

# MATH 019R: Fundamentals of Mathematical Literacy for Stem Fields

(STEM – Science/Technology/Engineering/Mathematics) Fundamentals of Mathematical Literacy for STEM fields is a developmental mathematics course that develops students' problem-solving and logical reasoning skills to prepare them for college-level mathematics courses needed for STEM fields. Topics addressed include introduction to functions, polynomials, linear and quadratic functions and equations, basic geometric topics, and introductory statistical concepts. Upon completing Fundamentals of Mathematical Literacy for STEM, students will be prepared to enter Functions and Modeling I (college-algebra and trigonometry course), or other introductory Liberal Arts mathematics courses. The course is student centered and focuses on developing quantitative literacy skills through activity-based instruction that integrates technology (e.g., graphing technology, manipulatives) and emphasizes the conceptual understanding of the mathematical concepts studied. Much of the course will focus on the misconceptions that students have developed over their mathematical careers. Multiple assessments tools will be used to measure the course competencies and may include on-going formative assessments, portfolios, quizzes, exams, and projects/investigations.

\*credits do not apply toward Associate degree requirements

**Credits:** 4

**Lecture Hours:** 4

**Prerequisites:**

(1) SAT Mathematics Score  $\geq 450$  OR (2) Successful completion (with a grade of "C" or better) of Fundamentals of Mathematical Literacy OR (3) written permission of mathematics advisor.

**Program:** [Mathematics](#)