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## **Teaching Statement**

## Section I: Summary and Core Teaching Principles

Teaching economics in graduate school has been a fulfilling and enriching experience. It has helped me see new connections in economics, it has sharpened my ability to communicate ideas to others and it has opened up questions that have inspired me in my research. In addition to the lessons I have learned from teaching, it has also been deeply inspiring to see my students grow and succeed. For the past four years, I have used grants and fellowships to cover my expenses so I could focus on my job market paper and conduct research with my adviser. I look forward to returning to the classroom with the insights I have gained from my research, because teaching is just as much a calling for me as academic research.

My teaching evaluation summary on my website here demonstrates my skill at teaching. As is clear, my students routinely have rated my courses and my teaching ability highly, with the most recent course I taught having a median 4.71 response out of 5 on the statement "the instructor was an excellent teacher."

As a teacher, I have five core principles that I bring to my work: embodying enthusiasm for learning, creating individually-tailored course materials, encouraging interactive teaching in the classroom, demonstrating relevance of class material, and above all valuing my students.

#### 1) Embodying Enthusiasm for Learning

The most inspiring teachers I had as an undergraduate were teachers who approached their work at the front of the class with obvious passion and conviction. They offered a level of enthusiasm at the board that motivated students to reflect that energy back in their coursework. I have endeavored to offer the same gift to my students. Part of teaching is a performance, and I have learned how to embrace that feature of my work while maintaining rigorous academic standards. I take pride in the fact that I have often been told that my passion for this work is infectious, that I routinely had students stay after class for questions, and that my office hours were often overflowing, sometimes with students from other sections. I would bring the same passion and love of learning to my teaching moving forward.

#### 2) Creating Individually-Tailored Course Materials

Any course bears the unique imprint of the person who teaches it. I believe it is important for course materials in a class to reflect that personal imprint. As such, I have always made my own detailed teaching materials for students in my sections. When I was a graduate student instructor for an intermediate econometrics course, for example, I made a semester-long course on STATA. I made my own in-class materials, class notes, and homework, and I then passed along all my work to the next graduate student instructor who taught the course after me. I made the materials for that unit public here.

Making these materials can be time-consuming, but it demonstrates my investment to the students. It also ensures that I communicate my vision of the course in the notes students use to study. For introductory and intermediate courses, I would use these notes alongside traditional textbooks. For more advanced courses, however, I would make my own materials as I did with the STATA course.

# 3) Encouraging Interactive Teaching

Interacting with students is one of the joys of teaching, and also a productive teaching strategy for keeping students engaged. I interact with my students in class in many ways.

First, I actively encourage students to ask questions in class. If one student has a question, it is likely the case that others do as well. I have consistently gotten positive feedback from students on my willingness to take questions.

Second, I like to encourage discussion of economic intuition in a class to introduce a topic. Many of the big picture ideas that motivate economics and econometrics are relatively simple, even if the proofs underneath these ideas are sometimes not simple. I like to begin new sections in a class by letting students reason aloud about, for example, why increasing the number of competitors in a market decreases their profit, or why random assignment is good for statistical identification, or how expectations matter in macroeconomic theory. These discussions offer students a chance to participate in the class and practice high-level economic reasoning. They also put into higher relief some of the more non-intuitive findings in economics, like the possibility of Giffen goods.

Third, if the class is oriented around problem solving, I like to allow students their own room for problem solving in a lecture. When working through examples in class, I plan out critical moments where I can stop and ask students to finish the problem on their own. I wait for a minute, and then complete the problem myself. Creating this space for problem solving allows time for the class to breathe, and ensures students are actively engaged in following along and working through examples. In my experience, students often are more willing to ask questions after these problem solving breaks. In the STATA course I taught for example, I strategically chose examples where I asked students to complete the next steps in the code, before then solving the problem myself.

Fourth, while I have not taught advanced undergraduate or graduate courses, I would have students present published research papers to the class in these courses. Letting students take the lead in class at communicating a paper's findings helps them take ownership of research early. It helps them see how papers work, and encourages them to think about how they would personally approach research.

Most of my previous teaching experience comes from teaching relatively small sections of 20 to 40 students. If I were working with a larger lecture class of 100 or more students, it would be harder to use class-wide discussions and presentations. However, I would continue to use the strategy I described of taking breaks to let students complete examples in lecture. I would also use iClickers and other related technology to enable more students to participate in the course.

# 4) Demonstrating Relevance of Class Material

As my background was in public policy before I entered economics, I am often looking for real world applications of concepts and ideas to motivate my teaching. When I taught undergraduate microeconomics, for example, I connected our discussions of budget sets to transfer policy design, and talked about cable providers as examples of monopoly power. When I taught econometrics, I tied our discussion of omitted variable bias to a discussion of the empirical relationship between schooling and earnings. When I taught macroeconomics, I had students talk about the austerity debate during the Great Recession and how our models in class could both argue for and against the claims politicians made.

