Irina Panovska Teaching Statement

1. Teaching Experience Summary

I have had the privilege of teaching classes at all levels. At the University of Texas at Dallas I have taught five classes: Intermediate Macroeconomics, Forecasting for Business and Economics at the undergraduate and Master's level (new MS level class that I added to the university catalog in spring 2020), Contemporary Macroeconomic Policy at the advanced undergraduate level (new class that I added in fall 2021 that I have been teaching since that semester), the first-year first-semester core PhD macroeconomics class, and a field PhD class on Business Cycles (new field class that I added in fall 2020). At Lehigh University I also taught money and banking, time series analysis, and at Washington University I taught statistics for graduate students in economics. I also have experience teaching experiential learning classes (Federal Reserve Challenge), and my Contemporary Macroeconomic Policy Class at UT Dallas entails a collaborative learning project (VE COIL) with students from the University of Marburg in Marburg Germany.

2. Teaching Philosophy

Economics does not only provide us with collections of equations that we can use for modelling and predicting the economy, but also with a language that allows us to communicate and to think more easily about our lives and our decision-making process. Every time I step in front of my students, I keep in mind that I am not only teaching macroeconomics and economic tools, but I am also training future business owners, policy makers, and executives who use will those concepts in their lives. Regardless of the level of the class, my classes always have two broad goals. First, I aim to make my students better economists. In addition to focusing on how each topic fits within the context of a specific class, I highlight how the theoretical concepts covered in class relate to policy and business decisions and to current events. Second, I emphasize transferable skills. Learning how to integrate information from multiple classes and learning how to utilize transferable skills is an integral part of higher education. These two goals of emphasizing both the content-specific details and of emphasizing practical skills are not mutually exclusive. On the contrary, I believe that a teaching approach that emphasizes both theory and learning-by-doing through projects leads to better learning outcomes.

To achieve these two goals, in my classes the students are asked to complete an assignment or a series of portfolio-type assignments for which they have to collect data, develop an economic model, and summarize the findings for different audiences (peers, economic experts, general audiences with no background in economics). Of course, the level and the scope of the assignments are scaled depending on the level of the class. In intermediate undergraduate classes I assign short exercises that ask the students to analyze basic patterns in macroeconomic data, in PhD field classes the students write an independent research paper that is intended to lead to academic publications.

However, the underlying guiding principles are the same: how can we take the equations, the models, and the data we study as economists in our class and translate them to understand the

implications of economic models? This approach is particularly useful for students who are new to economics because it makes abstract concepts more tangible, and it also helps the students build up their confidence when it comes to data analytics and communication. An added benefit of explicitly emphasizing integrative and transferable skills is that this goal directly aligns with the Texas Higher Education Coordinating Board's 60x30TX Plan to provide job skills and marketable skills to students.

3. Examples of Teaching Excellence and Incorporating my Philosophy in my Classes

My teaching evaluation scores at UT Dallas have an average score of 4.95 out of 5 across all of the classes that I have taught since Fall 2019. I also won the school of Economic, Political, and Policy Sciences Award for Distinguished Undergraduate Teaching in Spring 2023. During my time at Lehigh University, I held an endowed position 2017-2019 that was awarded to me for excellence in teaching and mentorship. However, going beyond the evaluation averages and awards, I am confident that my students have attained the learning goals that were set for them and that they are leaving the classroom equipped with the skills they need to succeed as economists.

There are three components to the learning process: the first part happens in the classroom; the second part happens when the students do their homework exercises and take their exams that ask the apply the tools learned in class. The third, and most important part happens after they complete a course, when they apply the concepts they learned in my classes in more advanced classes or in their field of interest. While the teaching evaluations proxy how well I have accomplished the first two goals, my students' progress in more advanced classes and in their jobs and postgraduate studies shows that they are also retaining the information they learned in my class and that they have remained intellectually curious about macroeconomics.

I am particularly proud that my students have been able to directly leverage the skills they learned both in industry jobs and in policy and academic research. Many students have used the final projects in their job application portfolios as writing and research samples. For example, in spring 2021 one student used their portfolio to obtain a position as a financial forecaster at Fidelity, another student used their portfolio to obtain a job as an economist at the Bureau of Labor and Statistics, a third student to obtain an internship at the Farm Credit Administration where they were conducing economic research. Several other students got jobs as data analysts for Southwest Airlines in Spring 2022 and in Fall 2022, and two more students just accepted offers to PhD programs where they plan to focus on quantitative methods, a topic they first encountered in my class. In Spring 2024, one student used the skills from Econ 5397 to obtain a promotion from an Analyst to a Senior Analyst focusing on Macroeconomic Conditions at her employer (a large US bank). Another student started a position as a Statistics Analyst in Spring 2024 and was later promoted to a Statistics Analyst II in Spring 2025 at the Federal Reserve Bank of Dallas. The student followed up with me (feedback shared with their permission): "

"I did want to tell you that I ended up doing a presentation on the Taylor Rule for my department in January, and the lessons from your Contemporary Macroeconomic Policy course were integral for putting it together. It was beneficial that the class also focused on delivering economic models to different audiences, as the audience for the presentation included those with

economic backgrounds and others who did not. I received compliments on presenting the topic in an understandable way for both audiences and feel like the course helped improve that skill – although I still need more practice. Thank you!"

