

# North Hennepin Community College

## MATH 0902: Intermediate Algebra

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires any of these four prerequisites

MATH 0901 - Introduction to Algebra (Minimum grade: 1.67 GPA Equivalent)

A score of 0 on test Accuplacer College Level Math

A score of 1 on test Exempt from taking Math placement test

A score of 65 on test Accuplacer Elementary Algebra

Corequisites: None

MnTC Goals: None

Topics include introduction to functions, rational expressions and equations, radicals and rational exponents, quadratic equations and inequalities, absolute value equations, and systems of linear equations. This course emphasizes applications for all topics and the acquisition of by-hand skill. Credit does not apply to a degree. Pre-requisite: Placement test or successful completion of Math 0901 with a "C" or better.

**B. COURSE EFFECTIVE DATES:** 08/27/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. See Course Description and Course Outcomes.

### D. LEARNING OUTCOMES (General)

1. Determine if an equation or graph represents a function and use function notation (MnTC G4, comps. a,b,c; NHCC Core Ability Critical Thinking, comps. a,c); (NHCC ELO 1, 2)
2. Solve systems of linear equations (MnTC G4, comps. a,b; NHCC Core Ability Critical Thinking, comps. b, c); (NHCC ELO 1, 2)
3. Solve application problems using systems of linear equations (MnTC G4, comps. a,b, d; NHCC Core Ability Critical Thinking, comps. a, b, c); (NHCC ELO 1, 2)
4. Use properties of exponents and interpret rational exponents (MnTC G4, comp. b; NHCC Core Ability Critical Thinking, comp. b); (NHCC ELO 1, 2)
5. Add, subtract, multiply, divide, and simplify algebraic expressions containing radicals and rational exponents (MnTC G4, comp. b); (NHCC ELO 1, 2)
6. Solve equations involving radicals or rational exponents (MnTC G4, comp. b; NHCC Core Ability Critical Thinking, comp. c); (NHCC ELO 1, 2)
7. Solve quadratic equations and inequalities (MnTC G4, comps. a, b; NHCC Core Ability Critical Thinking, comps. a, c); (NHCC ELO 1, 2)
8. Graph quadratic equations (NHCC ELO 1, 2);
9. Solve equations and inequalities involving absolute value (MnTC G4, comps. a, b; NHCC Core Ability Critical Thinking, comps. a, c). (NHCC ELO 1, 2)
10. Simplify rational expressions and complex fractions (ELO 1, 2);
11. Add, subtract, multiply, and divide rational expressions (ELO 1, 2); and
12. Solve rational equations (ELO 1, 2).

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

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

1. Knowledge of Human Cultures and the Physical and Natural World--Through study in the sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.
2. Intellectual and Practical Skills--Including: Inquiry and analysis; Critical and creative thinking; Written and oral communication; Quantitative literacy; Information literacy; Teamwork and problem solving.