MATHEMATICS FOR TEACHERS (MTCH)

MTCH 2000 MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS I (3 credits)
A course for prospective elementary school teachers that involves mathematical reasoning, conjecturing, problem-solving, and connecting mathematical thought to its applications. Topics include fractions, decimals, arithmetic operations, and proportional reasoning.
Prerequisite(s)/Corequisite(s): At least C in MATH 1310 or MATH 1120 and TED 2100 (EDUC 2020) or TED 2200 (EDUC 2030); OR at least C in MATH 1310 or MATH 1120 and passing the Praxis I - Core.

MTCH 2010 MATHEMATICS FOR ELEMENTARY TEACHERS II (3 credits)
This course represents a collection of topics, developed specifically for elementary school teachers, not covered in other courses.
Prerequisite(s)/Corequisite(s): MTCH 2000 with a grade of C or better.

MTCH 2020 NUMBER SENSE, ALGEBRA, AND GEOMETRY FOR MIDDLE SCHOOL EDUCATION (3 credits)
The course covers the following major concepts: standard algorithms for Arithmetic with rational numbers, proportional reasoning, number theory topics in K-8, beginning Algebra concepts, and beginning Geometry.
Prerequisite(s)/Corequisite(s): TED 2100 (EDUC 2020) or TED 2200 (EDUC 2030) each with a C or better and College of Education major and MATH 1950 with a C or better. Not open to non-degree graduate students.

MTCH 4800 MATHEMATICS EDUCATION CAPSTONE (3 credits)
This capstone course for preservice and in service teachers is intended to help connect the undergraduate mathematics curriculum to the secondary mathematics curriculum. Course topics include functions, equations, algebraic structures, congruence, trigonometry, and calculus. Topics are explored via strategies useful for studying mathematics called concept analysis and problem analysis. (Cross-listed with MTCH 8806).
Prerequisite(s)/Corequisite(s): MATH 4030 with a C or better or MATH 3640 with a C or better.