4. **New Classes Added to the Curriculum and Teaching Innovations**

As of Spring 2024, I have added two new undergraduate elective classes to the UT Dallas curriculum. In Spring 2020 I added **Forecasting for Business and Economics (4385, cross-listed as Econ 5397),** offered at the undergraduate and at the MS level. While Econ 4385 was in the university catalog, it had not been offered in more than a decade and it was a dormant class. The current version of the class is a completely redesigned new class that covers contemporary forecasting methods in economics and includes an introduction to machine learning. Students are exposed to programming languages and real data sets from the very first day of class, and all students in the class complete an original economics research project or a business case study. The graduate version of the class requires an independent research project and a research presentation. This class expanded the short list of electives offered to the MS students in economics and added another option for advanced undergraduate students who are interested in electives that have a data analytics component. The class is also part of the Graduate Certificate in International Banking and Monetary systems.

In fall 2021 I introduced **Contemporary Macroeconomic Policy (Econ 4386, offered under topics number 4396 in Fall 2021)**. This class also expanded our list of electives and added an option for students who are interested in advanced macroeconomic policy. The class explores modern theoretical models in economics, the use of economic data sets, and emphasizes communicating economic findings to different audiences. At the graduate level, I introduced the field PhD class on Business Cycles. **VE COIL:** In Fall 2023 and in Fall 2024 I incorporated a Virtual Exchange/ Collaborative Online International Learning Project in my Econ 4386 class with students from the University of Marburg in Marburg, Germany. Our students collaborated on a joint project that explored how economic policy regimes change the relationship between macroeconomic aggregates, and they explored to what extent economic data aligns with conventional economic theories across countries and across time. Along the way, our students also learned about each other's cultures and countries. The collaboration culminated with a presentation about the changing nature of the macroeconomy across countries, with each student group working on a different country. The students who completed the project in Fall 2024 were eligible to receive a digital resume badge through the UTD office of micro-credentialing. **In Spring 2024, I was a presenter at the CTL VE COIL showcase where I talked about my VE COIL project to colleagues interested in implementing a VE COIL project in their classes. I currently have a proposal under review for the 2025 Center for Teaching and Learning (CTL) workshop where I hope to discuss how I used the VE COIL project to enhance the students' data analytics and communication skills at the CTL workshop.**

Individualizing Assignments: I believe that students learn better and are more engaged when they can draw on their life experiences and interests. At least one assignment in each of my classes gives the students a choice about the topic. For example, in the forecasting class the students have the option to use the same quantitative model code on a homework to predict recessions, to predict consumer purchases for a small business, or to develop a personal finance

planning model. In the policy class, they are asked to apply a theoretical model to an industry or country of their choice. This approach does not mean lowering the standards for any of the students or any of the assignments. On the contrary: all students have to demonstrate the same economic and technical knowledge, but the individualized approach allows me to engage the students, identify and correct weaknesses in their academic background, and it allows me to build on their strengths.

Innovations in Times of Crisis: One of the challenges that both students and instructors face in advanced classes is bimodality. Some students have taken pre-requisite classes very recently, some student may have taken it a decade ago, and students who do not have a firm grasp on the prerequisites may get discouraged early on. The COVID-19 crisis amplified these challenges even further. However, the crisis also forced us to innovate and grow as educators, and I used it as an opportunity to incorporate innovations that helped me address this bimodality. In my classes I now prerecord a series of interactive mini-lectures that cover the challenging prerequisite concepts, and I include links to these review lectures in the notes and the assignments. As documented by the teaching evaluations, the students found that this increases student engagement and improved learning outcomes as measured both by student evaluations and by the program learning outcomes class assessment. For example, in Fall 2022 many Econ 6302 students commented on these videos in their evaluations for the class, and they all met the learning objectives for the class. I plan to continue using this approach in all of my classes regardless of the modality.

In Spring 2021 I was one of the guest speakers at the **Center for Teaching and Learning Lessons from COVID** virtual workshop on March 5th 2021, where I shared my strategies for using mini background lectures in advanced classes and in classes where students have different career and educational goals.

Teaching Excellence Committee: I also enjoy sharing my insights about teaching with our coworkers, and I serve on the EPPS Teaching Effectiveness Committee, a task that not only helps EPPS but it helps me learn about the new tools that my coworkers are incorporating in their classes across the curriculum.

I look forward to continuing to incorporate research and data analytics and a holistic approach to learning in all of my classes, from the graduate level methods classes to undergraduate introductory classes.