***MICROBIOLOGY***

**Course Prerequisites:**

**Successful completion of Biology**

**Introduction:**

**Microbiology is designed for the student who wants to expand their knowledge of the microscopic world, while pursuing an interest in the field of medicine or health –related fields. The Microbiology course covers the fundamentals of microbiology and the role of microorganisms in the environment and in human affairs. Experiments involve aseptic technique and manipulation of microorganisms under laboratory conditions are performed to illustrate the basic principles of microbiology. Upon completion of this course, students will have a strong foundation for successful completion of college Microbiology.**

**General Objectives and Sequential Timeframe:**

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

* + 1. **Introduction to Microbiology (including a short history) (2 weeks) 1,2**
    2. **Classification of microorganisms and functional anatomy of prokaryotic and eukaryotic cells ( 2weeks) 3,4**
    3. **Chemical principles and microbial genetics(2 weeks) 5,6**
    4. **Microbial Metabolism (2 weeks) 7,8**
    5. **Bacteria/Fungi/Protista/ Viruses (2 weeks) 9,10**
    6. **Microbial growth requirements (1.5 weeks) 11,12**
    7. **Host-parasite relationship (2 weeks) 13,14**
    8. **Immune response (2 weeks) 14,15**
    9. **Diseases and disorders (3 weeks) 16,17,18**

**Textbook used**:

Microbiology: An Introduction ,10th Edition, 2009. Benjamin Cummings

**Grading Scale:**

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

**Supplies needed:**

pen/paper, notebook, colored pencils, sharpie, antimicrobial hand wash, flash drive, box of kleenex