**Chemistry**

**Course Prerequisites: Successful completion of Algebra, Biology**

1. **Introduction:**

**This Chemistry course is designed to provide the student with a comprehensive study of inorganic chemistry and general chemical principles. Upon completion of this course, students will have a strong foundation for successful completion of college chemistry. Additionally, students should be able to solve problems involving measurement, atomic structure, chemical bonding, molecular structure, chemical reactions, stoichiometry, gas laws, solutions, titrations, molarity and nuclear reactions. Laboratory experiments provide the student with opportunities to collect and analyze data and identify unknown chemical substances from their properties via both qualitative and quantitative analysis.**

1. **General Objectives and Sequential Time frame:**

**1. Students study a variety of topics that include:**

* + 1. **Laboratory Safety(1.5 weeks) 1,2**
    2. **Matter, Energy, and Change (2.5 weeks) 2,3,4**
    3. **Scientific Measurements(2 weeks) 5,6**
    4. **Atomic Structure (2 weeks) 7,8**
    5. **Periodic Laws (4 weeks) 9, 10, 11, 12**
    6. **Chemical Formulas and Compounds (6 weeks) 13-18 end first semester**
    7. **Chemical Equations and Reactions (3 weeks) 19, 20, 21**
    8. **Stoichiometry (3 weeks) 22, 23, 24**
    9. **Physical Characteristics of Gases (2 weeks) 25, 26**
    10. **Organic and Biochemistry (4 weeks) 27-30**
    11. **Acids and Bases (2 weeks) 31, 32**
    12. **Nuclear Chemistry (2 weeks) 33, 34**
    13. **Properties of Solutions (2 weeks) 35, 36**

**Textbook used**:

Modern Chemistry. Holt Rinehart. 2009

**Grading Scale:**

25% homework,  25% labs,  25% Test,   25% quiz

**Supplies needed:**

pen/paper, notebook, spiral notebook for lab reports, Scientific calculator, flash drive