

BIO 205 Writing Assignment Spring 2014

This year's BIO 212 Writing Assignment Theme is "**Biomes**". A biome is a region characterized by its abiotic characteristics (e.g. temperature, precipitation, soil type) and dominant vegetation. It is often considered the largest unit in the ecological hierarchy.

It is important to remember that the biome is a human concept, and as such, different sources may characterize biomes differently or use different names for them. Your BIO 201 textbook (Freeman et al. 5th edition) discusses biomes on pages 1068-1081. We will be using the classification scheme used by the University of California Museum of Paleontology and found at <http://www.ucmp.berkeley.edu/glossary/gloss5/biome/>, which is nearly identical to the scheme found in your textbook. At this website, you will find general information about each of the biomes listed below, as well as more specific examples of each. I encourage you to begin your research in your text and at that website.

For your paper, you will investigate some biological aspect of the biome that is assigned to you. Your paper should briefly discuss the general characteristics of your assigned biome, but beyond that, you may choose to focus on any aspect related to that biome. For example, you may choose to investigate a particular organism, group of organisms, or community type found in that biome or the typical adaptations or life history strategies that have evolved there. What are the challenges that that environment presents? What types of plants, animals, fungi, or bacteria are found there? How have these organisms evolved to survive there? You may also choose to discuss the factors that control precipitation, temperature, soil characteristics, or other abiotic or biotic characteristics of that particular biome or investigate matters of conservation, economic importance or cultural value of that biome. You might focus on the biome in a general sense, or you may want to narrow your research on a specific example. For example, if your assigned biome is "desert", you may choose to research the Sonoran Desert or the Mojave Desert in detail. If your assigned biome is "Temperate Forest," you may wish to research the hardwood forest or the Gulf Coastal Plain. Remember that this is a biology class, so the majority of your paper should focus on biological concepts.

Subtopics:

- 1. Temperate Forest**
- 2. Taiga or Boreal Forest**
- 3. Tropical Forest**
- 4. Temperate Grassland (Steppe, Prairie)**
- 5. Savanna**
- 6. Tundra**
- 7. Desert**
- 8. Freshwater (e.g. ponds, lakes, streams, rivers)**
- 9. Wetlands (e.g. marshes, swamps, bogs, salt marshes, mangrove swamps)**
- 10. Ocean (except Coral Reefs & Estuaries)**
- 11. Coral Reefs & Estuaries**