Yucheng Lu

Teaching Statement

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Equity and Access: Meeting Students Where They Are

I believe good teachers meet students where they are, both intellectually and logistically. Students enter economics classrooms with vastly different mathematical backgrounds, lived economic experiences, and personal aspirations. My teaching philosophy begins with recognizing these differences and designing my pedagogy to support all learners.

Intellectually, I strive to make my teaching accessible to all while showing them the broader landscape. For instance, in introductory econometrics, I use matrix algebra sparingly, but emphasize that these operations underlie much of modern data science and AI, planting seeds for those interested in that direction. In game theory, for another example, Bayesian Nash equilibrium often feels abstract to students. I break it down step by step: what players know, what they can choose, and how maximizing expected utility follows from commonsense rationality. Through various worked-out example questions, the abstract becomes concrete. Yet even as I simplify, I highlight the power of these frameworks: how they illuminate phenomena ranging from the endogenous emergence of communication in signaling games to bidding behaviors in auctions.

Logistically, I am mindful that students learn under diverse circumstances. At NYU, most are full-time students, but some balance coursework with professional commitments or study in nontraditional formats. I make myself accessible through flexible office hours, online discussion forums, and one-on-one meetings, ensuring that every student has a fair opportunity to engage and succeed. In fact, one of my favorite pieces of student feedback is *"very accessible and helpful"*.

Beyond Right and Wrong: Teaching the Positive/Normative Distinction

Economics presents unique teaching challenges because, unlike some sciences, it is inevitably value-laden. While economists strive for impartiality in research, many findings, especially those that captivate students' interest, carry policy and ideological implications and risk misinterpretation.

Students often come expecting economics to provide clear answers about what policies are "correct", but I help them see that economics is better at illuminating trade-offs than resolving them. Take a classic example: ECON101 supply-and-demand analysis might suggest minimum wages reduce employment. I always emphasize that these simple analytical frameworks are not prescriptions for policy. These are tools for thinking, modeling devices that help us understand mechanisms or generate predictions under specific assumptions.

The empirical evidence on minimum wage employment effects is, of course, mixed and context-dependent - itself an important lesson about the complexity of real-world economics. But here's the crucial pedagogical point: even if we had perfect consensus on the empirical effects, claiming that governments *"ought"* to raise minimum wages crosses the boundary from positive to normative economics. The data tells us what happens; it doesn't tell us what we should value or prioritize as a society.

Teaching students to maintain this distinction is essential to my philosophy. Beyond economics, this is also about fostering good citizenship in our increasingly polarized world, where complex issues are too often reduced to simple ideological talking points. I want students to leave my courses able to engage with economic arguments charitably and critically, equipped with analytical tools that help them apply their own values more thoughtfully to complex real-world issues.

AI in the Classroom

I welcome AI as a learning tool - it's already part of students' reality. Rather than fighting the tide, I ask students to clearly indicate where and how they've used AI in their work, a practice I drew from the AI academic community. At the same time, I emphasize the power of learning by doing. To ensure students are actually learning, from time to time I have them explain their solutions in person, and I use pop quizzes to check comprehension. This approach acknowledges AI as a legitimate resource while ensuring students develop real understanding, not just the ability to prompt a chatbot.

Evidence of Teaching Effectiveness

Over the past years, I have served as a teaching assistant and instructor across a range of courses with consistently strong evaluations. In addition, I received NYU Teaching Certificate "The Art & Craft of Teaching" in 2024, which formalized my commitment to a teaching career in higher education and evidence-based pedagogical practices.

