

## ***Teaching Statement***

Andrew C. Haas

Through teaching laboratory classes, leading study groups, tutoring private students, and advising undergraduate summer students and graduate students, I've learned many important lessons. First is that a student learns much more easily if he/she understands why the topic is *interesting or important*. Some students will naturally be interested in a topic, but for those who are not, it's the teacher's job to try to explain why the topic is interesting or useful. Interested students will ask questions that help them fill in the gaps in their understanding and will retain key concepts.

Second, I try to use good *examples* from the real world to relate the abstract physical principles and equations into a situation that the student is familiar with. I find that one or two good examples that are fully understood is enough for students to remember a concept. Too many examples tend to confuse students, and they have trouble remembering the central point and get lost in the details.

I also think it's crucial to *listen* to the students. Their questions show what concepts are not being understood correctly and where extra time is needed. Therefore it's important to constantly get feedback from the students by having them work out parts of problems and answer questions.

I'm sure that teaching large classes will offer new challenges, but I think the principles remain the same. Students must be given the desire to learn, clear examples need to be presented, and the teacher must be an interactive piece of the classroom.