

Short Assignments

Syllabus Description: Short Assignments are based on work completed in class and may be handed in at the end of class (as a physical copy) and/or after class through Canvas. These may include small group projects, creative responses to lectures (poetry, political cartoons), formal debates, or short essays. I don't give "participation points" in this class; short assignments are active learning opportunities in class each worth 5 points. Missed short assignments may be made up within one week of the missed class – all assignments will be posted on Canvas (even if turned in during class), but please do reach out to me if you missed a class and need more details on the instructions. Every student has one "freebie" missed short assignment.

Update to Syllabus: There were 14 Short Assignments in Fall 2019; each student's grade was based on the highest 12 SAs (effectively 2 freebies). The Short Assignments grade was 30% of the final grade.

Short Assignments:

No.	Title	Learning Goals	Type
1	Climate Drivers & Feedbacks	At the end of this Short Assignment you will be able to walk someone (your friend, roommate, parent, sibling) through NCA4 Figure 2.2 and 2.3 and explain how they tell the story of climate change.	Large Groups; writing
2	Climate Influencers	At the end of this Short Assignment you will be able to describe a non-CO <sub>2</sub> greenhouse gas, its anthropogenic sources & its impacts climate change, including how much is in the atmosphere, its atmospheric lifetime, and its Global Warming Potential...and you will know for sure if you don't want to have a class Instagram account.	Small Groups; writing, visual art, presentation
3	Science Communication & Global Surface Temperatures	At the end of this Short Assignment you will be able to find the source of the underlying data in creative efforts to communicate global surface warming trends to the public. You will be able to explain the method used to calculate the global surface temperatures & the baseline time period that was used, and walk a friend or family member through the figure that underpins the science communication. You will also know a little bit about the side projects, hobbies, or music tastes of three active climate scientists.	Individual; personal essay
4	The Marvelous Dr. Marvel	At the end of this assignment, you will feel comfortable describing how climate modelers study attribution of long-term temperature trends, and who contributes to the Coupled Model Intercomparison Project Phase Five. You will also have the	Small groups; written

		opportunity to peek into the mind of a climate modeler and you will be able to follow and understand her narrative descriptions of radiative forcing and the greenhouse effect.	response to reading
5	Dr. Marvel the Sequel	(same as Short Assignment 4)	Individual; written response and peer review
6	Cape Cod	At the end of this assignment, you will have a place-based understanding of some of the impacts of climate change on Cape Cod, including erosion, coastal ecosystems, fisheries, infrastructure, storms, and flooding. You will also gain an introduction to how these impacts, the scientists who study them, and the people that they affect are covered in the media. You may flex your skills writing a sea shanty.	Small groups; written response to short film with the option to write a sea shanty
7	The Future of Flora and Fauna	After you complete this assignment, you will be able to explain recent research on the effects of climate change on the ecology of plants and/or animals, the key findings that scientists published in a paper, and the complete citation for that peer-reviewed paper.	Small groups; reading and presenting scientific papers
8	Day at the Museum	After you visit the Harvard Museum of Natural History Museum, you will reflect on their ability to engage visitors and communicate the science of climate change in the Climate Change exhibit. Outside of the Climate Change exhibit, you will make a connection between something else in the museum and the non-textbook (NCA4/Thinking Person's Guide) components of this course.	Individual; written reflection with selfies
9	Figures of NCA4 CSSR Chapter 6	After you complete this assignment, you will be able to interpret, explain, and critique a variety of figures on temperature changes in the United States from NCA4.	Individual and small groups; writing
10	Hot Drought in Poetry	After you complete this assignment you will be able to recognize and describe the science behind descriptions of climate change in non-scientific writing. You will be able to interpret poetry by Madhur Anand and Craig Santos Perez from a climate science perspective, and you'll grapple with finding	Pairs and large groups; written response to

		poetry in peer-reviewed literature. (You will also get to know more about Dr. Kate Marvel's science.)	poetry & creating black out poems on a scientific paper
11	Arctic Annotations & Poems	After you complete this assignment you will be able to both describe and evaluate journalism and art centered on climate change in the Arctic. You will recognize the science behind reporting and poetry on Arctic changes, and you will be able to write an Annotated Bibliography.	Individual; writing an annotated bib for peer work and film/radio program about Native people in the Arctic
12	Home Range	Relax. Let this directed art project be a calming experience as you head into break. Enjoy a good podcast & feel well-versed in the conversation after our work outlining <i>Thinking</i> Chapter 7 last week and reading NCA4 Chapter 12 for today	Individual; visual art capturing rising sea levels and projected flood risk in Boston
13	Better Know a Hurricane	After you complete this assignment, you will be able to describe the conditions necessary to create hurricanes, the factors that contribute to their strength (intensity category) and impact (\$ damage, human loss). Together, with your classmates, you will cover a general history of hurricanes in New England and a recent history of major hurricanes in the U.S.	Small groups; writing, visual art, presentation
14	Looking Back	Reflections and self-assessments on a semester of short assignments	Individual; written reflections