**Midland College Syllabus**
2021 - 2022
MATH 0482-Web
4 Semester Credit Hours
(4 Lecture/0 Lab)
Co-requisite MATH 0180

**Instructor Information:**
Instructor: Click here to enter text.
Office: Click here to enter text.
Phone: Click here to enter text.
Email: Click here to enter text.
Office Hours: Click here to enter text.

**Notice:** Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attending and dropped from the course.

**Course Description:**
Math 0482 is designed to bridge the gap between the basic math and college level algebra courses. This 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, word problems, polynomial factoring, rational expressions, rational exponents, radicals, complex numbers, quadratics.

Co-requisite: Math 0180 (Must pass to progress in sequence)

Text, References and Supplies:
**Required:** MyMathLab Access Code ISBN-13: 9780321199911
**Optional**: Martin-Gay, Intermediate Algebra, 7th edition, Prentice Hall (print book is optional,
e-book available on MML with your code), Textbook ISBN – 13: 9780134197289
**Required**: Use of a functional computer with Internet access on a daily basis
**Required**: Scientific calculator for some lessons (No graphing calculators allowed at any time),
pencil and paper.

**Student Learning Outcomes:**
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.

6. Use appropriate algebra terminology.
7. Work problems related to: relations and functions, inequalities and equations, factoring polynomials, rational expressions, quadratics, complex numbers, graph linear and nonlinear equations, and inequalities.
8. Create and solve mathematical models.

**Student Contributions, Responsibilities and Class Policies:**
Students will be expected to comply with the policies outlined in the Midland College Student Handbook. Instructor policies concerning attendance and academic behavior are consistent with the policies in the student handbook. Regular attendance is required to do well in this class.
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 0482 *and* a P in Math 0180** is required to progress to college level math courses.

**Attendance Policy:**
It is the responsibility of the students to know the policies and procedures associated with absences. These policies are set by instructors.
Excused absences may include, but are not limited to, illness, severe weather, and death in the family. Instructors will determine whether or not an absence is excused. Please visit the Midland College Catalog

**Withdrawal Policy:**
Students who have enrolled in a Texas public institution of higher education as a first-time freshman in fall 2007 or later are permitted to drop no more than six courses during the entire undergraduate career. This limit includes all transfer work taken at a Texas institution of higher education and to second baccalaureate degrees. This statute was enacted by the State of Texas in spring 2007 (Texas Education Code 51.907). Any course that a student drops after Census Day is counted toward the six-course limit if "(1) the student was able to drop the course without receiving a grade or incurring an academic penalty; (2) the student's transcript indicates or will indicate that the student was enrolled in the course; and (3) the student is not dropping the course in order to withdraw from the institution." Please visit the Midland College Catalog

**Scholastic Dishonesty:**
Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject. Please visit the Midland College Catalog

**Evaluation of Students:**
Students will be evaluated using a variety of methods including examinations and written assignments, group work, web based assignments, and quizzes.

The normal grading scale is:

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| Homework: | 0% to 20% | 90-100 for an A |
| Quizzes: | 0% to 20%, | 80-89 for a B |
| Midterm Exams: | 20% to 60% | 70-79 for a C |
| Final Exam: | 20% to 60% | 60-69 for a D |
| | | 0-59 for an F |

**Course 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
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, Graphs of Functions
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
6.1 Rational Functions and Multiplying and Dividing Rational Expressions
6.2 Adding and Subtracting
6.3 Simplifying Complex Fractions (optional)
6.4 Dividing Polynomials – Long Division and Synthetic Division
6.5 Solving Equations Containing Radical Expressions
6.6 Rational Equations and Problem Solving (optional)
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

**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.

**Non-Discrimination Statement**

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

**Tana Baker**
Title IX Coordinator/Compliance Officer
3600 N. Garfield, SSC 131
Midland, Texas 79705
(432) 685-4781
tbaker@midland.edu

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

**Americans with Disabilities Act (ADA) Statement:**

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit www.midland.edu/accommodation and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

**Math & Science Division Information:**

Division Office: AHSF 124 (432) 685-4561
Division E-Mail: mns@midland.edu
Department Chair: Dr. Krista Cohlmia (432) 685-4541
Dean: Dr. Miranda Poage
Secretary: Sarah Anderson
Clerk: Liliana Orcutt

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