Teaching Statement

University of Pittsburgh Hyung-Jin Kim

1 Relevant Teaching Experience

Teaching has always been an important part of my academic life at the University of Pittsburgh. As a main instructor, I taught undergraduate Econometrics. I was also the teaching assistant for the Ph.D. 1st-year Econometrics and undergraduate Introduction to Microeconomics and Introduction to Macroeconomics

2 Teaching Philosophy

My teaching philosophy centers on two key elements: 1) engaging in active learning and 2) fostering an inclusive environment.

1) Active Learning:¹ My commitment to active learning, especially through discussions, is deeply rooted in the pedagogical understanding that students learn more effectively when they are directly engaged in the learning process, especially in STEM courses (Freeman et al., 2014). Discussions, as a form of active learning, are vital because they encourage students to articulate their thoughts, challenge their preconceptions, and consider multiple perspectives.

As an Econometrics instructor, I adapted this approach to cater to students with varied backgrounds. Grouping students, I encouraged them to study course materials through three lenses: economic intuition, graphical representations, and mathematical expressions. This was particularly beneficial for those with diverse mathematical and statistical skill levels. In discussing the minimum wage effects within the Difference-in-Differences (DID) framework, I guided students to explore multiple perspectives, from economic intuition to graphical interpretations and econometric models. This multifaceted approach not only enhanced participation but also deepened their understanding. My success as a teacher is evident from my teaching evaluations, in which I was rated "The instructor creates an inclusive learning environment for all students" as 4.5/5, and "The instructor created an atmosphere that kept me engaged in course content" for 4.58/5.

In my role as a teaching assistant, I encouraged student engagement through group activities and discussions in introductory microeconomics and macroeconomics courses. This interactive approach, where students engage with each other rather than relying on direct solutions from me, proved to be highly effective. For instance, I facilitated card games where students played the roles of consumers and suppliers vividly illustrating market dynamics by negotiating prices for goods.

¹Active learning is a teaching method in which students are actively involved in the learning process. This can be achieved through various activities, including discussions, problem-solving, case studies, and role-playing. American Economic Association also promotes active learning. Source: Bayer et al. (2019)

Students could deeply understand the role of price mechanisms in the marketplaces and stimulated discussion between students.

2) Inclusive Environment: Creating a welcoming and inclusive space at the university is a mission I take to heart. In my teaching, I have implemented several practices to support this goal. For instance, I organized a 1:1 meeting with individual students to learn about their challenges and feedback about the future direction of the class. Following suggestions from students, I prepared more by going through practice problems so that students could digest the course materials. In tackling public issues like the gender wage gap, I used real-world datasets in my Econometrics course to foster discussions that bring attention to disparities between genders. After students learned that they could think through with data, they became more interested in both learning disparity issues and econometrics models using the data.

I maintain an open mindset and am always prepared to accommodate students. For instance, while I was a teaching assistant for Introduction to Microeconomics, I encountered students requiring special assistance. After discussing their individual needs, I noticed that some students wished to avoid potentially awkward situations, such as being observed by peers as needing extra time during exams. To mitigate this issue, I organized separate exam sessions for these students. Also, I always ensure I know each student's name and make it a point to come to class early to chat with them about their academic pursuits, life on campus, and recent events. Through these practices, I strive to create an environment where all students feel valued, supported, and able to thrive academically and personally.

3 Future Teaching Interest

Having utilized machine learning in my research and at Amazon Core AI, I am keen on teaching *data science* and *machine learning courses*, focusing on real-world datasets and business settings in undergraduate/master's programs. I am also interested in continuing to teach *Econometrics* at both undergraduate and graduate levels. Additionally, I am eager to teach *Industrial Organization* and *Health Economics* at the undergraduate and graduate levels, aligning with my research interests. Lastly, I am well-prepared to teach *introductory microeconomics, introductory macroeconomics*, and *intermediate microeconomics*.

4 Selected Students Comments

- Applied Econometrics, Instructor for Online Course, ² Overall evaluation: 4.63/5,
 - The prof explained things really thoroughly, which I feel sometimes isn't always done. I feel like I understood the content pretty well.
 - I liked how simple his slides were- they didn't overwhelm me. Short and to the point!
 He also provided a lot of office hours to help those with questions/concerns.
 - Virtually everything, from lecture speed, question answering, after class meeting, homework and exams, they are very reasonable and helpful. Provide a good balance of challenge and helpful in learning.

²Teaching Dossier, syllabus, and full teaching evaluations are available at this link.

References

- Bayer, Amanda, Şebnem Kalemli-Özcan, Rohini Pande, Cecilia Elena Rouse, Anthony A. Jr. Smith, Juan Carlos Suárez Serrato, and David W. Wilcox, "Best Practices for Economists: Building a More Diverse, Inclusive, and Productive Profession," American Economic Association 2019.
- Freeman, Scott, Sarah L Eddy, Miles McDonough, Michelle K Smith, Nnadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth, "Active learning increases student performance in science, engineering, and mathematics," *Proceedings of the national academy of sciences*, 2014, 111 (23), 8410–8415.