

Teaching Statement

Chiara Margaria*

November 2016

During graduate school, I had the opportunity to gain experience and develop my own perspective on teaching by being a teaching assistant for undergraduate courses of intermediate microeconomics and game theory (both an advanced and a basic level), including two summer courses taught online.

My aim in teaching economics courses in general, and microeconomics and game theory courses in particular, has been to foster economic and strategic reasoning. Analogical thinking—the use of parsimonious models—and intuition are the cornerstones of economic theory. Hence, as a teacher of economics one of my major goal is to help students develop a conceptual framework to analyze the causal structure of economic phenomena, and provide factual knowledge. More specifically, my approach to teaching is inspired by three objectives: developing economic reasoning, promoting collaboration, and fostering curiosity.

First, as a teaching assistant for an intermediate microeconomics course I came to realize that real-world examples that lay bare economic tradeoffs are the main tool to instill the ability to answer economic questions. A technique I have been taught by the instructor of that course, professor Samuelson, is starting each class with a real-world example. This provides students an overview of the topic of the class, and helps develop the ability to isolate the economic forces at play in tackling economic questions.

Second, I think that collaboration is important for two reasons. On the one hand, students learn and understand concepts differently from each other, and collaboration is the unique way to reap the benefits from this diversity. As I have learnt from my own academic experience, collaborating with fellow students as well as with coauthors is a challenge and an opportunity: it allowed me to gain perspectives by discovering new points of view, and it forced to me to logically organize my reasoning so as to be able to explain it to somebody else. On the other hand, collaboration promotes critical thinking and intellectual growth: discussions lead to questioning and scrutinizing one's own view and ultimately encourages a deeper analysis.

This relates to the third objective: I strongly believe that education at the university level should encourage critical thinking and foster curiosity.

*Yale University, 28 Hillhouse Ave., New Haven, CT 06511, USA, chiara.margaria@yale.edu.

In my experience, when teaching in top institutions, achieving these objectives is challenging. Grades are an important component of students' curricula, and their performance on the exam is frequently students' main concern in the course. I think assignments play a key role in overcoming this obstacle. I find that providing students with hard problems and encouraging them to collaborate is helpful to generate excitement and curiosity. At the same time, to avoid demotivating or generating undue worries, it must be made clear to students whenever they are asked to tackle problems of a higher level of difficulty as compared to the final examination.

While being a teaching assistant for a senior-level game theory course, in which students were faced with hard weekly assignments, I promoted a collaborative environment during the well-attended office hours. The positive feedback from students, both in teaching evaluations and in person, confirms the importance of combining challenges and collaboration in stimulating curiosity and interest.

However, expecting the same level of excitement and involvement from all students would be unrealistic. I prepare at the beginning of the semester a transparent course syllabus and sufficient supporting material to allow students to stay organized and learn the basic concepts even if they are unable to participate in recitations or office hours. I came to appreciate the importance of a detailed syllabus while taking part in the first-time setup of the online game theory course offered during the Yale Summer Session. Detailed planning is also beneficial to myself as instructor: thorough preparation is important for a successful lecture, and it is not a last-minute activity. A detailed outline of each lecture helps overcome the risk of planning to cover too many concepts, and guarantees overall coherence.

Last, I think that lectures, supported by lecture notes, should be self-contained. Moreover, the presentation of the mathematical analysis must be precise but concise. However, I think that it is important to point students to a few additional references at a detailed level, indicating where each topic is explained. I find that the use of texts that cover the major themes of the course in significant depth is beneficial to both students who are novices and look for a more thorough exposition of the basic concepts, and those who have some background and want to deepen their understanding. As for the technical material, providing precise references is useful to both students that are easily discouraged by mathematical concepts, and those inclined to delve further into the technical details.

My main teaching interests lie in the field of microeconomic theory and its application. On the graduate level, I would naturally be inclined to teach microeconomics, game theory, mechanism design, and organizational economics. At the undergraduate level, I would be additionally excited to teach course related to behavioral economics, theoretical industrial organization as well as finance.

