

## Statement of Teaching Philosophy

My teaching philosophy is founded on three fundamental principles shaped by my experience teaching economics and informed by my commitment to equity in the classroom. First, I emphasize the importance of analytical and mathematical tools in developing students' ability to think critically about economic and policy questions. Second, I ground my teaching in the idea that economics is a social science with direct implications for public policy, and I structure learning to help students apply economic reasoning to real-world challenges. Third, I believe that teaching is a collaborative endeavor and that learning environments are most effective when they actively engage students in constructing their own knowledge. As an educator, I am committed to fostering inclusive learning environments that reduce barriers to student success. My approach is shaped by my research, my engagement with students, and my experience working with institutional data to better understand and address equity gaps in economics education.

### Principle 1: Incorporating Analytical and Mathematical Tools into Critical Thinking

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Working in economics and public policy requires us to critically evaluate complex social and economic phenomena, and mathematical and analytical frameworks are crucial elements of this process. As the economist Dani Rodrik notes: "We need the math to make sure that we think straight—to ensure that our conclusions follow from our premises and that we haven't left loose ends hanging in our argument." Building a solid foundation in the quantitative methods used in applied economics and public policy is imperative for students to engage rigorously with economic reasoning. In my experience, many of the equity gaps I observe in student outcomes stem from disparities in these foundational skills, making it even more critical to provide all students with the tools they need to engage rigorously with economic reasoning. I primarily facilitate this in three ways.

First, I use a diagnostic quiz at the beginning of each course to assess students' familiarity with mathematical concepts covered in prerequisite courses. This assessment helps me identify areas where students may need additional support, allowing me to provide targeted resources and contextualized feedback. This approach is particularly important for addressing equity gaps in quantitative economics courses, where differences in students' prior preparation can impact their ability to engage fully with course material.

Second, I promote collaborative learning by linking mathematical tools to economic concepts. In my intermediate microeconomics course, for example, I organize a group-based learning activity to teach utility maximization and the properties of demand functions. Each student in a group is assigned a specific role—solving an optimization problem, connecting the solution to a graphical representation, or relating both to broader economic concepts. The groups then present their work, honing their ability to communicate problems using words, equations, and visuals. By encouraging students to articulate economic reasoning through multiple modalities, this activity fosters deeper conceptual understanding and reduces disparities in engagement.

Third, I use formative assessments such as short quizzes and structured discussions following these activities to gauge students' understanding. By integrating formative activities and assess-

ments into my teaching, I ensure that students receive frequent feedback and have opportunities to solidify their understanding before engaging with higher-stakes assessments. This approach also allows me to assess student understanding in real time, as I observe them working through problems individually and collaboratively. By identifying common stumbling blocks, I can adjust my instruction on the spot to address areas where students struggle before they move on to independent problem-solving.

## **Principle 2: Economics for Informed Social Policy**

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Economics, as a social science, offers diverse frameworks for understanding the world, and economic reasoning plays a crucial role in shaping public policy. I emphasize the strengths of economics in providing scientifically rigorous, evidence-based insights into social and policy issues. My goal is to help students see how economic concepts apply to the issues they care about and how they can use economic tools to engage both critically and charitably with policy debates.

For example, in a Master's course on Applications in Microeconomics, I conduct an in-class activity on wage inequality between high school and college graduates. I begin by asking students to estimate salary expectations under different educational scenarios and discuss the factors influencing these expectations. Then, I introduce a profit-maximization model with high- and low-skilled labor, and students solve for equilibrium wages for both groups, enabling them to test their predictions mathematically. Finally, we examine real-world wage inequality trends, drawing on economist Claudia Goldin's work to explore the historical and institutional forces shaping labor market disparities.

These activities are designed to help students connect economic theory to real-world policy debates. However, it is also crucial to acknowledge that students bring diverse perspectives to these discussions, shaped by their own experiences and social contexts. In my teaching, I encourage students to critically and charitably evaluate how economic models reflect—or fail to reflect—the complexity of social issues, fostering a classroom environment where students feel empowered to question assumptions and engage deeply with policy analysis.

