

Dakota County Technical College

MATS 0600: Intermediate Algebra

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites:

This course requires either of these prerequisite categories

1. MATS 0310 - Algebra Skills Lab

Or

2. A score of 51 on test Accuplacer Elementary Algebra

Corequisites: None

MnTC Goals: None

This course serves as a bridge between elementary algebra and college-level mathematics. Roughly equivalent to high school algebra 2, the major foci are polynomial factoring, rational expressions and equations, radical expressions and rational exponents, completing the square and the quadratic formula including complex solutions, and analytic geometry including but not limited to straight lines and conics. Applications are tackled periodically to develop the ability to reason symbolically.

B. COURSE EFFECTIVE DATES: 06/02/2003 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

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

D. LEARNING OUTCOMES (General)

1. Judge whether a result (whether numerical or algebraic) seems reasonable
2. Perform mental calculations
3. Understand and fix mistakes
4. Work with fractional forms
5. Reason symbolically
6. Appreciate mathematics as logical and coherent (not merely a sequence of steps)

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted