

My Philosophy of Universities as an Institution and of a University Education:

This is a university, not a high school. The professor is a scholar, not a high school teacher (In the sciences, this means he or she is a practicing scientist). The university is an institution for the acquisition of knowledge; acquisition of **new knowledge through research** and the acquisition of **knowledge by the students through teaching**. The environment of a university should reflect these two types of activities equally and in integrative ways. The university is also a valuable **intellectual resource** for the community at large (the community's "think tank").

The student is here to develop his or her intellect, meeting **higher standards of thought** (Higher Education!!!). The student should be able to **synthesize concepts** not merely regurgitate information. Learning is not about memorizing information (we have computers for that), but rather it is about learning to formulate relationships between facts and ideas, and constructing intellectual models of the world. The **value of undergraduate research** in developing these abilities cannot be over stated. It absolutely crucial for science majors to have some research experience (for practical reasons too). A valuable experience lasts for more than one or two terms. A meaningful experience should last two years or more. Ideas have to develop over time. Humans Beings have to mull over concepts before we can fully integrate them.

Professors are fully engaged in their field of scholarship (scientific research) and this is what gives them credibility as instructors. Would one want doctors trained by professors who have not practiced medicine for 10-20 years? Would you want to learn auto repair from some one who never works on cars? Then why would you want a professor teaching in a field in which he or she is not active? I believe it is my duty to strive to be the best scientist/educator I can be. I take both activities very seriously and have dedicated my life to this pursuit.

Expectations of the Student:

1. Students are expected to be developing **intellectual self-reliance ,critical thinking skills** and **analytical skills** .
2. Students should **not need their hands held** or to be spoon-fed information.
3. Students are **not whiners**.
4. I expect students to be no less **dedicated** to the pursuit of knowledge than I am to being the best scientific scholar/educator.
5. The student is required to **assume full responsibility for their performance. I do not give students grades, students earn grades!!!!!!**
6. **The student should be motivated. If you are not motivated to pursue this field, you should do something else. I get up at 5:50 am.**
7. Students should become **involved in either scientific research and/or other internship-like activities** during their tenure at the university. These activities put their knowledge and abilities to work and further deepen their mastery of the field. (plus it's fun)

