

Teaching Philosophy

My teaching philosophy is grounded in the belief that mathematics is both discoverable and accessible to every student when taught with clarity, compassion, and intellectual curiosity. I view mathematics education not merely as the transfer of knowledge, but as the cultivation of disciplined thinking—an iterative process of questioning, reasoning, validating, and extending ideas. My goal is to create inclusive learning environments where students feel empowered to explore mathematical concepts, develop problem-solving confidence, and connect abstract ideas with real-world applications.

I approach teaching through a balance of conceptual understanding and practical problem-solving. Conceptual clarity enables students to appreciate the underlying structure and beauty of mathematics, while rigorous practice builds technical fluency and analytical resilience. I rely on visual explanations, intuitive motivations, and well-chosen examples to demystify complex topics, especially for students encountering abstraction for the first time.

My teaching emphasizes interactive learning, multiple representations of concepts, incremental scaffolding, and rigorous but fair assessments. Across my roles at FUTA, the University of Saskatchewan, and the University of Wyoming, I have taught calculus, linear algebra, differential equations, numerical methods, applied mathematics for engineers, and computational mathematics.

Technology, including Python and MATLAB, supports learning when appropriate while ensuring accessibility and equity. I am prepared to teach a wide range of undergraduate mathematics courses and specialized graduate courses in applied mathematics, numerical analysis, CFD, and scientific computing.