

Teaching Philosophy Statement

Marcio Santetti

Ph.D. Candidate, Department of Economics, University of Utah

santetti@gmail.com

As a student, I was usually too afraid to raise my hand and ask questions. With the experience of being on the other side of the classroom, I could understand that I was definitely not alone back then. And how can an instructor effectively teach a class without student collaboration and their questions, comments, and feedback? The most important role I can play as an instructor is to maintain a pedagogical framework that allows students to continuously ask questions, stay curious, and improve their critical thinking. Learning is not about repeating concepts in exams, but rather about sharing experiences and knowledge with students.

One of the most fascinating aspects of Economics is that several concepts may be generally presented in three ways: mathematically, graphically, and with words. The way in which a student captures the content usually navigates across these different paths, and my philosophy comprehends making each of these paths as clear as possible for the most effective learning experience. Obviously, these events develop with experience, and I believe there is still much more to learn within this teaching journey. As of today, I build my teaching philosophy around three main principles: *empathy*, *intuition*, and relating *theory with real-world phenomena*.

Empathy

During my first semesters as an undergraduate student, when starting a new class, my first thought used to be “am I going to pass this class?,” or “how many exams do we have? Are they hard?,” and I know that these thoughts are also pervasive in some of my students’ minds. I do not want any of them to be overwhelmed by exams or assignments. Therefore, my first lecture is always about the syllabus, especially how graded assessments will be designed. More importantly, I always emphasize the fact that no subject that has not been fully covered in class will be part of an exam or assignment. This already relaxes students, giving them the confidence that by studying the readings and lecture notes, they have all resources for a successful journey.

An interesting episode that has taught me a lot pedagogically was one Accounting class I attended as an undergraduate student. Whenever asked, the instructor would always reply a student’s question with another question, sometimes on the same subject, sometimes on others. In case of no answer, he would then extend the question to the entire classroom. This process would move back and forth until the question was fully answered by the audience. And it would sometimes come from completely unrelated topics motivated by the instructor, such as movies and music references. This active learning strategy encouraged class participation, boosting students’ confidence towards the content. This is a technique I regularly apply in my Statistics, Econometrics, and Microeconomics classes, and it usually motivates even the most discreet students.

These are empathy exercises, where constructing knowledge overcomes the intrinsic fear of asking questions. In my teaching experience, I try to make students answer questions on their own, and my role is to guide the discussion until the question is fully answered by them. The classroom should never be seen as an antagonistic environment between instructor and students, but indeed as a constructive space where everyone learns and collaborates as much as possible. We all come from diverse backgrounds and have diverse interests, so why not learn from all? This is only possible in an inclusive environment.

Speaking of diversity and inclusivity, these two refer not only to students and faculty, but also to class content. The questions we ask and the approaches used to answer these are heavily dependent on our backgrounds, and exposing different methodologies in class allows both students and faculty to learn from

diverse authors, theories, and models. For instance, I like to present principles of Bayesian inference in my Statistics and Econometrics classes, as a way to criticize the classical approach to probability. In addition, I also bring several data sets from diverse regions and subjects to perform statistical techniques on, such as data from developing countries, models exploring poverty and inequality, and in-class exercises with environmental indicators. With a richer content, students feel more represented and encouraged to participate.

Given these views and my personal experience, I am most excited about the opportunity to teach in a liberal arts environment. Given its commitment to connecting a well-rounded undergraduate education with the smaller and broadly diverse student audiences, interacting with students and faculty in such environment builds a more effective support system for the entire community.

Intuition

Economics is a heavily mathematical and abstract science. This fact easily creates frustration, and it is not rare to ask for an example where there is none available. Students urge for concrete examples, and their attention may be lost if they do not see where some concept or model come from and where they can be applied. To address this issue, my Econometrics and Microeconomics classes are devoted to understand in depth the conceptual root of all of tests and models we use. There is always a story behind every concept, regarding the *when's*, *why's*, and *where's* of each theory. If we do not present what lies “under the hood” of an equation or line of code, then these will be just another equation and code. But if we provide their intuitive appeal, then there is a clear reason to use them.

The paragraph above connects with another teaching episode. Once, I was introducing students to Ordinary Least Squares coefficients, and at one point in a formula there was a multiplication between x and y . Then, I asked students why these two variables were being multiplied together, rather than, say, divided by each other. Even the Math majors would stay quiet for almost two minutes, and no answer would come up. After a few suggestions, students got both frustrated and excited. Frustrated because this was something that elementary school should have taught us (myself included). And excited because they finally came to know why they do so much variable multiplication: simply to look at the interaction between two variables! This episode has taught me how important it is to give the intuition about elementary concepts. These are, and always will be, the building blocks of any modeling approach.

Theory and the real world

Where do we place our content outside the classroom? This is one of the main caveats within the pedagogy of Economics. Obviously, in no area of knowledge are we going to apply 100% of what was learned. However, one important practice is to point out where and when most concepts may be applied in real life situations. One semester, when teaching Principles of Microeconomics, one student asked me where it would be possible to apply the content she spent the entire semester studying. My answer was: “you will never see anyone maximizing her utility at the grocery store, but if you see yourself in a situation where your input will be needed to assess the sales determinants of a certain product, you will know what to say, since it comes from microeconomic theory.”

Most of my current teaching gravitates around Statistics and Econometrics, and the growing interest in Data Science attracts many students to these classes. Beyond the theoretical primer, my focus is to apply the concepts as much as possible, through the use of official databases, applying models to test economic theories, and also requiring students to write short research projects. In these, students perform data analyses from scratch: formulating the research question, collecting and treating the data, and performing the necessary analyses to answer that question and present the answers. By asking their own questions and learning about the things they are curious about, I aim to empower students with the necessary intuition, tools, and practical skills to be successful.