

The undergraduate courses most formative to me were the ones that imbued in me a desire to use what I learned to engage with the world around me. The professors related the material to their own lives and required application beyond problem sets and exams. As an instructor of record for three sections of ECON 370: Economic Applications of Data Science and a teaching assistant for ECON 470: Econometrics and ECON 101: Introduction to Economics, I strive to foster an environment where students develop skills to follow their curiosity about the economics all around them.

This curiosity is not developed from grades alone; there must be a moment where students see that what they are learning has value beyond receiving a good grade. I designed ECON 370 to not only teach students how to program in R but also how to use R to answer interesting questions. Whether running simulations or analyzing real data, I ensure ample opportunities for students to see the value of the material and its benefits in future coursework. For example, without formally introducing endogeneity, I used a simplified simulation exercise to illustrate why the causal effect of college on wages cannot simply be calculated by comparing average wages by educational attainment. It is my hope that the tools developed in ECON 370 encourage students to pursue the questions that interest them. I also lead by example by being curious when asked questions, humbly admitting when I do not know the answer, and showing how to go about finding one.

I am convinced that students learn best when they are personally invested in the material. One way I achieve this is by engaging students in research, illustrating how class content relates to my own work. The final project for ECON 370 involves using R to analyze dialysis clinic data from the NBER to replicate findings from Eliason et. al. [2020], a paper on which I was a research assistant. This requires students to use different skills acquired throughout the course and gives them experience working with data in a real-world setting. Former students have told me that while challenging, it was an excellent experience and helpful in their academic studies and careers. I plan to continue using my research to influence my teaching, using airline data. The airline industry, with its publicly available datasets accessible to undergraduates, offers many interesting topics like dynamic pricing, auctions for upgrades, and competitive interactions among firms.

I seek to make my courses accessible to all learning styles and backgrounds. Growing up in the Appalachian mountains of West Virginia, I attended a small high school with only 17 students in my graduating class. The hands-on instruction I received from small classes complimented my own learning style. In my graduate studies, I often coded numerical examples to master new material, even when peers thought this unnecessary. In ECON 370, I provided a spectrum of resources and opportunities for students to learn, regardless of learning style and programming background. I kept class sizes small to ensure hands-on instruction from me and other students in groups. During lectures, I promoted active learning by encouraging students to program along with me, and presented opportunities to teach how to break down complicated problems into digestible pieces.

Lastly, I improved accessibility by adapting material to meet students at different levels. In ECON 370, this involved adjusting the pace or explanation style based on students' programming backgrounds. As a teaching assistant for ECON 101, I often presented multiple approaches to the same problem. I made a conscious effort to relate material back to students' own experiences and avoid economics jargon until properly defined. I believe these efforts make students more likely to actively engage with the course and feel respected at all times.