

## **Teaching Philosophy**

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My teaching philosophy is deeply rooted in promoting a growth mindset towards learning experience. I hold a great fascination with the work of Carol Dweck, who introduced the categories of fixed and growth mindsets. I relate to students who may struggle in traditional academic settings. I grew up with a fixed mindset toward education and often interpreted grades as reflections of my innate ability rather than feedback on learning. This lived experience has shaped my commitment to inclusive, student-centered pedagogy. There were two major turning points for me during higher education that sparked an interest in teaching for me: realizing the effect of mindset on education and that traditional classroom lectures are only one type of way to teach a course.

My primary goal as an instructor is to cultivate a classroom environment where students embrace challenges as opportunities for growth, understand that struggling in a course does not reflect inherent limitations, and that learning is more about persistence, resilience, and progress. I design my lectures according to what we have seen before in class and what students are already expected to know about the chapter. I emphasize the learning objectives and provide a context to how we will use the known material and build upon it for the new chapter. I structure content to build upon prior knowledge and emphasize conceptual understanding. I adopt a "think first" approach by providing brief, targeted instruction followed by opportunities for students to engage with problems independently before discussing solutions collectively. This strategy promotes deeper insights into the material and a more receptive attitude towards class material.

My approach is informed by training in evidence-based teaching, and as a mathematician, I am also interested in research inquiries that provide insights into ways to improve student learning. I conducted a teaching-as-research project in Spring 2025, through the Center for the Integration of Research, Teaching, and Learning (CIRTL), to evaluate the impact of test-taking strategies on student performance and confidence in a 100-level College Algebra course. My findings indicated that when students received explicit instruction in exam strategies, they demonstrated greater exam performance and confidence. This affirmed my belief in combining skill-building techniques with content instruction to enhance student learning, particularly in gateway courses, to help them advance with certainty in their knowledge.

I aim to contribute to excellent pedagogy practices in research-focused institutions. I continuously reflect on the effectiveness as an instructor and seek opportunities to iterate and improve through scholarly engagement. I aim to create a classroom climate that communicates high expectations while fostering a sense of academic belonging and strive to represent diverse perspectives in examples and applications. My passion for teaching is inseparable from my passion for learning. I come from a family where access to education was limited yet deeply valued and that legacy continues to shape my belief that inclusive and evidence-informed instruction plays a transformative role, not only in individual student trajectories but in the broader mission of higher education.