systems and diagnostic tools that I am less familiar with – thus broadening my basic knowledge in plasmas. In addition, I – with a number of other faculty – have been try to get funding to build a microelectronics device production teaching lab. This is something that I see as useful to both our students and my basic knowledge.