**CHEMISTRY**

Pisgah High School Coach Hembree

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Coarse Description:

This chemistry class will provide the basis for students to address consumer, health, safety, environmental, technological, societal, and scientific issues on a daily basis. Its content defines the fundamental knowledge and skills necessary for students to develop an understanding of the most basic chemistry concepts associated with structure, form, change, availability, and use of matter and energy.

The recommended prerequisite mathematics course for the Chemistry Core is Algebra I.

Coarse Objectives:

This class will prepare the students for college chemistry

Class Expectations:

Each student will bring all necessary supplies to class each day and participate in class discussions, labs and projects. While working in groups, the students are expected to cooperate and equally contribute to the group.

Grading Policy:

Grades will be assigned according to board policy as recorded in the student handbook using a 10 point scale. Exams will count as 70% of grade, Labs 20%, class work 10%

Make-Up Test Policy:

Make-up test will be taken during resource class no more than three days upon returning to school unless prior arrangements have been made. Failure to take the make-up test in this timely manner will result in the student following the no zero policy

Materials and Supplies:

Pencil, paper, 3 ring binder

Fees/Workbook

$30.00

Chemistry Coarse Outline

This is a tentative coarse outline for chemistry. This can be used a pacing guide as to the material that will be covered in this class. You can expect an exam approximately every two weeks. These exams will include current material as well as previously covered material. This is an advanced class. Though we will have very little homework, this class will require you to do work outside of class, such as learning names and symbols of elements, learning various rules etc. Most of the work required for this class will be completed in class so that I will be able to assist you.

1. Exam 1
   1. Conversion Factors
      1. English, Metric
   2. Element names and symbols
   3. Chemical name and formulas
      1. Metal
      2. Non metal
      3. Non metal-nonmetal
   4. Significant figures (digits)
2. Exam II
   1. Chemical names and formulas
      1. Polyatomic ions
      2. Transition metals
      3. Strong Acids
   2. Percent Composition
   3. Empirical Formula
   4. Molecular Formula
   5. Atomic Chart
      1. Number protons, neutrons, electrons
   6. Electron Orbital Filling Model
   7. Number of bonding electrons
   8. Lewis Dot Structure
   9. Lewis Dot Formula
3. Exam III
   1. Balancing Equations
   2. Determining Reaction Type
      1. Synthesis Reaction
      2. Decomposition Reaction
      3. Single Replacement Reaction
      4. Double Replacement Reaction
   3. Oxidation number
   4. Completing the reaction
   5. Nomenclature
   6. Stoichiometry
4. Exam IV
   1. Combined Gas Law
   2. Gases Collected over water
   3. PV=nRt
      1. Gas Density
      2. Molecular Mass
5. Exam V
   1. Mid-Term
6. Exam VI
   1. Net Ionic Equations
   2. Solubility
   3. Conjugate Acid/Base
   4. Equilibrant Equation
7. Exam VII
   1. Standard Solutions
   2. Molarity
   3. Molaity
   4. Mole Fraction
   5. Dilutions
8. Exam VII
   1. Organic Nomenclature and formulas
9. Exam IX
   1. Electro Chemistry

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