



Mathematical Sciences 2025 Colloquium Series

Dr. Kien Lim, Associate Professor, The University of Texas at El Paso.



November 21, 2025, at 3:00pm
Bell Hall, Room 130 and online
via Zoom *Scan the QR-code to access
the link.*



Beyond Calculation: How Generative AI Can Transform Math Learning

Generative AI is reshaping how people learn, work, and solve problems—and mathematics education is no exception. In my courses, I integrate AI not to replace students' thinking, but to support and extend it. In this colloquium, I will share insights from ongoing action research on incorporating tools such as ChatGPT and Copilot into undergraduate math courses, informed by my participation in the 2024–2025 Teaching with AI Learning Community (TALC) at UTEP. Drawing on three semesters of implementation, I will present survey findings and describe how preservice EC–8 teachers used with generative AI as a learning aid, including a focused investigation where students used AI to solve a cost-optimization problem involving least common multiples. I will also discuss how my own teaching practices have evolved in response to rapid advances in AI reasoning.

Beyond my classroom, I will highlight emerging approaches that math instructors nationwide are exploring—from AI-supported problem solving to critical evaluation of AI-generated proofs and explanations. My aim is to spark conversation and inspire colleagues to consider how generative AI might enhance learning, deepen engagement, and open new pedagogical possibilities in their own courses.

Hosted by: Dr. Larry Lesser

For further information, please contact Dr. Emil Schwab, eschwab@utep.edu