Teaching Statement of John J. Horton

Teaching experience

I have been the sole instructor for two undergraduate courses: an introductory probability and statistics course at West Point and a course on online work and the digital economy for sophomore economics concentrators at Harvard College. At the graduate level, I have served as a teaching fellow for two courses at the Harvard Kennedy School (HKS): a public economics course for masters students (one semester) and a course on analytic frameworks for public policy for advanced masters students and PhD candidates in public policy and political economy and government (three semesters). The analytic frameworks class included modules in microeconomics, statistics, game theory, decision theory, optimization and simulation. For many of these modules, I designed and taught sections that introduced new and technical material. I have also taught the two-week "Math Camp" for incoming HKS PhD and Harvard Business School DBA students.

Courses I am prepared to teach

At the graduate level, I am prepared to teach introductory courses in microeconomics, statistics, econometrics and decision-science. At the PhD level, I am prepared to teach labor economics and courses focused around my research interests. I am also interested in teaching a research methods course or seminar for PhD students.

Thoughts on teaching

In lecture preparation, I believe the military adage that "the more you sweat in training, the less you bleed in battle." Given the substantial amount of time spent preparing meaningful and productive lectures, I am interested in finding ways to give my teaching more initial impact, durability and reach.

To that end, as a teaching fellow, I often prepared and distributed extensive written notes and worked examples to students. I also tried to leverage technology in my teaching. For example, when teaching a module on insurance, I created a Mathematica demonstration to illustrate the relationship between risk aversion and the certainty equivalent/risk premium.

In the past, writing textbooks was one of the few avenues for teachers to increase their "scale." However, there are numerous initiatives underway to make education more scalable through technology. Examples include Khan Academy, Udacity, Coursera and the private university initiatives, such as MITx. It is becoming increasingly easy to distribute courses electronically, but the real changes in pedagogy will probably occur as we figure out how to design materials and features that can take advantage of what technology offers. I think it is an exciting time to be a teacher.