

MAED - MATHEMATICS EDUCATION

MAED 3137 Investigative Geometry and Measurement (3-0-3)

Prerequisite: MATH 1125 or MATH 1131 with a grade of C or better and admission to teacher education. An exploration of geometry and measurement topics suitable for middle school math teachers through the use of a variety of tools. Topics include similarity of geometric figures, areas of plane figures, volumes of solids, properties of parallel and perpendicular lines, congruence of geometric figures, Pythagorean Theorem, cross sections of cylinders, cones or other solids, basic analytic geometry, deductive reasoning, and elementary proofs. This course will not count toward the mathematics minor.

Prerequisite(s): MATH 1125 with a minimum grade of C and MATH 1131 with a minimum grade of C and Admitted to Teacher Education with a score of Y

Restriction(s):

Enrollment limited to students major in Mathematics - Teacher Cert, Mathematics or Mathematics and Secondary Ed.

MAED 3138 Exploring Statistics (3-0-3)

An exploration of various concepts in probability and statistics audience suitable for middle school math teachers. Topics include counting techniques, designing investigations, random sampling, methods for displaying data, interpreting results by observing shape, center, and spread, correlation, experimental and theoretical probabilities, probability distributions, conditional probability, confidence intervals, and expected values. This course will not count toward the mathematics minor.

Prerequisite(s): MATH 1125 with a minimum grade of C and MATH 1131 with a minimum grade of C

Restriction(s):

Enrollment limited to Freshman, Sophomore, Junior or Senior students. Enrollment limited to students in the following colleges:

- College of Educ Health Prof
- College of Letters Sciences
- College of the Arts
- Department Prerequisite

MAED 5131G Algebra & Proportionality (3-0-3)

Graduate Prerequisite: MAED 6130 with a grade of "C" or better. A deep examination of algebra topics that are relevant for elementary school teaching. Number theory, functions, and mathematical modeling using technology. Problem solving involving ratio and proportion. Students may only attempt the course three times.

Prerequisite(s): MATH 6130 with a minimum grade of C

Restriction(s):

Enrollment is limited to Graduate Level level students.

MAED 5131U Algebra & Proportionality (3-0-3)

A deep examination of algebra topics that are relevant for elementary school teaching. Number theory, functions, and mathematical modeling using technology. Problem solving involving ratio and proportion.

Prerequisite(s): MATH 2008 with a minimum grade of C and Admitted to Teacher Education with a score of Y

MAED 5132G Understanding Data Analysis and Probability (3-0-3)

Prerequisite: MAED 6130 with a grade of C or better. An exploration of data collection, data representation, data analysis and probability. Students may only attempt the course three times.

Restriction(s):

Enrollment is limited to Graduate Level level students.

MAED 5132U Understanding Data Analysis and Probability (3-0-3)

An exploration of data collection, data representation, data analysis and probability.

Prerequisite(s): MATH 2008 with a minimum grade of C

Restriction(s):

Enrollment limited to students major in Early Childhood Education or Elementary Education.

MAED 5133G Understanding Geometry and Measurement (3-0-3)

Prerequisite: MAED 6130 with a grade of C or better. An exploration of geometry and measurement topics through the use of a variety of tools. Topics include definitions and theorems relevant to elementary school teaching, elementary constructions, perimeter, area and volume. Students may only attempt the course three times.

Restriction(s):

Enrollment is limited to Graduate Level level students.

MAED 5133U Understanding Geometry and Measurement (3-0-3)

An exploration geometry and measurement topics through the use of a variety of tools. Topics include definitions and theorems relevant to elementary school teaching, elementary constructions, perimeter, area and volume.

Prerequisite(s): MATH 2008 with a minimum grade of C and Admitted to Teacher Education with a score of Y

Restriction(s):

Enrollment limited to students major in Early Childhood Education.

MAED 6105 Selected Topics: Math for Tchr (3-0-3)

Repeatability: Repeatable for credit up to 2 times or 9 hours.

MAED 6505 Selected Topics: Math for Tchr (3-0-3)

Prerequisite: Approval of Department Chair. Topics will be suitable for elementary and middle school teachers. Mathematics majors may not receive credit for this course.

Repeatability: Repeatable for credit up to 2 times or 9 hours.

MAED 6705 Mathematics Seminar for Teachers (3-0-3)

Explorations designed to strengthen and expand students' knowledge of topics found in secondary mathematics. Topics of investigation may include function properties and patterns, complex numbers, parametric equations, polar equations, vectors, and exponential growth and decay. Emphasis on mathematics content knowledge and content connections, as well as applications of the mathematics topics covered.

Restriction(s):

Enrollment limited to students major in Secondary Ed - Mathematics.