Climate Change Learning Center (CCLC) at Stockton University

FREE for K-12 Classrooms
Virtual Classroom Visits
Winter 2025

The Climate Change Learning Collaborative (CCLC) at Stockton University is pleased to provide virtual classroom visits (Grades K-12) to support educators' implementation of the new NJ Student Learning Standards in Climate Change.

Sessions are conducted in real-time and will run approximately 40 minutes. These sessions are available at no cost to the school district.

The following organizations can be scheduled for virtual visits to your classroom.

CENTER FOR AQUATIC SCIENCES

CARES: Conserve and Re-Establish Species
Target audience: Elementary school students
People have an impact on the plants and the animals that call our planet home. In this lesson, students will meet endangered species, such as axolotls; learn about the threats different species face; and identify ways they can help protect our animal friends.

Plastic Pollutants
Target audience: Elementary and middle school students
Did you know it can take up to 450 years for one plastic water bottle to decompose? In this lesson, students will learn about the impact of plastics on the environment and their relationship to climate change and identify ways they can help cut down on plastic pollution.

Coral Reef CSI
Target audience: Middle and high school students
Coral reefs are essential to ocean life; however, the effects of human-driven climate change are threatening their future. In this hands-on lab program, students will learn how to test factors that impact coral reef survival, including water temperatures, salinity, and human population impacts, to determine what is damaging the reefs.

Climate Activism and You
Target audiences: Middle and high school students
Battling the effects of climate change can feel like a daunting task for young people. This lesson will introduce students to three different methods of climate activism–social media, community organizing, and lobbying–and provide them with advice on how to get involved.

Digital Climate Detectives
Target audience: High school students
To share or not to share? In this lesson, students will hone their critical thinking and digital literacy skills by learning how to identify signs of online misinformation related to climate change. They will then use their digital detective skills to develop techniques for reducing its spread.

NEW JERSEY AUDUBON

Multiple Topics as Noted Below for Grades 3-12

Rain Gardens - Absorbing flood waters and helping pollinators

Trees - Storing carbon and cleaning the air

Climate Impacts on Bird Migration and Creating a Bird Friendly School

How Climate Change Affects NJ Habitats and Creating a Space for Wildlife in Your Schoolyard

Is Rainwater Clean Water? Exploring macroinvertebrates to see how streams are impacted by climate change impacts.

More Information available!

WETLANDS INSTITUTE

Traveling Turtles (PreK – 12th grade)
These ravishing reptiles elicit awe from students of all grade levels. Students will get a chance to meet a variety of turtles that are native to New Jersey, including the Northern Diamondback Terrapin. Dive into topics such as: turtle anatomy, natural history, behaviors, adaptations, life cycles, and more. Students will learn how sea level rise and other climate change indicators are affecting the Northern Diamondback Terrapin and about The Wetlands Institute's Diamondback Terrapin Conservation Project. Students will explore ways they can join in the effort and get quality virtual time with live adult terrapins and even some hatchlings.

Sea Creatures with Amazing Features (PreK – 6th grade)
Students will use all their senses and their imagination to discover the wet world of water animals. Following a fun and interactive explanation of and up-close look at the local sea animals, students will learn how climate change is impacting these amazing creatures and simple ways they can help. Habitats, food chains, climate change and anatomy are some of the topics covered. Animals include sea stars, sea urchins, hermit crabs, spider crabs, green crabs, clams, sea snails, and a horseshoe crab.*

Life in a Salt Marsh (4th-8th grade)
Salt Marsh ecosystems are some of the most productive places on planet Earth. Students will virtually assist our instructor in creating a living model of a salt marsh. As they go, they will be introduced to the extremely important elements of a Salt Marsh including tides, mud, sun, grasses, bacteria, fiddler crabs, snails, plankton, fish, terrapins, and bird. Students learn how all these elements affect humans and how humans affect all these elements. Once this living model is created, participants will discuss how climate change is affecting the salt marsh and what local scientists are doing right here at The Wetlands Institute to create healthy marshes.

Plankton: Bugs of the Sea (6th-12th grade)
We will cover all things crustacean. Students will get a virtual introduction into the "Secret Lives of Plankton", take a closer look at a live plankton sample, then delve into those crustaceans which start their lives as plankton (hermit crabs, blue claws, green crabs, spider crabs, shrimp, lobsters).* Students will learn how plankton, the building blocks of marine ecosystems, are being impacted by climate change and the affect this has on the local marine ecosystem. A major focus of the program is life cycles but there's more than that once you break through the shell.

Saltwater Gene Pools (6th-12th grade)
Using observation, prior knowledge, and problem solving, students will work in teams to sort live marine animals into their "family gene pools". Then, after an interactive and informative explanation session about the animals, the groups will have an opportunity to affirm or change their decisions. The program concludes with a discussion on how climate change is impacting these animals. Classification, anatomy, genetic relationships, climate change, and adaptations are some of the topics covered. Animals normally include green crabs, spider crabs, hogchoker, oyster toadfish, clams, whelks, hermit crabs, and sea squirts.*

***The types of animals involved may change due to availability.**

SAVE BARNEGAT BAY

Barnegat Bay Watershed Map (6th-12th Grade)
(can be adopted slightly to a local watershed)- How does a watershed work? What is stormwater and where does it go? What is carried in the stormwater to our waterways? How is climate change impacting NJ relative to storms, flooding, and droughts? During this presentation we will use

google maps and other imagery via PowerPoint to discuss place-based orientation of the challenges facing our local waterways. *(Can be adopted slightly to a local watershed.)*

Climate Storytelling and Solutions (11-12th Grade)
What do we collectively know about climate change in our region or in the world? What experiences have we already had of our own that could have been exacerbated by climate change? We will briefly go over where community power centers (where can we make change) are and our "Defenders" program. However we will end with the famous Climate Venn Diagram to brainstorm individuals career aspirations that could align with climate solutions.

Plankton in the Classroom (4th-12th grade)
This presentation is a combination of PowerPoint and screencasting of a microscope view of live plankton collected that morning. In this discussion we go over how plankton produces most of the oxygen we breathe, it is the backbone of the food chain, its importance to soaking up CO2, and the impact climate change is having on these sometimes microscopic life forms. What can we do to protect plankton communities in our local waterways?

Children's Book Reading
This presentation is a story read aloud paired with a drawing/writing exercise adapted for your classroom development level and goals. We have multiple book titles to choose from including "The Lorax", "Little Turtle and the Changing Sea", and "Alba and the Ocean Cleanup: A Story About Saving Our Oceans". Drawing and writing activities can include but are not limited to eye spy, letter writing to a local expert or elected official, or drawing a vision of the future we want to see.

HOW DO I SCHEDULE A WORKSHOP?

- Send an email to climatelearning@stockton.edu to indicate your interest and select a topic. You will be contacted to schedule a date/time that works for your class and the instructor.
- You will receive an instructional handout in order to prepare your students for the event.

TECHNICAL REQUIREMENTS

- Internet Access in Your Classroom
- Projection System/Speakers
- Webcam to interact with the facilitator

Visit the project website at
https://www.stockton.edu/ettc/climate.html

This project is funded by the New Jersey Department of Education.

Climate Change Learning Collaborative
STOCKTON UNIVERSITY
K-12 Education