**AP BIOLOGY 2013-2014**

**STUDY GUIDE SEMESTER 2**

**WHAT TO STUDY**

1. Go over all your class notes.
2. Use your text and internet access to review all diagrams discussed in class and try practice questions.
3. Use your Test Prep Workbook
4. Go over all labs and handouts.
5. Focus on general concepts and principles rather than memorizing details.

 **EVOLUTION**

 Know requirements for evolution

 Explain Natural Selection.

 What is meant by genetic drift? Examples such as Bottleneck effect and Founders.

 Describe what is meant by Hardy – Weinberg equilibrium

 Be able to work out Hardy-Weinberg problems

**ANIMALS**

 Definition of an animal

Know the phylogenetic chart of animals as well as the definitions of each of the descriptive terms.

Be able to interpret and construct a phylogenetic tree.

Explain the formation of organs from ectoderm, mesoderm and endoderm

**ANIMAL DEFENSE AND NERVOUS SYSTEM**

Explain the body’s 1st, 2nd and 3rd lines of defense.

Know the difference between Humoral Immunity and Cell-Mediated Immunity.

Describe the divisions of the nervous system

 Know the parts of a neuron

 Describe the steps of the action potential.

 Explain how an impulse travels across a synapse.

 **PLANTS**

 Know the divisions of plants from chart page 605.

 Describe what is meant by alternation of generation.

 Explain how water is moved through the plant

 Be able to describe conditions that increase transpiration

Describe the difference between primary and secondary growth.

 Identify the parts of a woody stem from the pith outward to the cork.