MAED 3317: Geometry and Measurement for Elementary Teachers

3 Credit Hours

Prerequisite: MAED 3316 and admission to the Teacher Education program.

This course is designed for the P-5 teacher as a continuation of MAED 3316. Topics will emphasize the critical content and conceptual development of measurement; transformational geometry; symmetry in the plane; and constructions. Geometric concepts will be explored and developed using physical models, visual models and educational software.

Notes: Not for mathematics or mathematics education majors.

MAED 3395: Geometric Proofs and Applications

3 Credit Hours

Prerequisite: MATH 2390 or MAED 2390

This course is designed to prepare prospective 5-8 teachers and 6-12 teachers to become effective facilitators in teaching geometry. This course develops geometry as an axiomatic mathematical system and approaches it from synthetic, transformational, and algebraic perspectives (including higher dimensions). Various geometries are studied including finite, infinite, projective, Euclidean and Non-Euclidean.

MAED 3475: Historical and Modern Approaches to Mathematics

2 Credit Hours

Prerequisite: Admission to the Teacher Education Admission, Enrollment, and Graduation Requirements

Students investigate classical and modern mathematics through problem-solving and mathematics-specific technologies. Students have opportunities to connect course content with the middle and secondary school curriculum.