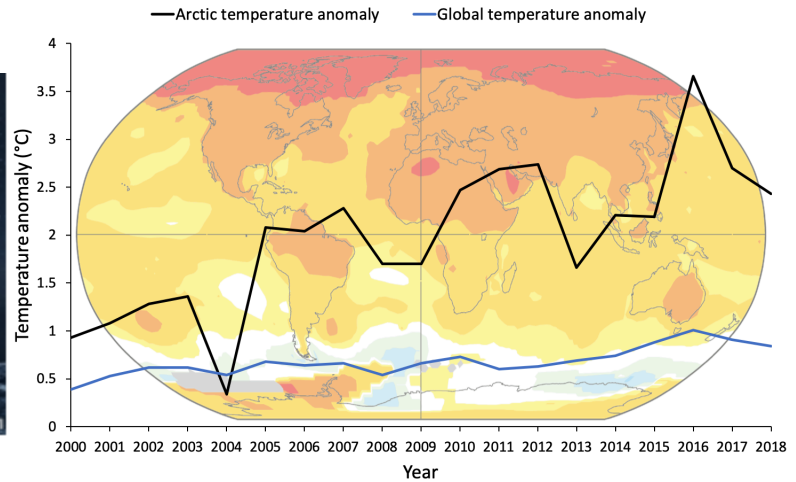


Connect your classroom to [MOSAiC](#), one of the largest Arctic climate research expeditions ever with new curriculum developed by the University of Colorado Boulder!



- Do you want to incorporate authentic data sets, stories and imagery from a real scientific research expedition into nature of science and Earth's systems learning?
- Are you looking for curriculum anchored by phenomena and supported by Next Generation Science Standards (NGSS)?

*Join us for a virtual workshop: "On board with MOSAIC: How a real Arctic research expedition can engage students in Earth's systems thinking"*

*5 hours of Continuing Education*

*No registration cost - it's free!*

*Friday, April 2nd from 10:00 am - 2:30 pm MT*

*Contact: [jonathan.griffith@colorado.edu](mailto:jonathan.griffith@colorado.edu)*

The Arctic is warming twice as fast as the rest of the world and due to a lack of observations, there is considerable uncertainty in climate models projecting the Arctic climate of the future. The MOSAIC expedition aims to better understand the changing Arctic climate system by freezing a ship in sea ice and drifting with the ice across the Arctic -- studying ocean, atmosphere, and sea ice processes -- for an entire year!

In this course, you'll hear from MOSAIC scientists and the curriculum developers as they lead you through "[Arctic Feedbacks: Not all warming is equal](#)", a curriculum tied to NGSS Earth's Systems standards in which students explore parts of the Arctic climate system to determine why the Arctic might be warming twice as fast as the rest of the world. Engage with [360 virtual tours](#), [authentic real-time Arctic datasets](#), and App-based labs in this virtual teacher workshop.

## Which classes could I teach this unit in?

- Middle School Earth Science\*
- High School Earth Science\*
- High School Environmental Science
- High School Science Electives

\*The curriculum is expressly designed to meet the science standards for these courses, but can be adapted to fit the standards in the other courses listed

## Designed to meet the NGSS

The curriculum is tied to NGSS Earth's Systems standards for middle and high school students and designed to leverage 3-dimensional learning by challenging students to model and explain how and why phenomena occur.

## Model-based inquiry pedagogy, based on the MOSAiC expedition

This unit was constructed following the [model-based inquiry](#) (MBI) framework designed around the construction and revision of models by students as they gather evidence through engaging lessons to explain phenomena. This curricular unit is anchored by the phenomena, "*Why might the Arctic be warming twice as fast as the rest of the world?*" Student ideas and understandings about the science related to the phenomena are tracked throughout the unit via public records (e.g., summary table). The unit culminates in students developing descriptive models and written explanations of the anchoring phenomenon.

## Flexible formatting

This 2-week curriculum has many different components. Pick the parts that fit your classroom -- facilitate individual lessons, implement in parts (e.g., 1 lesson per week), or complete all at once!

## Ready to go teacher guides

Teachers are busy, and we understand that! We give you everything you need to implement this curriculum in your classroom: unit summary, teacher guide, student materials, slide decks, answer keys, assessment rubrics, and more.

## Trusted Source

The "Arctic Feedbacks: Not all warming is equal" curriculum is the product of a collaborative effort by curriculum designers and MOSAiC scientists from the Cooperative Institute for Research in Environmental Sciences at the University of Colorado Boulder. Feedback from educators and MOSAiC scientists guided the revision process.

<https://mosaic.colorado.edu/arctic-curriculum-arctic-feedbacks>