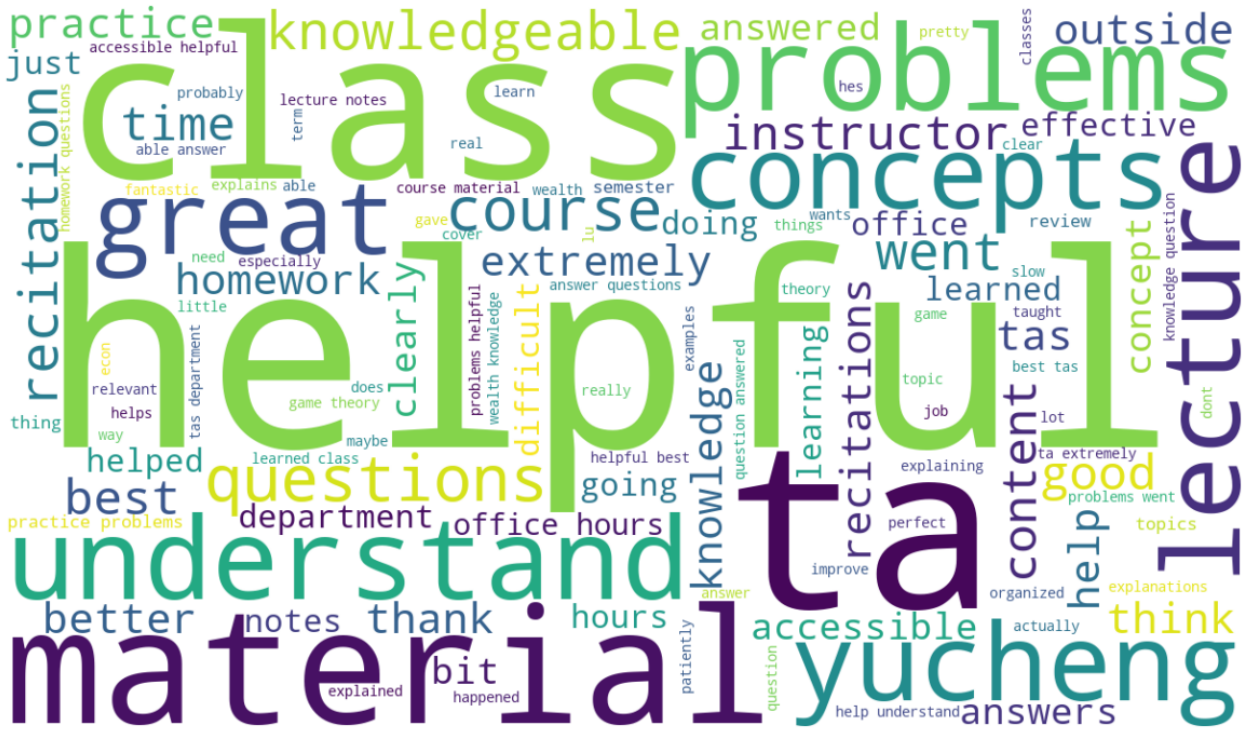
Below is a summary of my teaching evaluations, selected highlights from student feedback, and a word cloud generated from these feedbacks. Full evaluations are available in the supplementary materials.

Semester	**Role**	**Course**	**Evaluation**
2024 Fall	TA	Applied Statistics & Econometrics I (MA)	4.0 / 5.0
2024 Spring	TA	Intro to Econometrics	4.4 / 5.0
2023 Fall	TA	Game Theory and Strategy	4.9 / 5.0
2023 Spring	TA	Intro to Econometrics	4.4 / 5.0
2022 Fall	TA	Microeconomic Analysis	4.9 / 5.0
2022 Summer	Instructor	Statistics	4.8 / 5.0
2022 Spring	TA	Statistics	4.5 / 5.0
2021 Fall	TA	Microeconomic Analysis	4.2 / 5.0
2021 Spring	Grader	Policy Issues in History of Economic Thought	N/A
2019 Spring (LSE)	TA	Intro to Macroeconomics	N/A
2018 Fall (LSE)	TA	Intro to Microeconomics	N/A

Highlights and word cloud from students feedback:

- *very accessible and helpful*
- *Yucheng is an EXTREMELY thorough TA. He is extremely smart and is capable of explaining hard concepts in simple terms to help us understand. Despite the class being difficult, recitations with yucheng has been so helpful in my learning and Ihope I can have him for future Econ classes.*
- *Yucheng was very effective at breaking down difficult topics into smaller chunks thatwere simpler to understand.*

- *the summer term is short and we learn everything is a pretty quick path, but the instructor still made every concept clear and easy to understand.*
- *Yucheng was helpful and offered to meet with me outside of his office hours when I was struggling to grasp a concept, he wants to help us succeed.*



Teaching Interests and Course Development

I am prepared to teach across the economics curriculum at both undergraduate and graduate levels. At the undergraduate level, I am comfortable teaching the full range of courses the department needs, from introductory principles to upper-level electives. At the graduate level, I am particularly well-suited to teach applied econometrics and development economics.

I am also excited to develop a course on **Machine Learning and Artificial Intelligence for Economists**, designed for students with undergraduate econometrics background. This course would bridge traditional econometric methods with modern machine learning techniques, covering topics such as regression with regularization, tree-based models, dimension reduction techniques, neural networks, and applications of Large Language Models (LLMs). While the focus will be on hands-on applications to to economic problems, I will include sufficient technical detail to highlight the connections with econometrics and foster a deeper understanding of how these methods, especially LLMs, actually work. Students would gain practical experience prompt engineering and finetuning LLMs. My goal is for students to expand their skill sets to meet the shifting demands of the labor market and to pursue innovative research using these new methods if they so choose.