

## Math 218 8<sup>th</sup> Grade Mathematics 2014-2015

## Course Description:

The purpose of this course is to prepare 8th grade students for the transition to the high school math experience of introductory algebra. A theme of "algebra readiness" pervades the topics of instruction throughout the school year.

Course Content:

Order of Operations Number Theory: Factors, Multiples, GCF, LCM, Primes, Composites Fractions, Decimals, Percents: Equivalents Arithmetic with Fractions and Decimals Applications of Percent Variables Integers: Ordering, Comparing, Operations Ratios and Proportions: Creating and Solving Probability and Counting Theory **Evaluating Numeric and Algebraic Expressions** Solving One-Step and Two-Step Equations and Inequalities Polynomials Coordinate Plane **Graphing Linear Equations** Measurement and Conversions Basic Geometry: Points, Lines, Segments, Rays, Planes, Parallel and Perpendicular Lines, Triangles, and Ouadrilaterals Area, Perimeter, Volume Pythagorean Theorem **Exponents and Square Roots** Analyzing Data

## Required Textbooks and/or Other Reading/Research Materials

Prentice Hall Mathematics – Course 3 by Charles, Illingworth, McNemar, Mills, Ramirez, and Reeves. Pearson, Prentice Hall 2010

Students will be granted access to their course's online supplemental material found at *phschool.com*/

## Course Requirements:

Students are expected to maintain the course textbook throughout the school year, and to bring it to class each day. Students will also be expected to bring a pencil and a personal notebook to class each day. Other math items, such as a calculator, ruler, protractor, and graph paper will be supplied in the classroom.

Grade Components/Assessments:

Daily Assessments Graded Homework Assignments Tests Bonus Opportunities

Each marking period is worth 20% of a student's overall grade. The midterm and final exam are each worth 10% of a student's overall average:

Quarter 1	20%
Quarter 2	20%
Midterm	10%
Quarter 3	20%
Quarter 4	20%
Final	10%

Required Summer Reading/Assignments:

None