

PEEC Into the Classroom: Virtual Curriculum via Zoom (1 hour per class)

“Water Quality Time”

What’s in your water? Students will learn about different bodies of water and the creatures living there, followed by a simple, at-home experiment on water acidity.

- Pre-Lesson Assignment: Prepare cabbage juice experiment for learning pH
- Introduction to Water Quality & Cabbage Juice pH Experiment (15 minutes)
- Meet the Macroinvertebrates Live Stream Q&A (30 minutes)
- Meet an Amphibian & Wrap-up (15 minutes)

“What’s in Your Watershed”

Explore where water goes through our EnviroScope demonstration and supporting exploration of storm water management on-site.

- Pre-Lesson Assignment: Neighborhood Watershed Worksheet
- Introduction to Watersheds (10minutes)
- Enviroscope Demonstration (30 minutes)
- Discussion on Neighborhood Watersheds & Wrap-Up (20 minutes)

“Watershed & Water Quality”

A hybrid course that combines the exploration of a live EnviroScope demonstration with the highlights of macroinvertebrates commonly found in waterways.

“Plant Life”

Students will explore plant life around their homes, from common houseplants to backyard weeds. Students will to improve observation skills of monocots and dicots, learn common plant parts and function and gain appreciation for commonly overlooked species.

- Pre-assignment:
- Introduction to Plant Anatomy and Monocots vs. Dicots (20 minutes)
- Seed and Plant Anatomy (20 minutes)
- Backyard Plant ID & Wrap-Up (20 minutes)

“Seasonal Survival”

Explore animal strategies of survival for winter. Would your students survive the challenge? Learn how our everyday forest mammals and reptiles cope with the cold.

- Pre-Lesson Assignment: Animal Nests Worksheet
- Introduction to Survival Strategies (15 minutes)
- Mammal Survival with Animal Artifacts (30 minutes)
- Reptiles in Winter & Wrap-up (15 minutes)



“Digging Geology”

There’s more to rocks than meets the eye. Learn the importance of minerals in our lives and how to geologists classify them through hands-on, empirical methods.

- Pre-Assignment: At-Home Mineral Scavenger Hunt worksheet
- Introduction to Rocks vs. Minerals with Fossils (15mins)
- Mineral Identification Q&A with Scavenger Hunt results (40 minutes)
- Wrap-Up (5 minutes)

“Herpetology”

Meet the animal ambassadors of PEEC in this creature-focused presentation on cold-blooded amphibians and reptiles. Discuss why people have an aversion to these “crawling” critters and learn their importance in our environment

- Pre-Assignment: Reptile Reflection Worksheet
- Intro to Herpetofauna (5 minutes)
- Amphibian and Reptile Identification (45 minutes)
- Wrap-Up Discussion of Threats and Stigma (10 minutes)

“Trees & Leaves”

Do you know the trees in your backyard? We will review the parts of a tree and then discuss the various adaptations trees have in temperate forests, including how they survive winter. Then we will show and tell our backyard tree species!

- Pre-Assignment: Tree and Leaf Exploration Worksheet
- Introduction to Parts of a Tree and Adaptations (25 minutes)
- Common Tree Identification (25 minutes)
- Wrap-Up Identification Show & Tell (10 minutes)

“Plant & Animal Survival”

A hybrid course of winter plant and animal adaptations that combine the best of Native Plant Life and Seasonal Survival.



“Bugs & Beyond”

What really is a “bug” and why do they bother us? Explore the anatomy of insects, their life cycles and the importance of insects to humans. We will also cover the differences between insects and other arthropods like spiders and ticks.

- Pre-Assignment: Bugs Around the House Exploration Worksheet
- Introduction to Entomology, Insects and Lifecycle (20 minutes)
- Human and “Bugs” Discussion on pests, pollinators and decomposers (20 minutes)
- Wrap-up: Bugs but not Insects- Defining arachnids and other arthropods (20 minutes)

“Bird Bonanza”

Our fine feathered friends are seen throughout the year, but sometimes it is difficult to see them up close. Students will get a personal look at our bird artifacts to unravel the secrets of flight and the mysteries of bird identification in the field.

- Pre-Assignment: Backyard Bird Hunt Worksheet
- Introduction to Ornithology & Bird Anatomy (15 minutes)
- Native Birds and Adaptations (30 minutes)
- Backyard Bird ID and Songs. Wrap-up (15 minutes)

