

MATH EDUCATION (MTED)

MTED 3040 - Mathematics for Elementary Teachers (3 Credits)

Key mathematical concepts for K-6 teachers informed by NCTM & Common Core State Standards, such as place-value number systems, rational, proportional, & algebraic reasoning, geometrical concepts, & statistical/probability ideas. Students' meaningful, enjoyable learning is promoted via problem solving activities. Cross-listed with MTED 5400.

Max hours: 3 Credits.

Grading Basis: Letter Grade

MTED 4002 - Elementary Mathematics Teaching I (3 Credits)

Prepares elementary teachers to teach mathematics to PreK-6 students while applying principles of the National Council of Teachers of Mathematics to mathematical learning. Teachers explore ways to help all elementary students become flexible and resourceful mathematical problem solvers. Cross-listed with MTED 5002. Restriction: Professional Year Admission required. Max hours: 3 Credits.

Grading Basis: Letter Grade

Professional Year Admission required. Students must be enrolled in one of the following plans: ECED-LICU or EGLH-LICU or ELED-LICU or FWLF-LICU or FWLS-LICU or MATH-LICU or MSMA-LICU or SCIG-LICU or SPED-LICU or SSSS-LICU

MTED 4003 - Elementary Mathematics Teaching II (3 Credits)

Develops the mathematical and pedagogical understandings and competence of elementary teachers, focusing on instructional assessment, principles, and practices. Cross-listed with MTED 5003.

Prereq: MTED 4002 or MTED 5002. Restriction: Professional Year

Admission required. Max hours: 3 Credits.

Grading Basis: Letter Grade

Prereq: MTED 4002 or 5002. Restriction: Professional Year Admission Required. ECED-LICU or EGLH-LICU or ELED-LICU or FWLF-LICU or FWLS-LICU or MATH-LICU or MSMA-LICU or SCIG-LICU or SPED-LICU or SSSS-LICU

MTED 4300 - Curriculum and Methods for Teaching Mathematics (3 Credits)

Fosters teachers' use of task-based mathematics pedagogy, including orchestrating students' mathematical discourse, to develop mathematics classrooms in which the teacher builds from students' current understandings, accommodates for students' differences, and has high expectations for all students. Cross-listed with MTED 5300. Restriction: Professional Year Admission required. Max hours: 3 Credits.

Grading Basis: Letter Grade

Professional Year Admission required. Students must be enrolled in one of the following plans: ECED-LICU or EGLH-LICU or ELED-LICU or FWLF-LICU or FWLS-LICU or MATH-LICU or MSMA-LICU or SCIG-LICU or SPED-LICU or SSSS-LICU

MTED 4301 - Assessment and Equity in Mathematics Instruction (3 Credits)

Examines mathematics assessment and equity from both a teacher's and a student's perspective. Focuses on assessment as a process, during which a teacher gathers evidence of students' mathematical knowledge and understanding and then uses that evidence to make instructional decisions. Restriction: Professional Year Admission required. Cross-listed with MTED 5301. Max hours: 3 Credits.

Grading Basis: Letter Grade

Professional Year Admission required. Students must be enrolled in one of the following plans: ECED-LICU or EGLH-LICU or ELED-LICU or FWLF-LICU or FWLS-LICU or MATH-LICU or MSMA-LICU or SCIG-LICU or SPED-LICU or SSSS-LICU

MTED 4621 - A World of (Different) Numbers: Quantity and Operation (3 Credits)

Develops K-12 teachers' understanding of number systems and the ability to foster students' understanding. Focuses on number, quantity, and operation. Applicable to teaching students at all grade levels in line with the K-12 Common Core Standards. Cross-listed with MTED 5621. Max hours: 3 Credits.

Grading Basis: Letter Grade

MTED 4622 - Expanding Conceptions of Algebra (3 Credits)

Develops K-12 teachers' understanding of algebra concepts and the ability to foster students' understanding. Focuses on equivalence, variable, covariation, and function. Applicable to teaching students at all grade levels in line with the K12 Common Core Standards. Cross-listed with MTED 5622. Max hours: 3 Credits.

Grading Basis: Letter Grade

MTED 4623 - Geometrical Ways of Reasoning (3 Credits)

Develops K-12 teachers' geometrical reasoning and the ability to foster students' reasoning. Addresses transformation, measurement, classification, objects, imagery, formulas, and investigation. Applicable to teaching students at all grade levels in line with the K-12 Common Core Standards. Cross-listed with MTED 5623. Max hours: 3 Credits.

Grading Basis: Letter Grade