I think these kinds of applications help students see the link between material in a course and real world questions outside of the classroom. For many students, these links are exactly the reasons why they choose to study economics in the first place.

# 5) Valuing Students

Lastly, one of my most important teaching principles is that I value my students. When I teach a class, I want to do my best to ensure that every student can be successful in the course. I want to set-up an environment where they feel challenged and engaged in the course, but also one where they believe they can succeed.

An important part of creating an environment where students believe they can succeed is knowing that some students may need more attention and encouragement than others. Undergraduate students come to higher education from many different backgrounds, and for some the transition is rockier than others. In particular, non-white students, students from low-income families, and students who are the first in their family to go into higher education often have the most difficult transition. As such, I always proactively identify students who seem to be having trouble in class and send them encouraging and friendly invitations to attend my office hours and work on problems with me in person.

I view the positive reports on my teaching evaluations as an indication I have been successful in encouraging this environment for student learning. Moving forward, I intend to keep working to improve my teaching skills, but I believe I am ready to start off next year as an excellent addition to the teaching faculty.

## Section II: Specific Courses I Can Teach

# Introductory Undergraduate Courses

I have not taught first year courses in economics. However, I do have extensive experience as an economics tutor, so I am well-acquainted with the typical material in these courses. I will be able to design an introductory course in microeconomics, macroeconomics and econometrics when asked to do so.

Teaching these courses requires balancing the diverse goals and backgroungs of students who take them. While some share of students may be taking an introductory course to fulfill a university requirement, others are there because they want to continue with an economics major. Additionally, depending on the prerequisites for the course, the mathematics preparation of students may vary.

Given the variety of students who take these courses, I would focus these classes on basic economic reasoning and real world applications. I would avoid using calculus and instead focus on algebraic, verbal and visual demonstrations of concepts. While some degree of theoretical rigor is necessary, I know how easily students can get bogged down in calculations and miss the larger picture if too much complexity is introduced at this level.

Learning how to apply basic economic reasoning is one of the biggest skills students can take away from an introductory economics class, or an economics major in general. At the end of the class, I want my students to have seen examples of how economists talk about health care markets, market power, effects of taxation, types of pollution control, and effects of minimum wages. I would want them to understand that economics allows us to separate out normative from positive claims about many contentious policy issues. I would also like them to see how they can apply this reasoning on their own.

Relatedly, one introductory class that I have not seen, but would be interested in designing, is an introductory class that combines a basic discussion of empirical methods in economics with an overview of insights from empirical research on specific topics of interest. There are many studies of dubious quality that get produced by political partisans on key questions related to public policy. In my experience, many undergraduates have trouble distinguishing between these studies on the quality of their evidence. However, the basic principles that make evidence more or less plausible are relatively easy to understand. Many students have a basic understanding of why experimental evidence is better than non-experimental, even if they do not have the language to explain why it matters. Furthermore, empirical research has fascinating insights on many contentious political issues students might be interested in, including economic mobility, inequality, discrimination in the labor market, crime and the effects of transfer programs. As such, I think an introductory "Economics and Current Affairs" class could be well-received among students. At the end of such a class, I think students would be better prepared to ask the right questions of the ways people create and apply empirical evidence to social problems, even if they do not continue to study economics or social science.

## Intermediate/Advanced Undergraduate Courses

I have taught all the main intermediate courses that undergraduates take, including intermediate microeconomics, intermediate macroeconomics, and intermediate econometrics. While I have not been the head instructor for any of these courses, I know from these experiences how I would teach these classes when asked to do so.

Intermediate courses are where students get into the nuts and bolts of academic economics. Many of the students who take these courses are doing so because they have already decided to major in economics, and these courses are necessary prerequisites for further academic study. As such, I believe it is important to incorporate calculus in microeconomics and econometrics at this level. Students need to start to see that there is a logic behind the way economists and econometricians structure their claims. They need to see that, while we value intuition and common sense, we also balance them with rigor and precision. In my experience, increasing the mathematical demands on courses can make coursework harder for students with less mathematics training. To combat this problem, I try to encourage students to attend my office hours, and I have proactively invited students individually who seemed to be having trouble with the homework.

I would continue to teach these classes with a focus on the bigger picture and on real-world applications. Even while the course material becomes more challenging, students need to see that economics is a social science, and that its main focus is trying to understand human behavior.

Beyond the typical undergraduate intermediate courses, I would be able to develop advanced undergraduate courses in my main fields of study: labor economics, public economics, demography, program evaluation and applied econometrics.

#### Graduate Courses

I have not taught graduate courses yet. However, I have presented my work extensively at seminars, and am experienced at describing research to graduate students and faculty. My specialties are in labor economics, public economics, demography, program evaluation and applied econometrics. I would be delighted to teach any of these courses at the graduate level.