

## Teaching Statement

### Teaching Philosophy and Experience

During graduate school, I have worked as a teaching assistant for six courses in econometrics and economics. I was also elected by the students as the best teaching assistant in the department. I approach teaching by helping the students organize the pieces to build their knowledge framework, which is a powerful tool for them to form a critical view of the world. I have developed the following three principles in teaching:

- (1) Emphasizing on the knowledge structure throughout teaching is an effective method for students to build their own knowledge framework.
- (2) Motivating students from various backgrounds to raise relevant questions of interest has a long-lasting benefit on students.
- (3) An inclusive classroom environment is essential for teaching and learning.

I believe teaching and learning are like hiking. The instructors are like tour guides who have explored the trails and known the map well, but it's a fresh new experience for the students. Without a reinforcement on the whole map, students tend to get lost in the ocean of details and ignore the whole picture. During discussion sections, I emphasize how each specific topic fits into the broader framework of the course. Having such a framework also helps clarify concepts. For instance, when I taught econometrics for the first time, many students confused "heteroskedasticity" with "autocorrelation." The lectures introduced these concepts several weeks apart, so it was quite natural that students forgot and felt confused. When teaching the class, I rearranged the topics and always mentioned the other concept when elucidating one of them, and feedback from students showed they understood much better.

Based on my understanding, one goal of teaching economics and econometrics is to enable students to become critical thinkers and apply the concepts and rules into the analysis in their research, work, or daily life. Therefore, I encourage students to apply the knowledge to various fields of their specialization. In an econometrics class for the master of public policy program, many students had rich working experience in policy design and policy evaluation. I invited students to raise policy questions of their interest, which included education, health, and environmental policies. Throughout the quarter, I used these topics as complementary examples.

Students taking classes in economics and econometrics, particularly at the introductory level, are usually from a diverse background, which makes teaching and learning more interesting but also more challenging. As a foreigner, I am able to understand the difference in cultures and the possible barriers it might bring to learning. For example, the use of American idioms might make it difficult for students from other cultures to understand, so I try to avoid using idioms and

always explain when others use them. I extend the consideration to other differences in race, ethnicity, gender, and other identities. In addition, I always choose colorblind-friendly color scales for illustration.

My responsibilities as the teaching assistant include leading two 50-minute weekly discussion sections (each with 30-40 students) to review course materials and answer questions, holding 120-minute weekly office hours, and grading homeworks and exams. In the process of practicing my three principles, I have been continuously reflecting on and improving my teaching based on student's in-class reactions, after-class questions, homework and exam answers, as well as their course evaluations. With the passion for teaching, I look forward to developing my skills in teaching and mentoring as I further my academic career.

### **Teaching Interests**

With my background in development economics, applied microeconomics, and applied econometrics, I am excited to teach courses in these fields at both the undergraduate and graduate levels. With over three years of experience teaching courses in intermediate microeconomics and econometrics, I am qualified to teach these classes at the introductory and intermediate level. I am also happy to teach other courses if needed. Below is a list of courses and topics I'm experienced at.

- (1) Development economics: I am prepared to teach at both the undergraduate and the graduate level. The course will introduce topics on classic and innovative poverty measures, poverty traps and aspiration, consumption smoothing through risk management, and technology adoption. If students' knowledge background permits, I also plan to introduce methods for program evaluation.
- (2) Microeconomics: I am prepared to teach at both the undergraduate and the graduate level. Topics for the course include the decision theory for consumers and producers, risks and uncertainty, competitive equilibrium and general equilibrium, market failure, market structure, and game theory.
- (3) Econometrics: I am prepared to teach at both the undergraduate and the graduate level. For undergraduate econometrics courses, topics include the simple linear regression models and multiple linear regression models, and methods of causal inference with observational data, such as instrumental variables and fixed effects. For graduate econometrics courses, topics include potential outcomes, weak instrumental variables, sharp and fuzzy regression discontinuity designs, multiple hypotheses, and some big data methods such as penalized regression methods. I am also happy to teach a course of statistics and probability theory for economic students.