Teaching and Advising
(Last Updated: 02/27/25)

Since joining the Department of Economics at the University of Notre Dame (ND) in 2016 , I have taught six distinct courses—three undergraduate courses and three graduate courses—and received **seven** teaching awards. These awards recognize courses receiving the highest weighted combination of student course reviews (i.e. Course Instructor Feedback (CIF) scores) and difficulty (i.e. Intellectual Challenge scores) in a semester: I received six awards for an upper-level undergraduate elective (*Empirical Methods in Development*) and the other for a core course in the undergraduate economics major (*Econometrics*).[1] In addition to these two undergraduate courses, I have also taught a less technically demanding writing-intensive elective: *Describing an Unequal World.*

At the graduate-level (Ph.D.), I have taught a required course for the Development Economics field (*Microeconomic Development II*) and two courses that help students develop nascent research ideas through receiving structured feedback: the *Research Workshop in Microeconomics* and *Advanced Topics in Economic Development.* In both the undergraduate electives and graduate courses I have taught, students often devote considerable effort to empirical research that culminates in either a term paper or a research proposal. Consequently, advising is an essential part of my activities within the classroom and has resulted in a number of advising relationships beyond it.

At the undergraduate-level, I have supervised seven theses. Two of these theses won the *BonAnno* Prize for best thesis, while another received an honorable mention. At the doctoral-level, I have served as a committee member for two students—Linh Nguyen ('20) and Paul Shaloka ('23)—both of whom received placements upon graduation. Beyond these formal advising activities, I have also created part-time and full-time research opportunities for almost twenty students, allowing them to gain valuable research experience and training. In particular, I have hired eight undergraduates and three Ph.D. students for part-time research assistant positions. One of these students worked on a series of research projects over six semesters and summers and recently enrolled in the Economics Ph.D. program at the University of Michigan. In addition to these part-time positions, I have also raised funding to create three full-time predoctoral positions at ND and a further four full-time positions (non-ND students) for field-based research in Sri Lanka and India.

In my capacity as an advisor and as an instructor, my principal goal has been to teach empirical methods in economics as a series of analytical frameworks that enable students to creatively answer questions that they care about. In my experience, students are most engaged when they understand the intuition behind these methods—instead of belaboring the technical minutiae—and they are best able to appreciate its utility when they apply it to relatable problems. To this end, I have tried to create 'regurgitation-proof' assessments that disincentivize rote memorization and reward students who think creatively; this approach seems even more important in the era of generative artificial intelligence.

In aspiring to this goal, I have tried to be cognizant of how an increasingly quantitatively-demanding curriculum may discourage participation by talented students who are historically

[1] The five awards I received prior to 2023-24 recognize the highest rated course, thereafter a threshold system was introduced recognizing multiple courses (two awards).

underrepresented in quantitative fields. To illustrate this pedagogical philosophy, I will focus on two undergraduate courses: *Empirical Methods in Development, Econometrics* and a graduate course: *Microeconomic Development*.

Empirical Methods in Development is the course I have taught most frequently (eight semesters, 12 sections). I received a (composite median) CIF score of 3.5/5.0 for the first section I taught. In 9 out of 11 of the sections I have taught thereafter, I received CIF scores greater than or equal to 4.5/5.0. I created this course with the goal of teaching applied econometrics through applications in development economics. The class is ordered into three, roughly chronological, parts. The first part, 'The Inherited Past', considers how applied econometrics can be used to estimate how income differences across the world have been influenced by historical events, geography, climate, and culture. The second part of the class, 'Arriving at the Present' looks at explanations of the recent growth experiences of countries with a focus on the Solow model and the extent to which it can account for differences in income across countries. The third and final part of the class, 'The Present,' focuses on contemporary policy issues in development such as governance, migration, and the role of foreign aid. The breadth of the material covered in this course is intentionally broad to give students a sense for the variety of research that falls under the umbrella of development economics.

The class has three primary goals: (1) to train students to be proficient in using statistical software, (2) to introduce students to econometric methods for causal inference, and (3) to ask students to write a research paper that uses applied econometric methods. To achieve these goals, I have restructured this class several times, both in terms of the content of lectures and the types of assessments. Perhaps most importantly, the onset of the pandemic—and the remote instruction it necessitated—presented several new challenges to teaching this course effectively. After consulting an on campus institute dedicated to instruction, I restructured the distribution of assignments across a semester and changed the volume of material in the course. I received CIF scores of 5.0/5.0 for both sections I taught during the pandemic and I have incorporated much of this advice into sections I have taught thereafter.

As it is typically the first time students have written an applied econometrics paper, the term paper requirement for this class is especially challenging. This is reflected in the intellectual challenge scores I have received for this course: 8 out of 12 sections I have taught have 100% of students reporting that the intellectual challenge is extremely or very high. Smaller class sizes have enabled me to mentor students and develop their intuition for econometric research. I have found this process very rewarding and seven of my former students wrote term papers which became the basis for undergraduate theses that I subsequently advised.

