

Southern Regional High School

Manahawkin, New Jersey

Course Syllabus

Department: Math

Course: Essentials of Algebra

Marking Period 1

Topics/Units to be covered:

- Classroom Expectations/Grading
- Pre-Algebra review – absolute value, signed numbers, order of operations, evaluating, distributive property
- Solving equations, inequalities, absolute value, literal equations
- Basic coordinate plane – plotting points, quadrants
- Graphing using table of values
- Quarterly

Marking Period 2

Topics/Units to be covered:

- Continue with graphing using table of values
- Begin Slope – parallel versus perpendicular
- Slope-intercept form, (point slope form, standard form – graphing, real life examples, writing equations
- Graphing vertical and horizontal lines
- Line of best fit
- Systems – solve by graphing, solve using substitution, word problems
- Quarterly

Marking Period 3

Topics/Units to be covered:

- Graphing inequalities with two variables – then do systems of inequalities
- Exponent properties – multiplying, zero, negative, division, scientific
- Exponential functions – graphing, word problems
- Polynomials, classifying, add & subtract
- Quarterly

Marking Period 4

Topics/Units to be covered:

- Polynomials – multiplying
- Factoring – GCF, factor by grouping
- Radicals – removing perfect square factors, removing variable factors, multiplying, dividing, rationalizing the denominator
- Quadratics – square root, factoring, quadratic equation
- Graphing quadratics and absolute value equations
- Final exam