Teaching Statement

Teaching has always been an important part of my academic life. I have had a privilege of teaching a variety of courses at NYU Stern including an undergraduate introductory microeconomics course, a PhD-level math course, an MBA course on microeconomics. In all of these courses, I made an intentional effort to provide the students perspectives on how the solid understanding of the basic economic concepts and tools that are covered in class is essential for analyzing complex economic problems later in more advance courses or outside of their coursework.

My affection for teaching stems from my own experience with great courses and teachers. During my undergraduate studies at Yale, my professors encouraged me to pursue my independent research project. My professors at Stern helped me shape my research questions and obtain skill sets necessary to execute my own research. Such experience has led me to believe that good teaching can be transformative for a young scholar and can inspire new and exciting research.

I am excited about teaching a wide range of courses at the undergraduate, MBA, and PhD level. In addition to any course in the microeconomics and macroeconomics sequences, I would like to teach the following courses. First, I would like to teach any econometrics course on statistical tools needed to understand empirical economic research. The goal of the course would be to equip students to plan and execute their independent research projects. The course would be designed to first introduce standard concepts such as statistical inference, asymptotic properties, instrumental variables, and panel data methods. In addition, I want students to apply these principles through problem sets that will require analysis of actual data sets or interpretation of empirical results taken from research papers.

Second, I would like to teach a course that provides an introduction to game theory and strategic thinking. I would discuss ideas such as dominance, backward induction, Nash equilibrium, commitment, credibility, asymmetric information, adverse selection, and signaling. This class is particularly interesting since many game theoretic concepts can be found in economics, politics, sports, and various real-world situations.

Third, I would like to teach an undergraduate-level and a PhD-level course in industrial organization that gives a solid understanding of the structure of markets and the strategic behavior of firms and consumers. For the PhD-level course, I am prepared to discuss extensively the identification and computation of dynamic models, demand estimation, and asymmetric information, due to my research agenda. I am particularly excited about reading and analyzing research papers with the students, thinking about potential fruitful areas of research, and equipping them with empirical and computational tools to carry out their independent research.

Besides lecturing, I will happily participate in organizing reading groups and seminars as well as other activities that enhance the learning experience. I look forward to the teaching component of my future career.

Statement of Teaching Philosophy

I believe that good teachers can not only help students acquire new analytical tools, but they can also spark their passion for learning, deepen their understanding of real world phenomena, and encourage the development of their own ideas. This belief is the main source of my enthusiasm for teaching and my commitment to improving students' learning experience. My commitment also reflects my gratitude to the great teachers that have inspired me to pursue an academic career, from whom I have learned what I know and try pass along to my students.

My teaching experience began 10 years ago, as a teaching assistant, while doing my undergraduate studies at the University of Buenos Aires. Since the beginning, I have found teaching to be an essential part of my learning experience. I believe that if a teacher cannot explain a concept so that everyone in a classroom can understand, then there is still something there for the teacher to learn. Over the years, I have continued to learn from every class I teach. Even in introductory level courses, I have received challenging questions and have been led to advance and sharpen my understanding of basic concepts.

Effective teaching requires, in my opinion, an engaging learning environment and flexibility to meet students' needs. I strive to create a positive and open atmosphere in class, fostering participation and discussion. I assign readings in advance, sometimes about current events and debates, and encourage questions and comments, which helps keep students engaged. Fostering class participation is important not only to keep students motivated but also to identify the hurdles they are finding in the learning process. Encouraging students to come to office hours is also instrumental in that respect.

As a teacher, one quickly realizes that students are often highly heterogeneous in their backgrounds, difficulties and needs, as well as in the ways they choose to seek help and guidance. Thus, it is crucial to encourage various forms of interaction. I try contribute as much as possible to students' learning process by actively trying to understand their difficulties they face and be flexible and creative in adapting to them.

