STUDENT PARTICIPATION
Students enrolled in courses at Midland College MUST actively participate by completing academic assignments required by the instructor by the official census date. Students who attend class but do not actively participate in an academically-related activity will be reported as Never Attended and dropped from the course.

COURSE DESCRIPTION
Math 0372 is designed to bridge the gap between the introductory and college level algebra courses. This intermediate algebra course will permit students to become more proficient in the areas of polynomial factoring, rational expressions, rational exponents, radicals, complex numbers, quadratics, and composite and inverse functions.
Co-requisite: Math 0170 (Must pass to progress in sequence). Prerequisite: Math 0371 (this also includes a pass in co-requisite course Math 0170 in the same semester) or a satisfactory score on a math placement test. (3 Lecture/0 Lab) Co-requisite Math 0170

TEXT, REFERENCES AND SUPPLIES
MyMathLab Access Code

COURSE GOALS AND OBJECTIVES
After successfully completing this course the student should be able to:
  o Use appropriate algebra terminology.
  o Work problems related to: relations and functions, inequalities and equations, factoring polynomials, rational expressions, quadratics, complex numbers, graph linear and nonlinear equations, and inequalities.
  o Create and solve mathematical models.

CLASS POLICIES
Students are expected to arrive punctually and participate in class. Students should behave in an appropriate manner so as not to interfere with learning. What is inappropriate will be determined by the instructor. For example please turn off all cell phones.

A grade of C or better in Math 0372 and a P in Math 0170 is required to progress to college level math courses.

Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject.
INTELLECTUAL COMPETENCIES

Reading: Understanding the material incorporated in the text used in this course will require the student to analyze and interpret various mathematical concepts.

Listening: The primary teaching methods used in this course are discussion and lecture. Understanding the oral presentation or material will require the students to analyze and interpret various mathematical concepts.

Critical Thinking: Critical thinking, as exemplified by problem solving, is inherent in the study of any scientific discipline. Mathematical problems will be considered, discussed and analyzed in this course.

ADA STATEMENT

Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations.

EVALUATION OF STUDENTS

Students will be evaluated based as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework:</td>
<td>0% to 20%</td>
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<tr>
<td>Quizzes:</td>
<td>0% to 20%</td>
</tr>
<tr>
<td>Exams:</td>
<td>40% to 80%</td>
</tr>
<tr>
<td>Final:</td>
<td>20% to 30%</td>
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</tbody>
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The normal grading scale is:
- 90-100 for an A
- 80-89 for a B
- 70-79 for a C
- 60-69 for a D
- 0-59 for an F

INSTRUCTOR INFORMATION

Name:
Office:
Phone:
E-mail:
Office Hours:
Division Dean: Lynda Webb, 206 HLGC Annex, 685 - 6884
Division Secretary: Karen Harris, 206 HLGC Annex, 685 - 4799
COURSE SCHEDULE

5.1 Exponents and Scientific Notation
5.2 More Work with Exponents and Scientific Notation
5.3 Polynomials and Polynomial Functions
5.4 Multiplying of Polynomials
5.5 The Greatest Common Factor and Factoring by Grouping
5.6 Factoring Trinomials
5.7 Factoring by Special Products and Factoring Strategies
5.8 Solving Equations by Factoring and Problem Solving

6.1 Rational Functions and Multiplying and Dividing Rational Expressions
6.2 Adding and Subtracting Rational Expressions
6.3 Simplifying Complex Fractions
6.4 Dividing Polynomials – Long Division and Synthetic Division
6.5 Solving Equations by Factoring and Problem Solving
6.6 Rational Equations and Problem Solving
6.7 Variation and Problem Solving

7.1 Radicals and Radical Functions
7.2 Rational Exponents
7.3 Simplifying Radical Expressions
7.4 Adding, Subtracting, and Multiplying Radical Expressions
7.5 Rationalizing Denominators and Numerators of Radical Expressions
7.6 Radical Equations and Problem Solving
7.7 Complex Numbers

8.1 Solving Quadratic Equations by Completing the Square
8.2 Solving Quadratic Equations by the Quadratic Formula
8.3 Solving Equations by Using Quadratic Methods
8.4 Nonlinear Inequalities in One Variable
8.5 Quadratic Functions and Their Graphs
8.6 Further Graphing of Quadratic Functions

Optional Sections

9.1 The Algebra of Functions; Composite Functions
9.2 Inverse Functions

4.1 Solving Systems of Linear Equations in Two Variables [a review of process]
4.2 Solving Systems of Equations by Matrices
4.5 Solving Systems of Equations by Determinants

10.3 Solving Nonlinear Systems of Equations
10.4 Nonlinear inequalities and Systems of Inequalities