Diego Gonzalez – Teaching Philosophy Statement

As a student, the most exciting part about my undergraduate education was realizing the implications of what I learned in class had in my own life and the lives of others. Learning that neuronal firing controls behavior, for instance, prompted me to question the existence of free will, while the insight that neurotransmitters don't just bear one fixed function, but rather are involved in a multitude of behavioral and cognitive functions in a receptor type-, cell type-, and region-dependent manner filled me with a sense of awe at the complexity of the brain and its mechanisms. Now, as a teacher, **I wish to inspire my students with that same sense of wonder, excitement, and curiosity that comes from learning**. I not only want to instill this passion for learning in promising students, but also in students who may think that academia is not particularly for them. I believe that science has something for everyone, and everyone has something that they can contribute to science. It's important to receive input from a variety of perspectives within a field of study, so creating an environment in which students feel safe and included is also something that I value highly. In my teaching practice, I strive to incorporate these principles in a variety of ways.

To promote students' engagement with content, I utilize a number of different active learning strategies. When providing examples of a concept or exercise in class, for instance, I pick from topics that are relevant and interesting to my students such as dating or relationships to not only capture their attention, but also to attempt to continue to think about the material, its implications, and its relevance to the student's life outside the classroom. Often, I will also call on students in order to elicit their own example of a lecture topic so that I may directly appeal to a student's specific interest and promote student participation. In a further effort to encourage participation from students that may not be as outspoken as others, I also use flash cards with students' names on them (this also helps me to remember my students' names!) which I randomly draw from to request their input. I really enjoy hearing from all my students in this way and learning of their unique viewpoints.

Research has shown that students learn best from their peers, so I make it a priority to incorporate group-based learning by utilizing think-pair share liberally, having students work in groups for assignments, and by having students peer review each other's work. Not only do my students reap the benefits of learning from their peers, but the utilization of these practices also promotes a sense of community and belongingness within my classrooms. I find that my students enjoy interacting with each other in this way and I believe it helps to make learning more fun and engaging. While these practices help to foster engagement and community, I also make an effort to pay attention to students who may be feeling lost or left behind during lectures.

Firstly, I can identify such students because I call on every student at some point throughout lectures and because I read students' written assignments. If a student

struggles to answer a question or contribute to a discussion during class, I ask the student questions that help to lead them to an answer instead of outright giving them the answer so that they may practice developing the skill of building a rationale towards a logical conclusion based on available evidence. Likewise, when I read students' written assignments and observe mistakes, I provide thorough written feedback and write students questions that will help them identify why something is incorrect in the first place before then providing them with guiding questions as to how one would rectify mistakes. I also provide time during lab sections wherein students can work on their written assignments so that I can assess and offer feedback on their work in person and in real time, and I find these times during class to be the most productive as I can address students' concerns or frustrations right away. It is also incredibly fulfilling to me to see the excitement in my students when they finally understand a concept or how to tackle a problem, and it motivates me even further to assess students' grasp on a topic and guide them towards an understanding. I think the students themselves can see how invested I am in their learning, and I believe that it helps build a sense of trust between the students and I.

The nature of learning is so dependent on questions and discovery that it is critical students feel a sense of trust in their instructor to provide them an environment where they feel safe in contributing their thoughts on a topic whether it be correct or incorrect. In my classrooms, I do so by establishing a culture of trust, compassion, and open-mindedness. During the first class meeting with my students, I convey expectations of my students that are conducive to such a culture including patience with the instructor, other students, and their self, cordial communication, empathy, and an openness to learn and improve. Not only do these cultural norms within the classroom allow students to feel safe, but it also enables them to contribute in class with less fear that they will be judged if they are ever to be incorrect. Learning that a belief or assumption is wrong is integral to correcting the misunderstanding with new, more accurate knowledge, and I tell my students so in an effort to encourage them to view making mistakes as a necessary and crucial part of learning. I belief that the culture of my classrooms therefore helps my students to speak out more often in class, learn from not only the instructor, but also from one another, and helps to foster a community where everyone's perspectives are welcome and a trust that everyone in the classroom appreciates that imperfect knowledge is a valuable part towards a better understanding of a subject.