Dr. Bakhsh **Summer Review Topics for Physics Honors**

This course is meant for the most capable mathematical minds and for talented students who challenge each other in the pursuit of excellence. The course demands analytical reasoning, skilled and disciplined student habits appropriate for continued success at the college level.

Prerequisite:

Completion of Ap or Honors Chemistry with grade of B+, Ap Pre-calculus with grade of B+ or the consent of the teacher.

The following topics are prerequisites for this course and they must be thoroughly reviewed during the summer:

Since Physics and mathematics are connected:
Students must have a strong background in **Algebra 1 Honors**, **Geometry Honors, Algebra 2 Honors, Ap or Honors Chemistry.** Sound understanding of **problem solving** to do well in (H) physics

Understanding of:

Quadratic and **Trigonometric Equations**,

Complex numbers in polar form,

Exponential and logarithmic functions,

Rational expressions and equations,

Tables and Graphs,

Curve Fitting,

Error Analysis and interpretation of the graphs,

Manipulating formulas, taking data and **analyzing it quantitatively.**

Concepts of Chemistry

Measurements, Scientific Notation, Significant Numbers, Units, Mole, Avogadro's Number and its application.
Theory of Atoms, Molecular Theory, Quantitative Theory of Gases, Ionization in solution, Heat of Conservation, Temperature Scales.
Students must have disciplined work ethic in Laboratory science.

A good understanding of how to apply the concepts in any given situation is very

important (WORD PROBLEMS).

Diagnostic Test will be given in the first week of the school.

Enjoy your Summer