Instructor: Jim Daniels Classroom: 214 JimDaniels@pickenscountyschools.org Phone: 706-253-1760 ext. 214 Office Hours: 7:45-8:00 a.m.; 3:30-3:45 p.m. or by appointment I. MATERIALS: Folder Pencil

Paper

Textbook: ALGEBRA 2: APPLICATIONS, EQUATIONS, GRAPHS, Larson.

Software: USA Test Prep

Calculator: A **graphing calculator is recommended**. A TI-83 or above will be the most useful. A classroom set is provided with an individual calculator assigned per student. Each student is responsible for their numbered calculator with a replacement cost of \$115.00.

II. COURSE DESCRIPTION: This course deals with exponents, radicals, systems of linear equations in two and three variables, quadratic and higher degree equations, rational equations and inequalities, relations and functions, graphing and transformations and exponential and logarithmic functions.

- **III. COURSE OBJECTIVES:** Connect the Standards for Mathematical Practice to the Standards for Mathematical content. One developing the student's engagement as the student matures and develops expertise, while the latter provides the procedures and methodologies needed with each mathematical topic. The course, in general, should prepare students for future math courses, including College Algebra, through content and practice.
- **IV. CLASS CONTENT: Chapters 5,6,7,8,9,** and selected topics according to the learning objectives as provided by the Georgia Department of Education at <u>www.doe.k12.ga.us</u>.

A. STANDARDS FOR MATHEMATICAL PRACTICE:

- 1. Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively
- 3. Construct viable arguments and critique the reasoning of others.
- 4. Model with mathematics.
- 5. Use appropriate tools strategically.
- 6. Attend to precision.
- 7. Look for and make use of structure.
- 8. Look for and express regularity in repeated reasoning.

B. STANDARDS FOR MATHEMATICAL CONTENT:

- 1. The real number system
- 2. The complex number system
- 3. Seeing structure in expressions
- 4. Equivalent forms of expressions
- 5. Arithmetic with polynomial and rational expressions
- 6. Creating equations
- 7. Reasoning with equations and inequalities
- 8. Interpreting functions
- 9. Building functions
- 10. Linear, quadratic, and exponential models
- 11. Interpreting categorical and quantitative data

40% 40% 20% 100%

12. Making inferences and justifying conclusions from different types of studies. V. GRADING SCALE:

	A B	90 - 100 80 - 89	C F	70 – 79 Below 60	
ALC	LCULATIONS:				

VI. GRADE CALCULATIO	NS:		
9 weeks grade calculation:		Semester grade calculations	
Formative	40%	3 rd 9 weeks	40%
Summative	60%	4 th 9 weeks	40%
Total	100%	Exam	20%
		Total	100%

Formative 40%: Any assignment not completed in class is considered homework each day unless expressed by the teacher. Class will begin on time with a warm-up and will end at the proper time with each minute being used productively. The formative average will consist of announced daily work, notebook checks/quizzes, small assessments, and small project or group tasks.

Summative 60%: Tests, alternative assessments, larger projects or tasks. Tests will be mid-chapter or Chapter assessments of related topics.

Exams: A comprehensive final will cover the entire semester unless exemption criteria in the Code of Conduct are met.

It is the student's responsibility to make arrangements to make up work due to absences.

VII. TUTORING:

Each morning by appointment with Mr. Daniels	7:45-8:00
Tuesday-Thursday afternoons with scheduled instructor	3:30 - 4:30

VIII. CLASSROOM RULES:

- 1. Be respectful at all times. Should you be corrected, then make the corrections without rebuttals.
- 2. NO Cell Phones or devices at any time. Technology that is needed is provided.
- 3. Be prepared. Have materials ready to begin class.

IX. Tentative Course Calendar:

Formative assessments will be posted at least weekly through classwork and announced assessments. Summative assessments will regularly with a 3 week interval. Alternative assessments may also be used to monitor progress with selected material.

Week 1-Pretest/Review	Week 10 -Logarithms
Week 2-Real Number System	Week 11 -Logarithms
Week 3-Complex Number System	Week 12 –Rational Expressions
Week 4-Solve Quadratics	Week 13 –Interpret Functions
Week 5-Solve Quadratics	Week 14 –Applications with Equations and Functions
Week 6- Polynomials and Higher Degree	Week 15 –Systems of Equations
Week 7-Function Operations and Mechanics	Week 16 –Systems/Data
Week 8-Building Types of Functions	Week 17 – Data/Review
Week 9-Exponentials	Week 18 – Review/Exams

Comments or Questions:

I am looking forward to a very productive semester. Please sign and return to Mrs. Hermann by January 6, 2017.

Student Name (Please Print)	Parent/Guardian Name (Please Print)	
Student Signature	Parent/Guardian Signature	
Date	Date	
Preferred Contact Information (please pr	int neatly):	
Phone (home, cell, other):	(Name and Number)	
Email:		