

MISSOURI WESTERN STATE UNIVERSITY

COLLEGE OF LIBERAL ARTS AND SCIENCES

DEPARTMENT OF COMPUTER SCIENCE, MATHEMATICS, AND PHYSICS

**Course Number:** MAT 083

**Course Name:** Foundations for University Mathematics III

**Course Description:** A continuing study of the fundamental arithmetic and algebraic concepts prerequisite to university level mathematics initiated in [MAT 082](#). The specific topics studied are determined by assessment of the individual student's mathematical background.

**Prerequisite(s):** A grade of C or better in [MAT 082](#) or the equivalent.

**Text:** Aleks User's Gde.W/One Term Access Code, Baker, Edition 00, McG, ISBN 9780072391305

**COURSE OBJECTIVES:**

In general, the objective of this course is to provide the student with a review of elementary arithmetic and to introduce topics from elementary algebra.

1. Rational Expressions
2. Radicals
3. Supplementary

**In order to successfully meet the course objectives, students will be able to:**

1. simplify rational expressions.
2. simplify, add subtract, multiply and divide rational expressions.
3. simplify complex fractions.
4. divide polynomials by long division.
5. solve equations containing rational expressions.
6. perform operations with rational exponents.
7. simplify, add, subtract, multiply, and divide radicals.
8. graph quadratic equations.