Teaching Statement
Drew Vollmer

Objectives

What skills make an economist? We build and tweak models, scrutinize their assumptions, and evaluate them analytically and empirically. My objective is for students to learn to do the same.

Methods

But how? When I taught intermediate micro with calculus in Summer 2018, I relied on four strategies.

1. In-class practice problems

   To let students work out the kinks with new ideas, I asked them to solve example problems in class instead of lecturing the solution. Students worked on their own before discussing them in groups of four; I answered questions throughout. Students got hands-on practice that re-engaged them after lecture. I saw firsthand what students found confusing and had a chance to help weaker students. I used the same strategy in discussion sessions with more challenging problems.

2. User-friendly background material

   Intermediate micro relies heavily on calculus, but economics courses should be accessible for less prepared and less technical students. To help them, I wrote a primer[LINK] covering all of the math needed for the course with step-by-step explanations.

3. Emphasis on principles of modeling

   My core objective is for students to learn the economist's toolkit. To develop those tools, I emphasize that the structure of familiar models and the strategies used to analyze them apply elsewhere. For example, students can memorize how to derive ordinary demand in the consumer demand model, but it is more important that they recognize the underlying principles: the agent optimizes his objective subject to exogenous constraints. I ask students to use the principles in new settings on assignments and exams. For instance, in question

5 of the final, students must apply the principles of decision making under risk—studied in insurance markets—to a different, but economically equivalent setting[LINK].

4. Clear explanations

   I have worked on making my explanations as clear as possible since my time in high school debate. My approach is to distill the intuition to a few sentences and make it the centerpiece of my presentation, as in the "Intuition" section of my notes explaining the Cho-Kreps intuitive criterion for PhD micro[LINK]. Several course evaluations[LINK] mention clear lectures.

Assessing Students

- In-class practice and discussions let me talk with students to learn what is most difficult. If everyone is confused by the same thing, I can address it immediately.
- Problem sets and exams show when students repeat similar mistakes, which I can address in lecture and discussion.

Improvement

- Professional development: I am enrolled in Duke's Certificate in College Teaching, which includes coursework and observation.
- Mid-term course evaluations: I used a mid-term survey to listen to student opinions and adjust my micro course. I plan to ask again during my next courses.
- Revising course materials: I followed a traditional structure for my micro class, but I would like to tweak it to emphasize types of analysis, like Nash equilibrium, that are critical in economics but not required for the major.

Courses and Experience

My expertise is in industrial organization and microeconomic theory. I would be able to teach:

- Industrial Organization (graduate and undergraduate)

- Game Theory (undergraduate)
- Intermediate Micro (undergraduate)
- Econometrics and Statistics (undergraduate)
- Economic Principles (undergraduate)

Teaching Experience

- Instructor, ECON 205D (Intermediate Microeconomics with Calculus), 2018

  Ran lecture and discussion, assigned problem sets, wrote and graded exams, and held office hours. Course had 13 students: mostly economic majors, but two visiting students from overseas and one incoming PhD student.

- TA, ECON 701/705 (PhD Microeconomics), 2016 – 2017

  Ran weekly discussion sections and office hours, graded problem sets and exams, edited lecture notes, wrote exam questions, and gave feedback on draft exams. Coordinated weekly with faculty about course schedule, problem sets, and questions on material, and weekly with another TA about discussion section content and grading. Course had about 25 economics PhD students and 10 (705) to 25 (701) master's students and PhD students from other departments.

- TA, Regression Analysis (as an undergraduate), 2012

  Ran office hours and graded problem sets with one other TA. Met with faculty weekly to discuss problem sets and solutions. Course had about 60 students, mainly economics majors.

- Peer Tutor/Head Math Tutor (as an undergraduate), 2010 – 2013

  Ran office hours for calculus I/II and intermediate macro, tutored one-on-one for anything and everything (most frequently intermediate macro and multivariable calculus). Organized the calculus tutoring schedule as head math tutor from Fall 2012 to Spring 2013.