

Teaching Philosophy Statement¹

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Each of us may be bounded and ephemeral in our capacity for knowledge and discovery, but the purpose of education is to expand and coalesce the ranks of those who use and develop the fruits of knowledge. I believe that effective teaching is a duty to persons both past and future, and an utmost priority. Twice I have volunteered to teach an extra session when departments were short on TAs, and I pride myself on my commitment to improvement. For instructional guidance, I rely on research into teaching methods and cognition, which often challenge traditional educational norms. Research highlights the role of a teacher as inspiring and assisting, not simply training, students in their education. I try to incorporate these principles into my teaching, while also maintaining a nurturing and collaborative environment for students.

Motivating knowledge can be more challenging than transmitting it, and teachers cannot assume that students are intrinsically enthused to study their topic. Grades may merely prompt procedural effort, whereas retention relies on engagement and excitement. Furthermore, students have limited budgets of time and effort to allocate to their classes. While teaching a required physics course to biology students, it became clear that they considered the class a formality, irrelevant to their lives or careers. To convince students of the usefulness of physics content in both life and life sciences, I began each section by collectively brainstorming applications of the skills and concepts. Combined with authentic enthusiasm from the instructor, this simple exercise serves to both break students' preconceptions as well as provide tangible examples of the material.

The hazard of simply telling students how the world works, is that they may then try fitting their experiences into your model rather than organically reaching their own conclusions. Creating the conditions for students to question and reason for themselves is a deliberate exercise. In addition to solid fundamentals, students require concrete analogies to the material which allow them to break apart the problem and make connections. The engineering classes I have taught are theoretical in nature, so real examples relevant to each individual's prior experience were indispensable. Each student has a unique background and there is no universal course design, so teachers must be active accomplices in their students' critical thinking.

In my life and in my teaching I value warmth and approachability, since the impression of superiority or aloofness is counterproductive to the demystification of content. The aforementioned teaching strategies are less effective when students feel intimidated by or distant from their instructor and peers. As such, I strive for my classrooms to be communities in which people feel valued, supported, and safe. The development of knowledge is a collective effort, and I hope to help students feel a welcome part of something larger.

My passion for teaching pushes me to become better, including taking the graduate pedagogy course this quarter. It is always possible to make classes more engaging, more relevant, and more inclusive, so I will continue analyzing and improving the effectiveness of my instruction.