**HON Biology MidTerm Study Guide Fall 2014**

**Topics To Be Covered:**

* Scientific Method (3-4 Questions)
  + Be able to identify variables: Control, Independent, Dependent
  + Experimental Design: Why was it set up that way? (Seed Lab, Milk Lab, etc)
* Levels of Ecology (2-3 Questions)
  + organism – population – community – ecosystem – biome – biosphere
* Populations: (2-3 Questions)
  + Counting strategies: mark & recapture, random sampling
* Communities (8-9 Questions)
  + Symbiosis: mutualism, commensalism, parasitism
* Succession (6-7 Questions)
  + Primary and Secondary: differences, how they are defined
    - Put a sequence of pictures in correct order
* Food Chains/Food Webs (11-12 Questions)
  + Pyramids of Energy, Pyramids of Biomass: Why do they *decrease* going up?
  + Trophic Levels: autotrophs, heterotrophs, consumers, carnivores, decomposers, etc.
  + Food Chains: What do arrows signify?
  + Food Webs: identify trophic levels within
* Nutrient Cycles (4-5 Questions)
  + Identify major players in and the differences between each cycle
    - Carbon
    - Nitrogen
    - Phosphorus
    - Water