## **Principle 3: Inclusive and Data-Informed Pedagogy**

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Teaching is a collaborative process, and fostering an inclusive learning environment requires recognizing and addressing barriers to student success. Women and racial minorities remain underrepresented in economics classrooms, and I am committed to making my teaching more accessible while also contributing to broader efforts to close equity gaps in the field.

At UC Santa Cruz, I teach students from diverse backgrounds, including many first-generation and transfer students at this Hispanic-Serving Institution. Some students have varying levels of bilingual proficiency, and understanding these intersectional identities is crucial for effective teaching. When examining equity gaps between Hispanic and White students, I try to assess

whether disparities stem from structural and racial barriers, language barriers, or other factors. This distinction matters because interventions for language-related challenges differ from those addressing broader racial disparities. Supporting students requires both institutional strategies and individualized approaches.

My work with UCSC's Institutional Research and Assessment unit has provided me with two valuable perspectives: as a researcher analyzing program learning outcomes and equity gaps across multiple disciplines, and as an instructor using classroom demographic data to inform my teaching strategies. This dual experience helps me better understand and address the needs of our diverse student population. When institutional data indicates specific challenges—whether related to language proficiency, academic preparation, or other factors such as economic disadvantage—I try to adjust my teaching accordingly. To complement this data-driven approach, I try to assign a "letter to me" in the first week of class whenever possible to get a better sense of who my students are, and understand their situational factors that are often not easily quantified.

As an instructor, I incorporate frequent, low-stakes assessments based on evidence-based learning strategies, which reinforce key concepts, encourage productive study habits, and provide multiple ways for students to demonstrate understanding. For instance, in my role as an instructor for an intermediate microeconomics course, I would typically use a combination of formative and summative assessments to help students learn to apply tools like constrained optimization to understand optimal consumption. In low-stakes formative assessments, I explicitly list out each step of the process (such as writing the equation for a budget constraint, identifying the slope, calculating ratios of marginal utilities, and setting up the Lagrange function) as explicit and separate problems, with frequent callbacks and solution verifications. The summative versions of this problem tests whether students can solve a similar problem without the explicit instructions provided in the formative assessment.

Beyond my own teaching, I contribute to fostering inclusive pedagogical practices for my fellow educators at the department level, by leading workshops for instructional teams supporting high-impact, high-enrollment required courses in the Economics curriculum. These high-impact courses typically also see large gaps in proficiency across students, and as a Graduate Pedagogy Fellow, the workshops I design and lead are intended to support instructional teams to utilize practices shown from the literature to reduce gaps in proficiency and ensure student success for all students, especially in areas of the curriculum that present more challenges for them. In these workshops, we focus on creating scaffolded, active learning activities for concepts and skills that students tend to struggle with and that hold them back from progressing in the major. Feedback from participants has been overwhelmingly positive, with participants highlighting the practical strategies they can implement in their classrooms that improve student engagement. Additionally, as a peer mentor for the Teaching and Learning Center's Summer GSI Support Team, I have worked with graduate instructors across disciplines to design equitable courses, providing feedback on course syllabi in many disciplines to incorporate universal design, culturally responsive pedagogy, and equitable assessment practices. These experiences have reinforced my belief that inclusive teaching requires not just adopting best practices but fostering an ongoing dialogue

about equity-centered pedagogy.

## **Conclusion**

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My teaching philosophy is guided by the belief that students learn best when they are equipped with strong analytical tools, encouraged to apply economic reasoning to policy questions, and supported in a collaborative and inclusive learning environment. I integrate quantitative reasoning into my teaching to help students develop precision in their thinking, structure my courses to connect economic analysis with real-world policy applications, and actively work to reduce barriers to student success. By centering these principles, I aim to prepare students not only to engage with economic ideas but to apply them in meaningful ways in their careers and communities.