MTHC 5230 Discrete Mathematics (3)

This course covers mathematical structures pertinent to an understanding of computers, including graphs, Boolean algebra, and finite state machines.

MTHC 5250 Vector Geometry (3)

Basic concepts pertaining to vectors in the plane are developed. Proofs of theorems of plane geometry, using a synthetic approach, an analytic approach, and a vector approach are compared. The class introduces vector spaces.

MTHC 5260 Algebra for Secondary Teachers (3)

Students examine and extend topics in secondary school algebra. Techniques and materials for teaching algebra are also discussed.

MTHC 5280 Calculus for Teachers (3)

The course reviews the basic concepts of differential and integral calculus, with special focus on central ideas, theory, and applications. Computers and/or graphing calculators are used to help investigate ideas. Students enrolling in this course are assumed to have completed the undergraduate calculus sequence with grades of B or higher.

MTHC 5300 History of Mathematics (3)

This course is based on selected readings that examine the history and philosophy of mathematics. An important goal is to provide students with a perspective on the relationship between