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College of Social & Behavioral Sciences Department of Resource Economics

University of Massachusetts | Stockbridge Hall | 80 Campus Center Way | Amherst, MA 01003 | 413.545.5732 | www.umass.edu/resec

Teaching Statement

By Augusto Espin
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My goal as a teacher is to share my knowledge and experience with enthusiasm and empathy. In my courses, I teach theoretical and empirical tools to help students understand data, economic models, and the terminology and economics lingo. I always enjoy seeing my students succeed and grow to become professionals that will impact society positively.

Development as a teacher

The University of Massachusetts provided me with a variety of experiences to develop my skills as a teacher. I have worked as a teaching assistant (TA) in intro level courses as Intro to Statistics for Social Science (Res-econ 212) and advanced undergraduate courses as Industrial Organization (Res-econ 452), Managerial Economics (Res-econ 428) and Public Policy in Private Markets (Res-econ 453). During my second year, I spent one semester developing an online version of an introductory course, Computing Foundations to Frontiers (Res-econ 112), which included developing entire parts of the course using new computational tools.

When the COVID-19 pandemic struck and the University was forced to move online, I helped professors move their content online. This proved to be challenging, especially for homework and exams with mathematical content that were designed around numerical problems. However, the whole content was moved successfully online and even used later for in-person teaching in the same course, as was the case Managerial Economics. During my fourth year, I had the opportunity to work as a teaching assistant in a graduate level class, Probability Theory and Statistical Inference (Res-econ 701). Later, during the summer of 2022, I taught one introductory class with full instructional responsibilities (and no TA assistance), Introduction to Resource Economics (Res-econ 102). In this class I developed content for a course of 6 weeks and 4 credits, the equivalent to courses that are regularly taught during Fall or Spring professors in the department. As shown at the end of this document, my teaching evaluations demonstrate my capacities as an effective, caring and devoted teacher.

I have teaching experience that extends beyond UMass. Before joining the PhD program, I held a position as an instructor in the Electrical Engineering department in my home university where I taught a variety of engineering courses in my home country. A key component (and motivating factor) of my teaching was that I used this opportunity to introduce innovative methods and material that had not yet been adopted in Ecuador and that I had learned during my time in the US as a master's student.

Finally, I have extensive experience in communicating and presenting a variety of technical and non-technical material to a broad range of audiences. Prior to joining the PhD program, I held high level positions in government in my home country (both as a Minister and Vice-Minister of Energy and Telecom sectors). Among other things, these positions demand careful, clear, and concise oral communication. Further, these communications often have to be fine-tuned to the particular audience; effective delivery of information is essential, and mishaps can have wide-reaching negative consequences. I believe that this experience gives me a unique perspective on teaching: not only can I share concrete examples of this experience in my teaching in order to deliver a concept or highlight a point, but it provides me with the flexibility of adapting my communication style effectively. I believe that this experience will be beneficial and highly appreciated among students interested in policy and business, for example.

Teaching is a skill that needs to be improved over time with the introduction of new ideas that allow students to remain engaged. I have been an active contributor to the Graduate Student Seminar that is held every year in the Resource Economics Department at UMass, and where we have the opportunity to present our research work. Also, I have

presented my work in the industrial organization study group at the department several times.

During my time at University of Massachusetts Amherst I have received additional training in the use of tools like Blackboard, Moodle, and Echo 360, as well as on teaching methodology.

Methods

Approachability: As a teaching assistant and instructor I have encouraged students to reach me for additional explanation of material, either in office hours or informally. I think that giving students confidence in asking and expressing their thoughts is important in the learning process. As an instructor, it implies that students should be confident to participate in class by asking questions or expressing their own points of view on the presented material. A participative class environment guarantees engagement and learning not only from students which, in turn, also fuels the instructor's motivation further. For instance, while I taught Introduction to Resource Economics, part of the graded component was participation in class discussion and in general all students were able to discuss and set their own perspective in different parts of the covered material. Further, as evidenced in my teaching evaluations, I provide ample time and effort so that students can approach me outside of class.

