

TEACHING PHILOSOPHY

I take my role as an educator very seriously. In addition to my work as a research assistant, I have actively pursued teaching responsibilities. This fall I am teaching undergraduate Econometrics for a second time; I taught Statistics for Economics twice in 2014 and 2015. My expertise in policy analysis and statistical modelling enables me to imbue quantitative courses with applications to contemporary issues and to enrich them with student activities. Students enjoy my courses: my evaluations average 4.61 out of 5. They especially appreciate the way I convey difficult materials in a clear manner.

My teaching philosophy is made up of five major components.

1. Explain complicated concepts in a clear manner
2. Use in-class exercises and activities to facilitate understanding of abstract materials
3. Seek immediate feedback and adjust the pace of the course quickly
4. Make all course materials accessible to students all the time
5. For quantitative courses, emphasize computer software applications such as Excel and STATA

Explain complicated concepts in a clear manner

It is of the first order of importance for a teacher to convey complex materials clearly. I do several things to achieve this objective. First, I design different ways of explaining the same concepts to ensure students of different learning styles to gain a thorough understanding. I often use graphs, for example, to explain the intuition behind a formula and I find that many students are more impressed with pictures than with math. Second, I combine multiple illustrative tools including PowerPoints, videos, and writings on the board to facilitate effective teaching. Third, I always practice my slides 2 or 3 times before each lecture to make sure my notes are coherent and well-organized.

In-class exercises and activities

I believe that in-class exercises and dynamic activities contribute to and reinforce student understanding. In my statistics for economics course, for example, I used Reese's Pieces candies to illustrate the concept of sampling distribution. Each student is given two small plastic cups. They then randomly fill one cup with 5 pieces and the other with 10 pieces. These represent two samples of different sizes. Next, we collect data on the proportion of orange candy for each sample and draw two distributions accordingly. The exercise clearly shows that as sample size increases, the sampling distribution becomes more tightly distributed around the true proportion. I find students become more motivated to learn and the knowledge leaves a deeper impression when they engage in such activities.

In addition to activities, I also include numerous in-class exercises and find them extremely helpful in teaching technical courses. I make it a rule that after lecturing for about 15 to 20 minutes, students must have the chance to work on a relevant question on their own. This is often an application to the previously illustrated concepts. They are also encouraged to discuss the problem within their small groups. I find students are usually more comfortable sharing their knowledge in a smaller circle, and that this is particularly helpful in small classes. With large classes, when small group assignment is not convenient, I usually encourage them to have a discussion with their desk mates, and then randomly pick one or two students to share their opinions with the whole class.

Seek immediate feedback and adjust course pace quickly

I constantly seek feedback from students in a variety of ways. I find random quizzes to be particularly effective. At the end of each lecture, I offer one summarizing slide titled “review for quizzes” on which I list the most important concepts for the lecture. In the next class session, I may give a quiz on the takeaway point(s) from the previous lecture. This method ensures timely feedback from students and allows me to adjust the pace of the course immediately if they begin to fall behind.

I also hand out my own course evaluation in the middle of the course to make sure their feedback is heard. I find students’ comments to be very sincere and constructive. Motivated by one of their comments, that “repeating a thing does not make it clearer,” during my first time teaching, I have striven to offer students multiple approaches to difficult concepts, rather than overemphasizing a single perspective.

Finally, I have asked senior professors to observe my teaching and have constantly sought advice from them. Their suggestions have benefited my teaching tremendously.

Make all course materials accessible to students all the time

As a student, I find it extremely beneficial if I have lecture notes at my side in class. It greatly facilitates note-taking, reviewing notes back and forth, and preparing for exams. As an instructor, therefore, I provide printed copies of lecture slides to my students. I also reserve supplementary course materials in the library to encourage those in need to better understand the course. Finally, I provide practice exams as a guide for tests and upload all materials to Blackboard, the main course website.

Application of computer software such as Excel and STATA

For quantitative courses, I emphasize application more than theory. Instead of asking students to derive long and abstract equations, I teach them how to use real world data to answer important policy questions. I usually have seven computer lab sessions in which we apply methodologies learned in class using software such as Excel and STATA. Part of the homework requires using the software, and past students have told me the lab sessions add great value to the course.

Conclusion

I believe the skills I have developed teaching quantitative courses can be easily transferred to other economic and policy courses. My general teaching philosophy centers on students, focusing on clear illustration through a combination of lectures, activities, and assessments.