**Honors Biology**

**Course Prerequisites: Instructor Approval**

1. **Introduction:**

**Honors Biology is designed for the highly motivated student with a strong interest in the field of science. Upon completion of this course, students will have a strong foundation for successful completion of college biology. This course will emphasize higher order thinking skills using online activities, laboratory investigations, and problem solving activities.**

**In comparison to the general biology student, the honors biology student is expected to demonstrate his or her learning through the synthesis, application, and evaluation of the fundamental principles of biology.  Students are expected to process the learning beyond simple rote memorization**

**General Objectives and Sequential Timeframe:**

1. **1. Students study a variety of topics that include:**
   * 1. **Introduction to Biology (2 weeks) 1**
     2. **Biochemistry (2 weeks) (2 weeks) 2,3**
     3. **Cell Biology (3 weeks) 4,5,6, 9,10**
     4. **Cell Respiration and Photosynthesis (2 weeks) 7,8**
     5. **Mitosis and Meiosis (2 days) (included with cytology)**
     6. **Heredity and Mendelian Genetics (3 weeks) 11,12, 15**
     7. **DNA and Protein Synthesis (3 weeks) 13,14**
     8. **Creation/Evolution (3 weeks) 17,18, 20 End first semester**
     9. **Taxonomy (2 weeks) 19**
     10. **Kingdom Monera (1 weeks)21**
     11. **Kingdom Protista (2 weeks) 22**
     12. **Kingdom Fungi (1 weeks) 24**
     13. **Botany (2 weeks) 23,28, 29, 30**
     14. **Invertebrates (4 weeks) 25**
     15. **Vertebrates/ animal systems (5 weeks) 26**
     16. **Ecology(1 weeks) 44-46**

**Textbook used**:

Biology: The Unity and Diversity of Life 12th Edition, 2007. Cengage Learning

**Grading Scale:**

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

**Supplies Needed:**

pens, pencils, notebook, paper,  colored pencils, Scientific calculator, flash drive, box of kleenex