

**Global Warming and Climate Change – University of Calgary**  
**David H. Manz**  
**May 5, 2016**

**Assignment Number 3**

1. What is meant by the Holocene Period of Earth's history?
2. How far back (years) in history can we go and still collect reliable temperature and precipitation data?
3. Which countries have been collecting ice core information from Greenland and Antarctica? How far back in history do these ice cores provide information on Earth's climate?
4. Has the temperature of the earth increased since 1900? If it has, by how much?
5. What are the observed effects of global warming – other than any temperature and rainfall effects?
6. Why would we use computer models to assist us with the science of global warming and climate change?
7. What is the purpose of the climate change scenarios (e.g. RCP2.6, etc.)?
8. Why do the temperature changes of the land and the sea surfaces differ?
9. How do global temperature changes affect the hydrological cycle?
10. Why is the ocean getting more acidic?

**Assignment is due May 12, 2016.**