Teaching Statement

My teaching philosophy is centered around learner-centered teaching and consists of three essential tenets. First, a successful teaching and learning procedure should include at least four levels of thinking skills: remembering, understanding, applying, and creating. Second, facilitating class engagement plays a crucial role in teaching. Last, active learning and critical thinking can significantly improve learning effectiveness. These tenets are grounded in the Certificate in College Teaching (CCT) program at the University of Arizona (UA) and inspired by my past teaching experience. I instructed a five-week upper-division MIS course (MIS 373: Basic Operations Management) at the UA in the summer of 2019. I will illustrate how I applied my teaching philosophy in this course.

The teaching and learning procedures should involve multiple thinking skills. A learning procedure always starts with remembering and understanding concepts, facts, principles, and their connections, which are the building blocks of the course. One cannot build skyscrapers without bricks. From a managerial point of view, the ultimate goal of learning is to apply what have learned and even create something new in broad business applications. My course was designed to incorporate at least these four levels of thinking skills: remembering, understanding, applying, and creating. Specifically, the class sessions, homework, and exams mainly covered the first three levels. In the slides, I highlighted the most basic and important concepts. During the class session, I challenged students to think about the connections between topics. I used real-world business examples and hands-on practices to help students understand the materials and apply them to real problems. In the homework and exams, students were also asked to draw a concept map so as to get a high-level understanding. In addition, I designed a group project where students in groups needed to investigate a real-world organization from the Operations Management (OM) perspective. Using what they have learned, students comprehensively evaluated the existing practices of their selected organizations; and surprisingly, they created new business strategies based on the analyses.

Engagement in classrooms is critical for students' success. Being a student for many years, I firmly believe that students should get the most out of the course by attending the class sessions. To facilitate class engagement, I implemented many strategies. First, I started each session with a relevant warm-up activity to get students ready for the class. For example, when teaching the session Product and Service Design, I presented several amusing anti-human product designs to draw students' attention and help them realize the importance of good product designs. Second, I introduced various teaching activities to get students more engaged. For example, I used some interesting videos to illustrate relevant concepts. I planned many collaborative activities (e.g., Write-Pair-Share and peer teaching) in the class. I also scheduled many hands-on practices so that they could immediately retrieve what they had learned and evaluate their performances. Last, I introduced some game-based sessions to make learning an enjoyable experience. For example, I implemented the traditional beer distribution game to help students learn the key principles of supply chain management.

Last but not least, active learning processes and critical thinking development can greatly facilitate teaching effectiveness. In my opinion, teaching is more than the process of knowledge transmission; it also builds up students' domain-independent ability such as learning by themselves and thinking critically. The real-world phenomenon is often more complicated than what is in the textbook. When students run into a new business context, they should be able to learn actively and think clearly and rationally about the phenomenon. I designed my course accordingly with the attempt to equip my students with such ability. For example, I introduced lots of group discussions where students could develop their own opinions. I used some critical questions such as "when does the conclusion from the textbook not work in real world" to guide students to think critically. In the homework and the exams, I encouraged students to come up with their own solutions based on their understanding, rather than copying and pasting from the textbook.

In summary, all my teaching activities are learner-centered, with the goal of maximizing students' learning outcomes while providing them with a comfortable and enjoyable learning environment. In addition to the abovementioned three essential tenets, I embraced novel IT tools to improve the learning experience. For example, I resorted to animations in the slides to help illustrate complicated concepts and dynamic processes. I also tailored

my teaching to meet students' needs. At the beginning of the course, I used a pre-course survey to understand students' backgrounds, learning styles, and expectations. This allowed me to adjust my teaching contents to cater to their needs. By employing these strategies, I obtained a high teaching effectiveness rating of 4.4 out of 5.0 for the course I taught in the summer of 2019.

I have broad and flexible teaching interests. My interdisciplinary background on Management Information Systems (MIS), mathematics, statistics, and computer science allows me to teach a wide range of courses, including both technical and managerial courses. These include but not limited to business analytics, statistics for quantitative analysis, statistical machine learning, deep learning, text/data/web mining, programming and web crawling, database, and operations management. Last, given my training in various disciplines, I believe I can handle relevant new courses whenever necessary.