Instructor Information:

Rachel Perkins
Abilene High School, 2800 North 6th Street, Abilene, TX 79603
325.677.1731, extension 1785
Email: Rachel.perkins@abileneisd.org

Major Course Requirements:

Tests-Students may expect a test at the end of each chapter-oriented topic. The exact dates and coverage of these tests will be announced in class in a timely fashion. The Final Exam will be held as specified in the Abilene High School Semester Exam Schedule.

Daily Work-Daily work will consist of primarily traditional problems assigned from the book, on worksheets, or to be completed online during and outside of class time.

Quizzes-Quizzes will be frequent, often daily and will be completed during class time, on paper or online.

Student Learning Outcomes:

1. Students will demonstrate factual knowledge including the mathematical notation and terminology used in this course. Students will read, interpret and use the vocabulary, symbolism, and basic definitions used in college algebra including the real numbers, exponents, radicals, polynomials, factoring functions, equations, inequalities, and graphs.
2. Students will describe the fundamental principles including the laws and theorems arising from the concepts covered in this course. Students will identify and apply the laws and formulas that result directly from the definitions; for example, the quadratic formula, rules of exponents, and properties of logarithms.
3. Students will apply course material along with techniques and procedures covered in this course to solve problems. Students will use the facts, formulas, and techniques learned in this course to simplify algebraic expressions, graph functions, and solve inequalities, equations and systems of equations.
4. Students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields. Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic areas requiring college algebra as a prerequisite, or for work in occupational fields requiring a background in algebra. These fields might include education, business, finance, marketing, computer science, physical sciences, and engineering, as well as mathematics.

TEXT:

College Algebra, Eleventh Edition, Gustafson and Hughes
Prerequisites: Fundamental Concepts of Algebra

1. Real Numbers and Algebraic Expressions
2. Exponents and Scientific Notation
3. Radicals and Rational Exponents
4. Polynomials
5. Factoring
6. Rational Expressions

Chapter 1:

1.1 Linear Equations and Rational Equations
1.2 Applications of Linear Equations
1.3 Quadratic Equations
1.4 Applications of Quadratic Equations
1.5 Complex Numbers
1.6 Polynomial and Radical Equations
1.7 Inequalities
1.8 Absolute value

Chapter 2:

2.01 The Rectangular Coordinate System
2.02 The Slope of a Non-vertical Line
2.03 Writing Equations of Lines

Chapter 3:

3.1 Functions and Function Notation
3.2 Quadratic Functions

Chapter 4:

4.1 Exponential Functions and their Graphs
4.2 Applications of Exponential Functions
4.3 Logarithmic Functions and their Graphs
4.4 Applications of Logarithmic functions
4.5 Properties of Logarithms
4.6 Exponential and Logarithmic Equations

Chapter 6:

6.1 Systems of Linear Equations
6.6 Partial Fractions

Subject Matter:

We will be studying the basics of algebra including exponents and radicals, logarithms, factoring, algebraic quotients, systems of equations, inequalities, absolute value, complex numbers, and quadratic equations.

The schedule listed below is very tentative and subject to change according to pace of the class, campus schedules, and adaptation.

Honor Code:

Angelo State University students shall maintain complete honesty and integrity in their academic pursuits. The University expects all students to engage in all academic pursuits in a manner that is above reproach and to maintain complete honesty and integrity in the academic experiences both in and out of the classroom.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>TEXTBOOK SECTIONS</th>
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<tbody>
<tr>
<td>1: August 28</td>
<td>Class Procedures and Review 0.1, 0.2</td>
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<tr>
<td>2: September 4</td>
<td>0.2, 0.3</td>
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<td>3: September 11</td>
<td>0.3, 0.4, Test</td>
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<td>4: September 18</td>
<td>0.5, 0.6</td>
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<td>5: September 25</td>
<td>Test (all of chapter 0), 1.1, 1.2, 1.3, 1.4</td>
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<td>6: October 2 (End of 6-weeks: October 3)</td>
<td>Test (1.1-1.4), 1.5, 1.6, 1.7</td>
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<td>7: October 9</td>
<td>1.8, Test (1.1-1.8), 2.1</td>
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<td>8: October 16</td>
<td>2.2, 2.3, Test (2.1, 2.2, 2.3)</td>
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<td>9: October 23</td>
<td>3.1, 3.2, Test (Quadratics: 3.1, 3.2)</td>
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<td>10: October 30</td>
<td>6.1, 6.6</td>
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<td>11: November 6 (End of 2nd 6-weeks: November 8)</td>
<td>Review, Test (chapter 6)</td>
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<td>12: November 13</td>
<td>4.1, 4.2, 4.3, 4.4</td>
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<td>13: November 20</td>
<td>Thanksgiving Week</td>
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<td>14: November 27</td>
<td>4.5, 4.6, Review, Test (chapter 4)</td>
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<td>15: December 4</td>
<td>Catch Up</td>
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<td>16: December 11</td>
<td>Review for Final</td>
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<td>*** December 14 - 15</td>
<td>FINAL EXAM (CUMULATIVE)</td>
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