# Teaching Statement

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#### 1 Teaching Areas

Microeconomic Theory (all levels), Macroeconomic Theory (undergraduate), Game Theory (all levels), Behavioral Economics (all levels), and an interest course in Computational Modeling and Optimization in Python (detailed below).

#### 2 Teaching and Mentorship Experience

I have taught the following courses:

- Principles of Microeconomics (undergraduate) at Ithaca College twice [syllabus here]
- Intermediate Macroeconomics (undergraduate) at Empire State University once
- Principles of Economics (undergraduate) at Empire State University once

In addition, I have served as a Teaching Assistant for the following courses:

- Macroeconomic Theory I (PhD) twice
- Intro to Microeconomics (undergraduate) twice
- Agent-Based Policy Modeling (master's/PhD) once

For Agent-Based Policy Modeling, I played a key role in redesigning the course. I helped develop assignments that introduced students to both Python programming and computational modeling—some of which remain part of the curriculum today.

I also served as a department-hired tutor for PhD students preparing to retake comprehensive exams:

- Microeconomic Theory once, focusing on Game Theory
- Macroeconomic Theory I once, focusing on dynamic optimization and value functions

As evidence of my effectiveness as an instructor, I invite you to review my student evaluations, available **here**.

For over three years, I have also volunteered as a peer mentor through my university's advising program. In this role, I am paired with a PhD student from a lower cohort, providing informal guidance through regular check-ins (every three weeks). We discuss research goals, academic progress, and general well-being. This has been a deeply rewarding experience, and I plan to continue mentoring wherever possible.

## 3 My Approach to Teaching

I was first inspired to pursue a PhD by the enthusiastic instructor of my Intro to Microeconomics course. That class led me to two realizations. First, studying economics equips us to better engage with and contribute to solutions for many pressing global issues, often underrepresented in public discourse. Second, a single passionate instructor or mentor can profoundly shape the educational direction of a student.

In other words, I believe that student success is often path-dependent. Instructors can play a pivotal role in shaping those paths. I see myself as a steward, helping students recognize their potential, develop

the skills to reach it, and make informed decisions about their academic journey. So what does this look like in the classroom?

I set high expectations because I believe students grow through challenge. At all levels, I expect students not only to apply economic models and methods, but also to understand their underlying logic. This sometimes includes being able to explain why certain steps are taken in a solution method or what different parts of a model represent.

Given my background in computational modeling, I emphasize model literacy from the start. I open my courses with a discussion of what models are, what makes a "good" model, and how theoretical frameworks relate to the real world. When new models or concepts are introduced, I encourage students to evaluate whether the assumptions are reasonable and consider what real-world factors may be excluded. This kind of inquiry helps reinforce foundational concepts while also promoting a more critical and nuanced engagement with economic thinking.

These moments also open the door to brief detours into current research that addresses the limitations of traditional models, discussions that often energize class participation and spark student curiosity.

To help students meet these expectations, I provide a wealth of resources. I often use a doc-cam or a digital tablet to write lecture notes in real time, which are shared digitally after class. This allows students to review material or catch up if they miss a session. I post solutions to all homework and exams, and I set aside regular time to address questions at the beginning of every lecture.

I also strongly encourage collaboration; students are advised to work together, study in groups, and ask questions. I am highly accessible outside of class and have regular office hours. If I notice a student struggling, I proactively reach out to offer support to help them build a plan for success.

I care deeply about the learning and well-being of my students, and I want every student to feel like they have the tools they need to succeed.

Overall, I strive to be a compassionate and effective instructor. I believe the best evidence of this lies in both the evaluations I have received from the students (available **here**) and the trust placed in me to teach as an instructor of record, prepare PhD students for comprehensive exams and help design graduate level course materials.

### 4 A Course Proposal in Computational Modeling and Optimization

If given the opportunity, I would be excited to teach a course focused on the area at the heart of my research: Computational Modeling. This course would draw on my experience as a Teaching Assistant for Agent-Based Policy Modeling (Master's/PhD level) at Binghamton University, for which I developed a substantial portion of the instructional material. The course could be adapted for either undergraduate or graduate students.

The course would be structured in three phases:

- 1. **Foundations:** The first third introduces students to core concepts in computational modeling and builds foundational skills in Python programming through hands-on assignments.
- 2. Advanced Topics and Applications: In the second third, students begin combining these tools to construct components of computational models. The lectures will introduce special topics such as optimization techniques, rule-based decision processes, using network representations. I also plan to include discussion and guided exercises on how tools like large language models can assist with coding and model development.
- 3. **Independent Projects:** In the final third, students will form small groups to design and implement their own computational models to explore original research questions. Each group will submit a brief project report, including a model description and preliminary results, and present their findings to the class.

After the course concludes, students may choose to further develop their projects into publishable research. In addition to offering a first-hand experience of the research process, this course will help students develop programming skills that are highly transferable to both academic and private-sector careers.