

## Ecology: Climate Change Final Paper

This final project is considered your “final” for the course, and will be worth 20% of your final grade for the course. In other words, put time and effort into the project.

The project is a research paper on the impacts of climate change, the objective is that you are able to discuss the biological, ecological, and climatic impacts of climate change. The other objective is that you will be able to discuss the solutions to the problem.

Which raptor did you choose to research for the Hawk Project? \_\_\_\_\_

Which animal of interest did you choose on your student introduction card? \_\_\_\_\_

**Paragraph I:** Introduction, you should use class notes/discussion to answer the following questions within your introduction.

- What is the natural greenhouse effect and how does it occur? (make sure to discuss ultraviolet radiation, earth’s troposphere, infrared radiation, and greenhouse gases with examples.
- How is the natural greenhouse effect **different** from anthropogenic climate change? Discuss causes of anthropogenic climate change.

**Paragraph II:** Impacts of Climate Change on Biodiversity (research using provided websites)

- How is climate change expected to impact global species biodiversity? Explain.
- Why is it important to preserve biodiversity? Explain.
- How might climate change impact the population of your hawk project raptor? Discuss.
- How might climate change impact your animal of interest? Discuss.

**Paragraph III:** Impacts of Climate Change on Human Health

- Discuss at least 3 ways in which human health is being impacted by climate change (keep it local to the United States). Topics to discuss could include: increase of lyme disease and other vector spread diseases; increase of food shortages; food having less nutritional value; increase in waterborne illnesses; warmer temperatures being difficult for people with asthma or any other respiratory diseases, etc.

**Paragraph IV:** Impacts of Climate Change on the State of New Jersey

- Discuss the changes in weather trends as they will impact NJ
- Discuss at least 3 major concerns specific to NJ; issues to be discussed could include sea level rise, increase storm threat (specifically hurricanes); increase spread of disease; increase occurrences of heat waves; agriculture; fisheries; infrastructure, etc.

**Paragraph V: Solutions to Climate Change**

- Discuss and explain at least three viable solutions to climate change.
- Do you believe that there is hope? Why or why not? Back up your response with a meaningful discussion.

**Additionally you will include**

**A Title Page:** Separate from the rest of the paper, includes Name, Date, and Course Name

You must ***proofread your paper***, points will be dedicated for misspellings and grammatical errors.

**MLA Citations: Correctly Formatted**

**[Purdue University](#)**

Taken from Purdue University's Website:

Editor, author, or compiler name (if available). *Name of Site*. Version number, Name of institution/organization affiliated with the site (sponsor or publisher), date of resource creation (if available), URL, DOI or permalink. Date of access (if applicable).

*The Purdue OWL Family of Sites*. The Writing Lab and OWL at Purdue and Purdue U, 2008, owl.english.purdue.edu/owl. Accessed 23 Apr. 2008.

In Text Citations- (Name of Entire Website in Parentheses).

Work Cited: must be on the last page of the paper (no other information on that page); sources listed in alphabetical order; hanging indent.

	0-5 pts	5-10 pts	10-15 pts	Total Points Earned
Paragraph 1	Incorrectly describes the Natural greenhouse effect AND/OR does not correctly relate to anthropogenic climate change.	Correctly describes what the natural greenhouse effect is and relates the natural greenhouse effect to anthropogenic climate change however misses 1-2 details in the discussion.	Correctly and thoroughly describes what the natural greenhouse effect is and correctly relates the natural greenhouse effect to anthropogenic climate change.	
Paragraph II	Incorrectly Answers the Questions. Answers poorly explained AND/OR lacks citations.	Correctly answers the questions; however, lacks detail in the response (information is correctly cited (intext and on the work cited).	Correctly and thoroughly answers the questions, information is correctly cited (intext and on the work cited.).	
Paragraph III	Incorrectly Answers the Questions. Answers poorly explained AND/OR lacks citations.	Correctly answers the questions; however, lacks detail in the response (information is correctly cited (intext and on the work cited).	Correctly and thoroughly answers the questions, information is correctly cited (intext and on the work cited.).	
Paragraph IV	Incorrectly Answers the Questions. Answers poorly explained AND/OR lacks citations.	Correctly answers the questions; however, lacks detail in the response (information is correctly cited (intext and on the work cited).	Correctly and thoroughly answers the questions, information is correctly cited (intext and on the work cited.).	
Paragraph V	Incorrectly Answers the Questions. Answers poorly explained AND/OR lacks citations.	Correctly answers the questions; however, lacks detail in the response (information is correctly cited (intext and on the work cited).	Correctly and thoroughly answers the questions, information is correctly cited (intext and on the work cited.).	

Title Page and MLA work Cited	<p>Missing Title Page/Work Cited Page.</p> <p>If included, not correctly formatted.</p> <p>Numerous errors</p>	<p>Correctly formatted Title Page and Correctly Formatted work cited page; however includes grammatical errors through the paper.</p>	<p>Correctly formatted Title Page and correctly formatted work cited page</p> <p>No Grammatical/Spelling Errors</p>	
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\_\_\_\_\_/90 points.