



DR. WILLIAM JACO

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Student Learning and Success in Entry-level Mathematics:

First-year Math Courses, Corequisite Instruction, and Mathematics Learning by Inquiry

We will facilitate a discussion of the program led by the Oklahoma State Regents for Higher Education to enhance student learning and success in First-year mathematics courses. We will discuss the structures of Math Pathways (course sequences beginning with entry-level courses) and Corequisite Instruction (eliminating developmental math courses) that are being implemented across all public institutions of higher education in Oklahoma, taking a closer look at these structural changes at OSU. While these structural changes are not easy, they are fairly straightforward and from them we are seeing measurable successes. However, a consequence of these changes, along with the need to address goals for enhanced student engagement and increased applications of mathematics and support for academic success skills, dictates necessary classroom instructional changes that will require a shift in departmental culture and faculty and advisor professional development. The newly funded Mathematics Inquiry Project is a statewide program to address these challenging changes. Pilot projects are showing excellent success.

MONDAY, MARCH 18

2:00 pm - 3:00pm

Room: EMAGC 1.302 / BLHSB 2.312

ZOOM: <https://utrgv.zoom.us/j/962644366>

Minimal Triangulations for 3-manifolds

The Complexity of a compact 3-manifold is the minimal number of tetrahedra needed for a triangulation of the manifold. Thinking of a triangulation as a discrete metric, we draw on methods from geometric analysis using discrete minimal surfaces and barrier surfaces to arrive at the Complexity ("discrete volume") for the first infinite families of 3-manifolds.

MONDAY, MARCH 18

4:00 pm - 5:00 pm

Room: EMAGC 1.402 / BLHSB 1.312

ZOOM: <https://utrgv.zoom.us/j/726092724>



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