

A student's 'understanding' illustrates a teacher's pedagogy to pass on knowledge. A good teacher challenges students to question subject matter, but a provident teacher recognizes their students' prior knowledge and elevate their students' knowledge with new insights that connect to the broader world. Connecting a concept or idea to everyday life is an empowering conduit for students to learn. My teaching philosophy is: **creating and maintaining an equitable learning environment that encourages students to discover their potential as future leaders**. My goal as a teacher is to nurture students by helping them recognize their true learning potentials and build their confidence to succeed as students and with their careers.

My motivation to pursue a career in academia to be tenure-track faculty member at a research institution is because of the positive impacts I can have on underrepresented minority (**URM**) students in STEM. I am a first-generation African-Filipino American doctorate holder and I can relate to URM students working to overcome barriers that URM students face at a predominantly-white institution like the University of Wisconsin-Madison (**UW-Madison**). I can understand how URM students feel when they stand out because I was the only Black student in most lab course sections I took when I was an undergraduate student at the University of California-Davis (**UC Davis**). I was fortunate to have wonderful professors at UC Davis. They always seemed happy to answer my questions even though I was not a student who had top grades or understood the course material well; however, my professors believed in me. Their nurturing support for my curiosity instilled a sense of belonging in me to continue my pursuit of knowledge as a student and beyond. The professors' support was a catalyst to build my confidence, which resulted with me having interdisciplinary research experiences and exposure to various teaching philosophies across four academic institutions.

Courses evolve through effectual design and recognizing students illustrate their understanding of course content through different means. When I was a teaching assistant for avian anatomy and physiology at North Carolina State University (**NC State**), with support from the instructor, I overhauled the course schedule. I wanted to update the course learning outcomes to connect why students should learn the content. When I took the course, the course schedule was designed by a former professor who previously taught the course for many years could be improved to resonate with the new generation of students. I conceptualized themes that connected physiological systems to their functionality in birds as a broader way to connect each physiological system with how it contributes to avian physiology. An example of one theme was when I created and delivered lectures on muscle physiology that would prepare students to learn about avian flight. I also recognized how the course schedule did not have a lab topic related to bones. This led the instructor and I to incorporate a class field trip to North Carolina's Museum of Natural Sciences so students could physically handle bird skeletons and tie-in concepts from lectures. Students learned in class about how birds have very light bones compared to mammals to accommodate flight and then handled bird bones at the museum to feel how the bones' lightness was vital for flight. I aspire to help students recognize public resources available to them that will be critical for their future goals as a part of my teaching philosophy: "**creating and maintaining an equitable learning environment**".

One curriculum-related goal I would like to develop is having students work academic institution libraries for a small group project that has science communication elements and microbiology. Students would design an infographic like a map that integrates geographical markers that would be informative to the public about microbiological links. An example project could be using publicly available data like temperature and linking it to geographical locations where mold outbreaks could be a concern for public health. Student groups would present their infographic and educate the rest of their class section on what they learned. The expected outcome of this project would help students with communicating science by connecting public resources with their scientific knowledge to provide recommendations that can inform community members and policymakers.

My instruction style is to be approachable and real to my students, which includes being open about my shortcomings and highlighting how I am a learner as well. I was a lead lecturer for multiple lab sections of human anatomy and physiology when I was a graduate teaching assistant at Auburn University. In addition to training new graduate teaching assistants on content delivery for each lab, I strived to keep students engaged. One of my favorite teaching experiences was when I joined with students with doing exercise to learn about blood pressure. Students had to do a little bit of exercise to increase their blood pressure and understand how that is impacted by heart rate. I joined a few students and did a short sprint with them to show students that I wanted to learn along with them by participating in the lab. My aim to be an engaging teacher resonates with inspiring students to succeed.

Diversity has positive impacts in all walks of life; however, there are still visibility issues with younger URM students and perceptions due to lack of likeness or role models. I aspire to become a role model for students to support their growth as future leaders. I conduct outreaching opportunities to connect URM students, especially students from at-risk populations or socioeconomically-challenged areas. My most memorable experience in outreach was when I was a graduate student at Auburn University and I was recruited to teach URM students from elementary schools from disadvantaged counties in Alabama. Using various animal skulls from museum collections, I taught young students about differences between carnivorous and herbivorous animals and why skulls relate to diet. Motivating those students was extremely gratifying because they were young minds filled with curiosity about their world. Those students were thrilled to see different teeth, large and small skulls, and enthusiastically guessed what animal each skull came from. My goal with teaching is to inspire students to achieve success and help students recognize they are capable of achieving anything regardless of their background.

My teaching philosophy: **creating and maintaining an equitable learning environment that encourages students to discover their potential as future leaders**, motivates me to continue growing as a teacher. My experiences as an URM scientist have vital implications for helping create a welcoming and inclusive environment for URM students and encourage all students to recognize they can succeed. I am excited to continue developing my pedagogy and how it will influence my teaching philosophy for my career trajectory.