



## INTERMEDIATE ALGEBRA — MATS 0600

### A. Course Description

- **Credits:** 4.00
- **Lecture Hours/Week:** 4.00
- **Lab Hours/Week:** 0.00
- **OJT Hours/Week:** 0
- **Prerequisites:**
  - MATS 0310: Algebra Skills Lab
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- **Corequisites:** None
- **MnTC Goals:** None

Students with a basic algebra background are prepared for college-level STEM courses such as college algebra and statistics. After reviewing linear equations and factoring methods, students move on to study rational expressions and equations, radical expressions and equations, rational exponents, quadratic equations and their solution in the complex number system, coordinate geometry including lines and circles, and functions and their graphs.

### B. Course Effective Dates: 6/2/03 – Present

### C. Outline of Major Content Areas

1. Applications of factoring
2. Factoring polynomials
3. Graphing
4. Quadratic Equations in the Complex Number System
5. Radicals and Rational Exponents
6. Review applications
7. Review key fraction maneuvers
8. Solve linear equations and inequalities, including fractions

### D. Learning Outcomes

1. Appreciate mathematics as logical and coherent (not merely a sequence of steps)
2. Judge whether a result (whether numerical or algebraic) seems reasonable
3. Perform mental calculations

4. Reason symbolically
5. Understand and fix mistakes
6. Work with fractional forms

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

**F. Learner Outcomes Assessment**

As noted on course syllabus

**G. Special Information**

None noted