Another important ingredient for effective teaching is careful course preparation. I invest a lot of time in course preparation and planning. When preparing lectures, I carefully consider how to present the essential assumptions and implications of each theoretical model, how to break the models down into their building blocks, how to explain each of these clearly and precisely, and how to bring in real world examples and applications. In my experience, detailed lecture notes can be extremely helpful as studying material and as reference in further discussions with students outside the classroom. I have also noticed that distributing lectures notes in advance makes it easier for students to follow the class, keep focused and ask better questions. I carefully design homework assignments so that they prompt students to better grasp and apply the analytical tools and concepts covered in class. Detailed and clear solutions to problem sets and exams can also significantly aid the students' learning process. Careful organization is particularly important for big classes (such as Intermediate Macroeconomics at Brown, for which I have been instructor twice). Coordinating lectures with TA sections and problem sets, in my view, is crucial to achieve a cohesive learning experience for students.

My teaching philosophy has evolved over time, and the guidelines for effective teaching that I now follow reflect the insights I have extracted from a critical examination of my past teaching experiences. I hope to keep learning and improving as a teacher in the future, and I am certain that I will remain as enthusiastic and committed as I was when I started teaching.

Teaching Statement

Stephen J. Terry

Over the course of multiple years as an instructor of undergraduate and graduate students in economics and mathematics, I have learned two lessons about teaching. First, detailed instructor preparation before lectures is perhaps the most crucial predictor of a successful lesson, regardless of the subject material. Second, university-level students can quickly grow to resent arbitrary or rigid constraints on their behavior which are unrelated to their wellbeing or to their understanding of course material.

During my experiences as an academic researcher and as a research associate within the Federal Reserve System, I have also learned firsthand the importance of practical experience with data for economics students. In the rest of this teaching statement, I discuss each of these points in more detail, relating them to my previous experiences and future teaching plans.

Instructor Preparation

During my time as a graduate student in mathematics I served as a lecturer for two undergraduate service courses at the University of Oklahoma, in elementary functions and in applied differential calculus. This mathematics experience, which was spread over five semesters, taught me some of the same lessons as the quarter which I spent as a teaching assistant for the first-year PhD core econometrics course at Stanford University. In particular, regardless of subject matter, preparation on the part of the instructor is the single biggest predictor of whether a given lesson or lecture will be successful.

By spending a considerable amount of time ahead of the lecture itself working through, in full detail, the problems or concepts to be introduced to students, an instructor guarantees two things: first, that there are no hidden complications which could detract from student learning, and second, that the instructor is so readily fluent in the details that they have the mental capacity to respond in the moment to the bigger issues or concerns that arise as students grapple with the material.

Although this discussion of preparation may sound like common sense, I have learned through experience that outlining the material in advance in broad terms is not sufficient. Only by putting in the effort ahead of class on the details, especially during an instructor's first term teaching a subject, can they guarantee that the majority students have a reasonable chance of absorbing the material.

Arbitrary Decisions

Instructors inevitably must make decisions about the details of a course. Such details will involve deadlines, the grading process and weighting, the date of examinations, among many other points which are naturally of extreme interest to students. I view such details as falling into two categories.

The first category involves decisions already made by the department or the university to ensure the safety and wellbeing of students as well as the existence of a fair academic environment. I wholeheartedly support detailed rules of this nature and recognize the crucial importance of following such guidelines down to the smallest detail in the interests of students as a whole.

In my experience as a teacher in the university environment, I have also found that students are extremely sensitive to a second, more arbitrary set of rules. Initially as a teacher I sought to create a rigid and detailed set of contingency plans and guidelines for things such as the format in which student problem sets were prepared or the manner in which they were submitted, penalizing deviations from my strict set of classroom rules. However, I quickly found that students grow to resent such rigid structures. Students react negatively to such guidelines because they are arbitrary but also more importantly because students understand that such rules don't relate to the issue of importance, which is their comprehension and mastery of the subject material at hand.

As an economics instructor at the undergraduate or graduate level, I will therefore continue to take care in the preparation of course guidelines, showing respect for the ability of my students to use discretion where possible.

Ultimately, by treating students in this manner, I have found that my courses have become less time consuming and adversarial for me as an instructor but also more focused on the subject material in the interest of students.

Student Experience with Data

I view empirical experience, in particular a familiarity with basic challenges and tools involved in the use of data, as one of the more important pieces in an economics student's toolkit. Empirical research projects of course require such knowledge. However, as a research associate at the Federal Reserve Bank of Kansas City, I also learned firsthand that to function policymakers and their advisors need to often access and analyze unfamiliar datasets. Since economics students often pursue careers as researchers or policy advisors, I naturally desire to equip my students with practical empirical experience.

