ES202 Climate Change Thinking Questions Cyber Friday Assignment March 3, 2017

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use your textbook and favorite internet resources (Wikipedia, google, etc.) to answer the following questions:

1. Explain how climate differs from weather.
2. Define “ice rafted debris”, explain its origin and significance with respect to paleoclimate reconstructions of planet Earth.
3. Explain how oxygen isotope geochemistry of seafloor sediments and ice cores can be used to reconstruct ancient climates of Earth. Include sketches or cut-and-paste images to illustrate your answers.
4. Explain the difference between glacial and periglacial processes. Provide example landforms indicative of each process.
5. What are the three primary Milankovitch cycles and how are they thought to control long term climate change on Earth over time. Include sketches or cut-and-paste images to illustrate your answers.
6. Explain how glacial-interglacial cycles affect global sea level. Include sketches or cut-and-paste images to illustrate your answers.
7. Write a one paragraph summary of the Missoula Flood story in the Pacific Northwest region. What was it? What were the causes? When did it occur? How did it affect the mid-Willamette Valley of Oregon.