Preparedness: In my opinion, planning and preparing the course material, as well as its daily delivery, is key to successfully deliver content and keep students engaged in the learning process. Preparedness includes rehearsals of presentations and the approach on how content will be delivered including additional learning tools and material. For instance, as an instructor I took the time to practice the lecture the day before delivering it and staging many examples that were prepared to illustrate the presented material.

Applied problem sets: Students need to do homework on topics that are well related to the content that is delivered in lectures. This is how they internalize knowledge and understand their level of awareness of the delivered material at the same time. Also, it is important to help students develop skills with data analysis using firsthand tools as Excel for introductory courses or broadly used tools as R or other languages for more advanced courses. For instance, when I developed the course of computing foundations to frontiers, I planned homework based on real datasets and incorporating tasks in many of the computational skills learned in class.

Teaching skills

I have been involved in delivering content as a teaching assistant a sole instructor. In addition, I have developed new material for two introductory courses. I have previous working experience teaching advanced engineering classes that required development of all the material from scratch. I have a strong background in teaching and the ability to deliver and communicate content effectively. One important aspect of teaching technical courses is combining effectively theoretical knowledge with computational tools to allow students a better understanding of the subjects, an approach that I embrace and am committed to using in the future. I am prepared to teach courses in applied microeconomics (including but not limited to industrial organization, public policy), applied econometrics, as well as courses based or centered around computational tools.

Teaching effectiveness

Below is a chart with a selection of my results as sole instructor for the course: Introduction to Resource Economics, which is a general education course for freshmen students. It was taught in summer 2022 and covers the same material as in regular Fall or Spring semesters.

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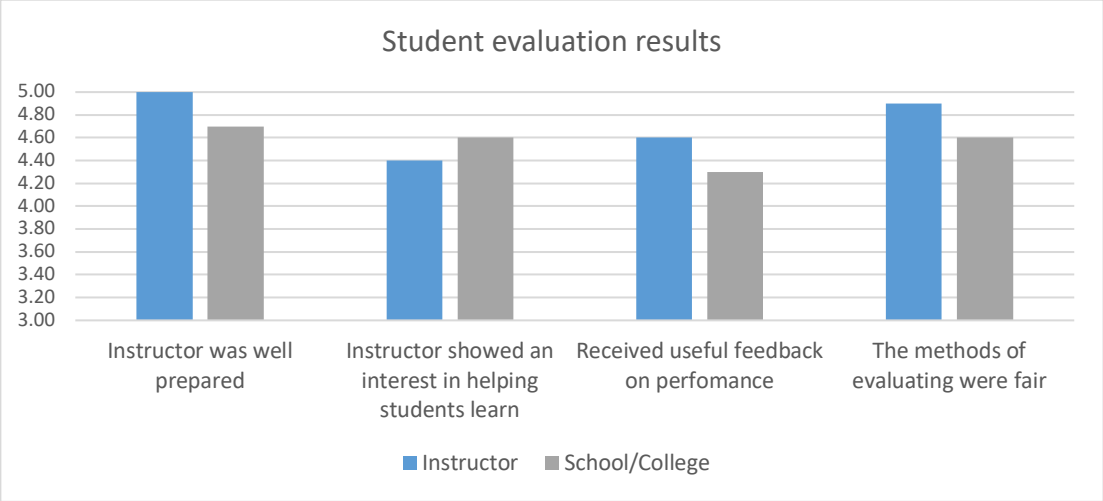

Below is a sample of the comments received from students (complete teaching evaluations available upon request):

"It was my first ever economics course and it was very easy to understand owing to the way of teaching. The teacher was enthusiastic and patient with our questions which made it a better experience."

"The classes were long, but Professor Espin always came to class with a welcoming smile and gave us a 15 minute break every day. He was very understanding of how it might be difficult to sit down and listen for such a long period of time and tried his best to keep us engaged. I also attended his office hours regularly where he answered all my questions thoughtfully and tried his best to make sure I understand my homework and the content."

"The course and teaching is great the way it is."

"The course was a great experience for my first course at UMass Amherst."

"Very clear and well-made slides."