

Maya Chandrasekaran – Teaching Statement

Teaching Objectives

As an instructor in applied economics and policy, I aim for my students to have the conceptual understanding and analytical toolkit to work on real world, policy relevant questions. To meet this aim, there are four steps of learning I have emphasized and will continue to emphasize in classes I teach in the future. First, I want my students to have a *solid theoretical foundation* of commonly used and relevant microeconomic and econometric concepts, because it is important to me that students understand why a specific method works to address a given policy scenario. Second, I want my students to know *how to obtain and interpret results* for a real world analysis. This includes selection of the correct statistical software to use and knowledge of its limitations, knowing what data is required to answer the question at hand, how to upload and clean data such that it is ready for analysis, how to write code for different relevant statistical models, and how to interpret model outputs. Third, I teach *how to push past results*. I want my students to be able to speak to the policy and economic implications of their results, including how and why those implications change if we alter our study context or sample. This would also include learning about robustness checks and comparing results to other academic work. Finally, my students learn *how to present their findings* via both writing and speaking, because it is my belief that findings are only as valuable as our ability to communicate them clearly and concisely.

I am qualified to teach microeconomics, econometrics, and statistics courses, as well as field courses in environmental and resource economics, applied statistics, impact evaluation and monitoring, and topics in environmental policy at the undergraduate and masters levels. At the PhD level, I am most qualified to teach courses in energy, gender, and environmental economics.

Teaching Methods

Lecturing

I strive to create lectures that are engaging, clear, and cater to different styles of learning by using a combination of slide-based lectures, in-class group work, and discussions. Because my classes often require student participation and are constructed to include the majority of exam material, I include regular, low point value quizzes to gather attendance and ensure students are not falling behind. Slide-based lectures that include first the motivation for why an approach was developed, followed by graphical visualizations to understand the economic rationale behind an approach are used to address my first goal written above, building a solid theoretical foundation for commonly used microeconomic and econometric methods. In-class group work and discussions push students to think critically about the topics we cover and develop a collaborative mindset amongst their peers, key for students who plan to pursue applied research topics in their future careers.

For example, when I gave a set of lectures on public goods in *Economics of the Public Sector*, an undergraduate course at Duke, I first built the motivation for studying public goods using an example of disputed groundwater rights in California, and followed this by explaining the theoretical concepts that drive provision of and conflict over similar public goods. Next, I used graphs to demonstrate the rationale of different pricing schemes for private versus public goods. To push students to apply these concepts to further topics, I had the class split into groups to discuss a set of questions thinking specifically about roads as a public good. Questions included “Given the attributes of a public good, when would roads classify as such?”, “One thing that planners find is that roads get crowded. Why is this a problem? What is a potential solution?”, and “What is the political feasibility of the solution your group has proposed?” These questions encouraged students to reflect on the topic at hand and think critically about its implications.

Assignments

I devise assignments to help students develop empirical skillsets that will prove useful were they to pursue careers in data analysis, policy, or research. I use a combination of (1) writing assignments such as policy briefs and

memos, so students learn both to synthesize concepts from class with external written materials and to foster important communication skills; (2) applied coding and data analysis, to practice real world application of methods presented in lecture; and (3) speaking-based assignments such as debates and in-class presentations that ask students to think on their feet and clearly articulate their thoughts. For example, in the same class as above, I organized a classroom debate regarding whether the government should tax income or tax wealth and asked students to submit a reflection of their debates afterwards. Since students tend to be better at one skill or another, multiple assignment styles allow students to shine in the skills they have and grow the skills that come less easily.

Outside the Classroom

Teaching goes beyond classroom lectures and assignments. Some students need time to digest material and some students learn better in smaller group settings or alone. It is important that I make myself readily available for these diverse learning experiences. For example, I have hosted multiple office hours per week for a single class to work with student schedules and ensure every student who wants to attend office hours can. I also allow students to request one-on-one sessions if they are unable to attend office hours for academic or athletic reasons and allow Zoom sessions for individuals who are ill or cannot come to campus for personal reasons. As a teaching assistant, I volunteered to host review sessions before exams and larger assignments. Post-submissions, I held optional assignment debriefs to make sure individuals gathered the fundamental concepts the assignments were meant to cover. I always share slides from class and record any lectures, office hours, and review sessions so students can return to the materials and re-learn concepts on their own. On Sakai, I post additional material related to topics covered in class such as academic papers, news articles, and YouTube videos so that students who are interested in delving further into a particular topic have a starting point.

My teaching reviews include comments such as “Maya’s office hours/discussions/lectures/review sessions were always so helpful, and she was always very approachable”, “Fantastic TA! Always there to answer my questions and provide help. Thanks for being so accommodating overall”, and “Maya provided a ton of help this semester and went above and beyond to make sure that we were prepared.”

Outside of teaching courses, I serve as a student mentor at both the Sanford School of Public Policy and Duke’s Global Health Institute. I am also the co-president of the Global Energy Access Network, where I work to provide opportunities and mentorship in all steps of the research process including funding, data analysis, and writing for undergraduate and graduate students interested in energy research.

Diversity and Inclusion

In addition to being accommodating in terms of different learning styles, I believe in inclusion based on sex, race and ethnicity, gender and gender identity, political and religious beliefs, and mental health. I have and always will make it a point to refer to students by their preferred pronouns, do my best to pronounce names correctly, make sure assignments and exams do not fall on religious holidays for any students registered in class, and include multiple political ideologies in my lectures rather than sticking to my own. I also prioritize student mental health. For example, a student in my class whose immediate family lived in Iran came to my office hours during the violent protests for women’s rights and mentioned she was having trouble focusing on an upcoming assignment. I validated her difficulty focusing, provided university mental health resources, and alerted the professor in case her issue escalated.

I strive to create an environment where my students feel comfortable voicing their opinions, critically examining and questioning topics presented, and alerting me to any personal struggles that may affect their performance in my class so I can make accommodations when appropriate. I believe that not only students, but I too benefit from diverse opinions on different topics in the classroom and believe in maintaining a learning mindset even as a teacher.