Datasets in general are horribly messy, with outliers and inconvenient formatting the rule rather than the exception. Furthermore, efficiently processing and analyzing that data typically requires at least a passing familiarity with a statistical analysis language such as R or Stata. Given its open-source availability, as well as its wide use in data-oriented industry, as an economics instructor I plan to make heavy use of examples and exercises using R.

I will require my students, in most economics courses beyond the principles or introductory level, to deal in practical terms with the data download, cleaning, and analysis steps. These types of exercises and experience can of course be scaled to the difficulty and experience level of students which will differ by context. However, I firmly believe based on my own experience that an abstract familiarity with data analysis is no substitute for practical empirical experience.

Teaching Statement

Gedeon J. Lim

Department of Economics, Boston University.

I have always believed in the importance of good teaching. Students are the intellectual life-blood of any institution and it's our duty as stewards of higher education to enable students to succeed regardless of the career path they choose. To this end, I believe that good teaching and research are complementary in two ways. First, success in both areas require clear thinking, collaboration, and the ability to simplify complicated concepts. Second, in terms of growth as an academic, teaching provides the privileged opportunity to learn from students and give back to the community. During my time in graduate school, research commitments have kept me in the field and abroad and hence, relatively little time for teaching obligations. I am, however, a firm believer in the importance of teaching to ability and my philosophy in teaching is that no student should be left behind. In this statement, I will explain how my experiences in mentorship and long-term fieldwork in Southeast Asia has informed my teaching philosophy and the classes I would be interested in teaching.

At Boston University, I've had the opportunity to serve as a mentor during three years of the Research Assistant (RA) program for Master's students. Owing to the international nature of our program, mentees working on my projects have hailed from diverse cultural backgrounds and, having been in the US for a longer period of time, I've often helped them in their transition towards living and studying in the US. I've also taken the time to advise them on career choices based on my experience in US academia. Most importantly, many of my RA's enter the program with varying levels of prior research experience. To ensure that they gain the most out of their time with me, I typically organize a first meeting centered around understanding their ability and research interests. I then give them tasks suited to both their ability level and interests. In this way, I ensure that my mentees believe in the work they do and, at the same time, gain research skills valuable for their future career choices. After graduation, many of my mentees have gone on to become good friends. These mentoring relationships have given me immense satisfaction and I would love to continue my success in mentoring through teaching.

My research uses modern economic empirical methods to analyze primary survey data. This has led me to spend a considerable amount of time in my fieldwork locations (Indonesia and Malaysia) building re-

relationships with relevant (non-)governmental stakeholders to facilitate data collection. These relationships have taught me the importance of collaboration and given me the necessary skill-set to simplify technical concepts. For example, in Indonesia, I worked with a non-governmental organization, AKATIGA Bandung, where most researchers were trained in anthropology. Hence, in survey design and implementation, I had to learn how to justify my survey design by simplifying technical economic concepts in order to gain their trust and affirmation. I believe that these skills will translate well into the classroom where students might be equally, if not more, skeptical of the concepts and ideas that we as teachers try to convey to them.

I am excited to teach a wide range of courses at both the undergraduate and graduate level. In addition to any core courses in applied microeconomics and econometrics, I would like to teach a course on international development and public policy. Leveraging on my regional expertise, the course would have a regional focus on Southeast Asia and the goal of this course would be two-fold: to provide students with an introduction to the latest empirical research and tools and to enable them to conduct independent research projects. To enable students to conduct independent research, the course would teach students the A to Z's of conducting field research. Skills taught will include how to establish relationships with partners, designing and implementing surveys, and leveraging my considerable relationships in Indonesia and Malaysia, placing students for internships at institutions which I've worked with. These places include SMERU Research Institute, Indonesia, AKATIGA Bandung, Indonesia, and Universiti Tunku Abdul Rahman, Malaysia.

I am confident that my experience in mentorship and working with various stakeholders in the field has prepared me to face the challenges of teaching at any level and I very much look forward to the teaching component of my career.