Teaching Statement.md 8/1/2022

Teaching Statement

Ling Tong

Teaching Philosophy

Students reflect that they need down-to-earth advice in a classroom. Students' desires are to learn something they like. They will stop attending a lecture where they do not wish to learn or have nothing to learn. This requires me, a passionate instructor, to find learning materials that interest them. Also, I understand the gap between students' preferences and industry's needs. My primary goal is to create a welcoming classroom environment in which students from all backgrounds can enjoy, learn from hands-on training, and prepare for a future career. They can feel it is worth the time to learn from my lectures. To accomplish this goal, my teaching philosophy includes the following principles:

-Hybrid virtual and classroom experience. In post-COVID times, students have shifted to and will continue to learn in virtual space. I strongly believe online learning will be an indispensable part of students' experience. First, the asynchronous class allows a more flexible schedule, improving students' overall experience in college. Also, a virtual class allows me to provide targeted feedback for every student. The targeted feedback also helps me to find those students in particular need of advice. Students can get more practical assistance to achieve their goals. Lastly, hands-on training courses are a natural fit for the online platform. For example, learning to code online was found to be effective. Students can navigate parts of a video to focus on materials they need to learn, and skip other parts if they have already mastered them. This form of learning helps students focus on what they truly need to learn. For students who prefer classroom teaching, I will provide traditional classroom teaching as an equally important part of the student experience.

-Understanding the diverse backgrounds of students. As Dr. Darienne B. Driver, Superintendent of Milwaukee Public Schools, said, "Each of us must determine how we will lead in times of great challenge and injustice." As one of the Asian minority groups, I understand the challenges we must face during this unusual time. My duty is to lead students to work safely and fruitfully for their future lives. By using a combination of virtual and classroom teaching, I can accommodate all types of learners. My research experience in addressing the equality of healthcare also helps me become a compassionate and empathetic instructor. Therefore, I will be able to create a welcoming learning environment for all my students in every lecture, where they can safely explore their study and career goals.

-Teaching students to become life-long learners: an instructor can only lecture on a topic for a limited time, usually one semester. It means the influence may not last long. However, a student's peers, friends, staff, professors, and instructors, all whom they meet in college, can affect their value and life across decades or even lifetimes. I will try to become one of the influencers in college and convey my life's faith to students' minds at their very best youth time.

Teaching Interest

-Undergraduate course: As mentioned, I'm particularly interested in hands-on training courses in the general areas of healthcare professions. This includes my previous teaching on computational software, including Microsoft Excel and healthcare databases. These are two areas I see most undergraduate students' lack of skills. Besides, I'm happy to teach entry-level statistical courses for undergraduate students. I'm interested in bringing my statistical knowledge from my background to future healthcare professionals. In addition, if the

Teaching Statement.md 8/1/2022

campus is looking for an instructor for entry-level programming courses such as Java or Python, I can also teach these courses at the undergraduate level because of my computer science background.

-Graduate course: I believe a hands-on training course related to artificial intelligence and healthcare would be in high demand and become a highlight in the course catalog. There are unmet needs in the interdisciplinary fields of engineering and healthcare. The industry will need many administrative and development professionals in the next 5–10 years. Developing a course with particularly high public interest will increase the overall rating of curriculum quality, further improving enrollments. The interdisciplinary collaboration will also bring opportunities in research funding and cross-discipline academic collaborations, which will result in fruitful achievements and further improve the schools' reputations. Besides, I'm also able to lecture on advanced level statistical courses, including public health and research-based statistical knowledge. Statistics and evidence-based research are an important part of healthcare that every healthcare graduate student needs to understand. I'm also able to host small interactive seminars for graduate students and help them gain experience in academic peer discussion and public presentation.

Teaching Experience

I have spent 4 years in teaching and polishing my teaching skills. I completed 9 semesters and a total of 27 credits workload of courses in the University of Wisconsin Milwaukee. My extensive teaching experience granted me a deep understanding of their problems and needs. I'm able to develop a syllabus for a new course, modify materials for specific needs, and help students reach an area they desire to learn. Most students are highly engaged in my class. The rating of my course was 4.1 out of 5.0, which is higher than the average instructor rate of 3.7 in university. Students' feedback shows syllabus was excellently organized. Assignments has a moderate difficulty, The grading criteria is clear and easy to follow, and the knowledge is practicle for their future industrial positions. One students commented, 'This professor is formatting our classes to what matters to our future jobs.' My supervisor in teaching, Steve Castelaz, also provided excellent feedback for my teaching.

During 2019 spring–2022 fall, I'm an independent lecturer for a course called "Computational Tools for Healthcare Professionals." This is an undergraduate-level course focused on an introduction to computational tools for information management, including system architecture, process, and ethical concepts. In addition to theoretical concepts, this course also incorporates hands-on training in office application software. This course gave me a comprehensive view of students' groundings and helped me to develop specific materials to meet their needs.

In Fall 2017, I was a teaching assistant for one semester of a course called Big Data Healthcare Processing Platform. This is an engineering-based course, teaching how students use the Python programming language to process large batches of healthcare data. I'm also responsible for grading and study materials. Therefore, my experience in programming courses also helped hundreds of students to accomplish their goals.

My teaching is not limited to a lecture. I also supported the community's academic development outside of a course by mentoring students. In my doctoral research lab, I advised other undergraduate and graduate students, including giving my thoughts on life questions, caring for their mental health, teaching them to take it easy, and writing reference letters as a form of support. These are essential points to growing a strong community. The lab-instructing experiences reinforced my belief in the value of one-on-one mentoring with personalized assistance and suggestions. I also provide support to the candidacy exam attendants in my PhD program and help them succeed in qualifying exams. All my curricular experiences and research experiences have formed me into a responsible, experienced, caring instructor who is committed to excellent teaching.