This course has also created a pipeline of talented researchers whom I have subsequently involved in my own research. In particular, I hired three of my students for full-time pre-doctoral positions upon graduation. I published a peer-reviewed paper together with one of these students, Alison Lodermeier ('17) and they enrolled in the Economics Ph.D. program at Brown University upon completing their research position. I also have a working paper with Lodermeier and Paul Shaloka, a former ND doctoral student whom I advised.

Econometrics is arguably the most demanding course in the core curriculum for the Economics major and is also a prerequisite for *Empirical Methods in Development*. I taught *Econometrics* for the first time in Spring 2022 and received a CIF score of 4.9/5.0. In contrast to the relatively small class sizes in the electives I have taught, *Econometrics* had 62 enrolled students. To many students, this course is a critical juncture at which they decide if they want to continue to major in economics. This is for good reason: the course is often the first time students are introduced to formal mathematical proofs and are asked to use statistical software to implement modern econometric techniques.

My approach to this course has been to prioritize application over theory. Although I devote time to the formal derivation of important econometric results, the assignments and quizzes I use to assess students instead aim to give students conceptual clarity about challenges to causal inference and econometric strategies that can be used to overcome them. For example, on the final exam, I asked students to consider how they might estimate the broader effects of the war in Ukraine on grain prices and poverty given access to certain data. I also favor an applied approach because I think students can more intuitively recall econometric insights when they are associated with specific applications, allowing them to use these concepts in their future careers. As many of student comments for this course reveal, I think this approach had the intended effect of lowering barriers for students who were (needlessly) intimidated by the quantitative sophistication of *Econometrics*.

In Fall 2020, I taught a graduate course entitled *Microeconomic Economic Development II: Market Failures in Developing Countries*. I received a CIF score of 5.0/5.0 for this course. This class is a required course for the development economics field requirement. I structured this course around the foundational 'Agricultural Household Model' and then introduced frontier research topics as departures from this model. This course gave me an opportunity to advise graduate students on their research through a set of assignments intended to develop their research ideas. Though a very different challenge to teaching undergraduate students, I have tried to use this class to instill similar ideas: I encourage graduate students to embrace creativity, be wary of research fads, and work on applied problems that are relatable and that they have reason to value.

While a graduate student at Harvard University, I served as a teaching fellow for Prof. Nathan Nunn's undergraduate course entitled *Poverty and Development*. This course was an upper-level elective for undergraduate students that blended development economics and econometrics. In addition, I was the head teaching fellow for a week-long executive education course entitled 'Re-thinking Financial Inclusion: Smart Design for Policy and Practice' at the Harvard Kennedy School. In this capacity, I both helped design the course curriculum and materials and trained and managed ten other teaching fellows. This course attracted policy makers from governments and research institutes from over 30 countries interested in understanding and using empirical methods for evidence-based policy.

Overall, I believe I have been successful in simplifying the exposition of complex material in a manner that students find relatable. Relatedly, I think my instructional style has often been successful in creating a learning environment that is respectful but informal enough that students feel comfortable participating without worrying about being judged. Even with these successes, I think my courses have fallen short in engaging with contemporary policy debates. Creating assignments that allow groups of students to debate the virtues of competing policy proposals would both improve their analytical skills

and showcase how an understanding of seemingly abstract concepts like 'selection bias' can allow them to assess the quality of evidence that informs policy debates.

Service

I have sought to promote research in development economics at ND through organizing a series of workshops, lectures, and conferences. Between 2016-2024—with the exception of 2019 when I was on a research sabbatical—I organized the weekly Development Economics Workshop, which provides a forum for graduate students and internal faculty to present their research.

Further, in both Spring 2019 and Spring 2023, I organized the 'New Frontiers in Economic Development' lecture series. In each iteration, this lecture series featured week-long visits by five leading scholars in development economics. Each scholar delivered a public lecture and six hours of graduate lectures focused on their seminal contributions to the field that was integrated into the *Advanced Topics in Economic Development* course I taught.

I have also organized two international conferences in development economics. In the summer of 2023, I co-organized the ND-ITAM Poverty and Development Economics Research Conference (PODER) in Mexico City. The conference included presentations by several ND and ITAM faculty, in addition to several external visitors. In June 2018, I organized the Luksburg ND-PUC Conference in Development Economics in Santiago, Chile. This conference, similarly, featured presentations from ND economics faculty, faculty from PUC, and external visitors.

I have refereed several articles across 20 journals, including in the *Quarterly Journal of Economics*, the *American Economic Review*, the *Review of Economics and Statistics,* and the *Journal of Development Economics*. I have also served on a number of grant committees including the Kellogg Grants committee, USAID's Development Innovation Ventures, 3ie (the International consortium for impact evaluation), the Small and Growing Businesses (SGB) Evidence Fund at the International Growth Centre (IGC), and DAISI (a Gates Foundation and MIT consortium on research in agriculture and technology).