

Statement of Teaching Philosophy

As an economist who has 5 years of teaching-related experiences at the collegiate level, I believe it is important for me to create an environment that is conducive to student success and learning. My perception of successful learning entails a combination of lecture, studying, and practice/experience to apply new knowledge to evaluate real-world situations. A common obstacle to successful learning in economics is the student fear of math. Math is a vital part of economics. For example, calculus can help simplify problems in intermediate microeconomics. Through my experiences I have found that students lack confidence in their math abilities and have a preconceived notion that calculus is useless in everyday life. Through my course design I encourage successful learning and overcome this obstacle by highlighting the usefulness of mathematical foundation through course activities.

What I teach

I have taught both Principles of Microeconomics and Intermediate Microeconomics during my graduate career. At Iowa State University Intermediate Microeconomics is a calculus based microeconomic theory course for undergraduates. Based on my teaching experience, I am prepared to teach economic principles courses as well as microeconomic theory courses. I am also qualified and interested in teaching environmental and natural resource economics, mathematical economics, industrial organization, experimental economics and behavioral economics..

How I teach

Over the years my teaching style has gradually shifted from the standard PowerPoint approach to a flipped classroom approach. In my most recent Intermediate Microeconomics course, I implemented team based learning, which lead to better course flow, discussions, and results. The students came to class prepared, participated in class discussions and overall received higher scores. Having the ability to work in teams is a vital skill to possess and seems to be lacking in undergraduate classrooms. Many employers list “can effectively work in a group setting” as a job requirement. Before heading to the job market, students need to learn how to work with others who may not have the same views, accept and provide critical criticism, and deal with conflict in a professional manner

With team-based learning, the course is divided into many modules, representing different topics. To ensure outside reading is completed and assess their understanding of the relevant topics, students take a quiz known as a readiness assurance test (RAT). Immediately following completion of the RAT students retake the quiz as a team. This allows students to discuss the questions to

gain insight from their teammates. After the team quiz, we discuss the answers starting with the questions teams struggled with the most. The class periods to follow contain lectures and exercises (known as applications) structured with an emphasis on the least understood topics from the RAT quiz. The applications are designed to further develop critical thinking skills and more in-depth understanding of the economic material. They also provide the opportunity to bring in topics from other disciplines, which I believe is important to help students relate the course to their non-economics courses and everyday life. I often use news articles or podcasts related to the topics in the module to help students relate the economic concepts they learned to life outside the classroom. In junior and senior level courses I may use a dataset related to the module topic and have the students analyze the data. The students are expected to read (listen to) the article (podcast) or other background material so they are prepared for the application during class. Based on the background material, students answer a series of thought provoking questions within their teams. Then teams are randomly called on to defend their answers to a certain question (sometimes there are no correct answers but are meant to be discussion questions). Other teams can argue why they support or disagree with the called-on team's answer.

Finally, at the end of each module is an exam to test the students' knowledge and understanding of the material. This style of teaching encourages a lot of student engagement, which I believe leads to a better understanding of the topics and a more enjoyable class. The goal of my course is not to have students do as well as possible on exams, but to understand the material and be able to use it outside of the classroom.

How I measure my effectiveness

Throughout my course I want to ensure students are learning the material and I am meeting the needs of as many students as possible. Under the team-based learning approach there is constant feedback of students' understanding. First there are the individual and team quizzes, then team application exercises, individual problem sets, and individual exams. Also, before each exam students are required to fill out peer evaluation forms, where students evaluate their teammates contribution to team activities and provide feedback to their teammates about their strengths and how they can improve their contribution to the team. Additionally, with these peer evaluations, I ask students to fill out a course evaluation to gauge how the course is working and where I can make improvements over the semester. As a teacher it is important to realize that the students are seeing the material for the first time when in the course, but it is not the first time I am seeing the material. It is very easy to skip steps or not realize your explanations are too advanced for the students. Therefore, I believe it is important to have open communication with students about the course and use their critiques to improve the class in the future.

As an economist graduating from a research oriented department, I plan to bring my research skills into the classroom. I believe it is important to use my current courses as a data source to analyze the progress of new teaching techniques. Having data will allow me to accurately determine the success of my teaching and the areas that need improving. The data will incorporate evaluations I ask my students to complete throughout the semester, semester end course evaluations and course results. This data collection will help me continue to improve student learning of the course objects and allow for teaching as research projects and papers throughout my career.