

# TEACHING STATEMENT

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I have worked as a teaching assistant for both undergraduate and graduate classes at Rutgers University. My primary duties include attending regular lectures, grading, holding recitations and review sessions, and presenting supplementary materials. Working as a teaching assistant allows me to interact with students, address their questions after class, and, more importantly, learn from experienced teachers in my department. I later applied what I have learned as a teaching assistant to the Summer Math Camp for the incoming Ph.D. student in economics, which I have taught for the last three years.

## Teaching Philosophy

I firmly believe that there is no single teaching style that works for all economics courses. It is essential for me as an instructor to understand the students' needs and tailor my teaching style accordingly. For undergraduate courses, I emphasize economic intuition and critical thinking over important real-life economic issues. For graduate first-year core courses, I prioritize the use of mathematical models to formally understand fundamental economic theories. For graduate field courses, I focus on helping students make the transition from being a consumer to being a producer of economic knowledge.

## Undergraduate Courses

For undergraduate students, one of the most valuable assets they can take away from an economics classroom is to think like an economist. This mindset of being an economist extends beyond the classroom to how students understand the world around them. Therefore, for undergraduate classes, it is essential to encourage students to ask questions, to apply or construct economic models for answering those questions, and to clearly communicate the underlying economic stories. When I was a teaching assistant for *Intermediate Microeconomics*, students usually asked me why firms make zero profit in a perfectly competitive market. Instead of directly giving them the textbook answers, I first helped them think of more specific examples that better fit into the perfect competition model. Then I asked them what they would do if they were the owner of the firm in those examples. By challenging their presumption that firms can earn positive profits and by providing instant feedback on their economic arguments, students could develop a deeper understanding of the boundary of perfectly competitive models and learn how to apply economic reasoning to real-life scenarios. To give you another example, when I was a teaching assistant for *Game Theory*, I usually asked students to play the "guess two-third of the average game". In the Nash equilibrium of this game, all players should pick zero. However, most students did not choose zero, which encouraged some students to ask why people do not

play a Nash equilibrium in a strategic environment like this guessing game. Then I explained to them how one should think of Nash equilibrium as a prediction for strategic environments and showed them what would happen if they played the guessing game many times.

## Graduate Classes

First-year graduate core courses serve to teach students the important building blocks of modern economics, a deeper understanding of which usually requires a solid mathematical background. Therefore, as the summer Math Camp instructor for incoming Ph.D. students, I emphasize mathematical maturity by rigorously going through fundamental mathematical concepts and proof techniques that are important for their first-year courses. Furthermore, speaking of my experience as both a student and a teaching assistant for the first-year core courses, it is crucial to have a holistic perspective of how models taught in those courses fit together to improve our understanding of fundamental economic questions. For example, in the core sequence in Microeconomics, it is important to remind students that the general equilibrium theory applies to an economy with price-taking agents. When one moves out of the general equilibrium paradigm, game theory provides an important tool to predict outcomes in environments with strategic agents and asymmetric information. For graduate field courses, it is essential to teach students workhorse models and then encourage them to think of what question they want to ask based on those models. Given their questions, they can present related papers during class and start writing a term paper as the building block for their research.

## Teaching Interests

Given my teaching experience, as well as my research on financial economics and information economics, I would be happy to teach both undergraduate and graduate courses related to financial economics, money and banking, microeconomics, game theory, and information economics. I also had substantial training in quantitative finance when I was a master student in the applied mathematics department at Stony Brook University, so I am happy to teach courses such as asset pricing and stochastic calculus. Also, if possible, I would like to teach a course on the financial crisis both from the historical and theoretical perspectives. Finally, if the need arises, I can also help out with any other teaching responsibilities.