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Teaching Statement

I have been teaching mathematics courses, since 2008, when I began teaching as an instructor. I have had the opportunity to teach a range of courses, although have mainly focused on applied mathematics – including at Numerical Analysis, in 2022, at Constructor University. I enjoy teaching, both for the joy of sharing mathematics, but also for the opportunity to revisit some familiar material and enhance my own understanding.

I have experience of teaching to broad, diverse international audiences. Recently I delivered a series of lectures to a number of graduate and post-graduates as part of a CIMPA summer school on mathematics in medicine. Furthermore, while a post-doctoral researcher at University College London, I also taught mathematics for students in the foundation year program at Nazarbayev University, in Astana, Kazakhstan for three months.

I am confident in my ability to teach a variety of undergraduate courses, specifically in areas of applied mathematics such as dynamical systems, ordinary and partial differential equations and numerical methods and analysis. I believe I have been quite successful as a teacher, as evidenced by positive student evaluations as well as many unsolicited compliments I've received from students. As mentioned, the joy of sharing mathematics, but this should not be confined to the lecture theatre. Where possible, I have been involved in outreach events, as I believe that there should be no barriers to studying mathematics.

During my first week as an undergraduate, on a sheet of paper called learning to learn, was the quote by George Polya, "Maths is not a spectator sport". To me this means being being active and participating in the act of thinking mathematically about a given problem. Through an open an non-judgemental manner, I encourage students to ask any questions they want about their work. Especially in the beginning of courses, I emphasize that no question is a "stupid question". I believe that continuing to ask questions may help re-frame concepts and lead to a better understanding of mathematical ideas.

I understand that there are many approaches to learning and I have provided printed and online materials as well as code in order to cater for as many learning preferences as possible.

Applied mathematics has undergone significant changes in the past decade with advances in machine learning, and the broad range of applications touching many areas. As such I believe that course content should reflect this, so that graduates from Constructor University are equipped with the tools and understanding to thrive.