

Teaching Guide: ATM S 103

Unequal Impacts: Justice at the Intersection of Risk and Exposure to Severe Weather Threat

Module Objectives:

1. Provide students with the tools they need to recognize and describe the nuanced connections between severe storms (especially hurricanes), climate change, and societal vulnerability.
2. Give students an overview of how different demographics face unequal impacts of severe storms.
3. Have students establish their own solutions-based approaches to this problem and gain experience in presenting climate change and social justice to a broad audience.

Module Logistics:

This module was developed for an asynchronous class of ~200 students but could be adapted to a smaller, synchronous class. One one-hour lecture is required, either in a traditional or flipped-classroom perspective.

Module Timeline:

BEFORE CLASS: Students are provided with the attached list of readings and videos ("Resources on Severe Storms, Climate Change, and Inequality").

DURING CLASS (IF SYNCHRONOUS): Lead a brief discussion (including break-out rooms and think-pair-share) of materials read, optionally covering the following questions:

1. **WHAT DID THE READINGS TEACH YOU ABOUT CLIMATE CHANGE AND HURRICANES THAT SURPRISED YOU?**
2. **WHICH GROUPS ARE LIKELY TO BE MOST STRONGLY IMPACTED BY SEVERE STORMS?**
3. **WHICH OF THOSE INEQUITIES ARE LIKELY TO BECOME MORE OR LESS PRONOUNCED WITH CLIMATE CHANGE?**

DURING CLASS (IF ASYNCHRONOUS): Encourage students to consider the above questions while reflecting on the readings/videos.

AFTER CLASS (ASSIGNMENT): Provide students with assignment details ("Unequal Impacts Assignment") and one week to complete assignment. Students should receive detailed feedback on each element of grading, using the attached grading rubric ("Grading Rubric").

FOLLOW-UP (IF SYNCHRONOUS): In a small class, have each student report back a reading of their assignment and a 1-2 minute Q&A. In a larger class, break students into groups of 4-5 and have them do the same thing. Optionally, have students cycle into two or more groups.

FOLLOW-UP (IF ASYNCHRONOUS): Students hand in copies of their assignments to the instructor. With students' permission, all assignment files are saved in a class-public repository, where a selection can be summarized by students for optional extra credit.