

**FA '17**

**METR 112**

**Homework #1**

40 Points

Due: 9/3 @ 11:59 pm on Canvas

Directions: Read Ch. 1 in Andrew Dessler's Introduction to Modern Climate Change, then answer these questions from the text and from the video lecture. Use complete sentences with correct grammar and spelling. Proper writing and clarity of thoughts are important in getting full credit.

- 1) Please explain what the simple difference is between: (a) weather, (b) climate, and (c) climate change. (6)
- 2) What are four other weather variables, other than air temperature, that would be important when studying climate change? (4)
- 3) What is the best way to determine whether or not a scientific claim is valid? What is the problem with relying on your own personal experiences for determining whether you think a scientific claim is valid in climate science? (6)
- 4) Please summarize Figure 1.2 from Dessler (textbook) in your own words in no more than 3 sentences. (3)
- 5) Describe the differences between the two temperature scales of Celsius and Fahrenheit. (4)
- 6) What is the area from 30 °S to 30 °N called? 30 °N to 60 °N? 60 °N to the North Pole? Where does the U.S. fall under? (5)
- 7) On an map, major lines that run from the North Pole to the South Pole are called \_\_\_\_\_, and lines that run parallel from east to west are called \_\_\_\_\_. (2)
- 8) Self-reflection exercise (minimum length=200 words): (10)

Currently, when you hear about the debate on climate change, it is referring to more specifically the global warming observed within the last century. To the best of your ability, try to summarize your

views and opinions about climate change and the debate about climate change. Some questions to think about are:

- a) Do your current political beliefs influence your perception of global climate change?
- b) Dessler defines the term *opinion leader*. Have you been influenced by opinion leaders regarding your stance on climate change? If so, who? Family members? Friends? Political Leaders?
- c) Do you think humankind should be concerned with climate change?