Midland College
Syllabus
2008-09
MATH 0390
Introductory Algebra
3 Semester Credit Hours
(3 Lecture/0 Lab)
Co-requisite Math 0190

Course Description:
This course is designed to enable students requiring leveling work in algebra to develop and review their algebraic skills. This introductory algebra course will permit students to become more proficient in the areas of fundamental algebraic operations, exponents, simple factoring, solving linear and quadratic equations, graphing linear equations and functions, solving systems of equations and inequalities, and word problems. Co-requisite: Math 0190 (Must pass to progress in sequence). Prerequisite: Math 0389, or a satisfactory score on a math placement test.

Text, References, and Supplies:

Course Goals/Objectives:
After successfully completing this course the student should be able to:

1. Use the language of algebra.
2. Simplify algebraic expressions.
3. Solve and graph linear equations and inequalities.
4. Solve quadratic equations.
5. Create mathematical models.

Student Contributions and 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 and pagers.

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

Intellectual Competencies:
1. Reading - Understanding the material incorporated in the text used in this course will require the student to analyze and interpret various mathematical concepts.
2. Listening – The primary teaching methods used in this course are discussion and lecture. Understanding the oral presentation of material will require the student to analyze and interpret various mathematical concepts.
3. 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 and secure the proper authorizations.

**Evaluation of Students:**
Quizzes will count at most 10%, exams from 60% to 80%, the final from 10% to 30%, and projects, or homework 0% - 20%. 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, and 0-59 for an F.

**Class Schedule:**
1.2  Algebraic Expressions and Sets of Numbers
1.3  Operations on Real Numbers
1.4  Properties of Real Numbers
2.1  Linear Equations in One Variable
2.2  An Introduction to Problem Solving
2.3  Formulas and Problem Solving
2.4  Linear Inequalities and Problem Solving
2.5  Compound Inequalities
2.6  Absolute Value Equations
2.7  Absolute Value Inequalities
3.1  Graphing Equations
3.2  Introduction to Functions
3.3  Graphing Linear Functions
3.4  The Slope of a Line
3.5  Equations of Lines
3.6  Graphing Piecewise - Defined Functions and Shifting and Reflecting Graphs of Functions
3.7  Graphing Linear Inequalities
4.1  Solving Systems of Linear Equations in Two Variables
4.2  Solving Systems of Linear Equations in Three Variables
4.3  Systems of Linear Equations and Problem Solving
4.5  Systems of Linear Inequalities
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
5.8  Solving Equations by Factoring and Problem Solving

**Instructor Information:**
Name:
Office:
Phone:
E-mail:
Hours:

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