

Mathematics

Mathematics Classes

MAT 511 : Problem Solving, Communication & Reason

The instruction of mathematics rests heavily on the first three process standards of the National Council of Teachers in Mathematics: problem solving, communication and reasoning. This course is organized around these three intertwined themes, each of which is crucial and pertinent to primary, middle and secondary teaching. The premise for this course is that the learning of mathematics by you and by your future students is best achieved by active student participation and involvement, discovery, critical thinking, working collaboratively in groups, written and verbal communication of ideas, the use of graphical representations when appropriate, and the exploration of more open ended problems.

MAT 520 : Educational Technology in the Math Classroom

This course is an overview to many of the uses of technology in the mathematics classroom. In this course you will explore graphics calculators and the Internet, study various mathematics software packages including a computer algebra system, statistics package, Geometer's Sketchpad and Microsoft Office, and learn to critique software lessons and packages.

MAT 550 : Math & Pedagogy Portfolio

The Portfolio is the vehicle that candidates for the Masters of Arts in Mathematics use to submit their work demonstrating mastery of several state and national standards in mathematics education. This is a zero-credit, pass-fail course. The portfolio will contain work that reflects all coursework in the program but particularly that from the mathematics content portion. This course must be completed by the end of the second internship placement or student teaching placement.

Prerequisites

It is anticipated that candidates will have completed or currently be taking MAT 511, MAT 520 MAT 557 , EDU 656 & 657 or EDU 658 & 659

MAT 557 : Selected Topics: Upper Level Mathematics

This course is intended to extend the mathematical knowledge base of students by focusing on a particular area of pure mathematics. Common to all areas is the notion of proof, requiring rigorous command of the language of mathematics, along with a certain level of mathematical maturity.