

Department: Science

Course Name: Science 5 - Ecology

Course Description:

Fifth Grade Science is designed to encourage and excite students to explore and engage in the natural world around them. Students will study Earth science topics related to Earth's structure, geologic changes, weather and climate, and water and other resources. Another focus of the course is modeled after the Virginia Master Naturalist program, which allows students to become naturalists, studying the unique ecological systems around them. Students will be getting their hands dirty, observing, experimenting, and analyzing Virginia's vast ecosystems, ultimately creating an extensive field guide to the world around them. Apps and online resources such as Go Formative, Nearpod, and Flipgrid have been implemented into the course in the classroom. These resources, along with zoom, also provide the capacity for online learning if necessary.

Content:

Methods of Science
Mapping Earth
Earth's Structure
Minerals
Rocks
Weathering and Soil
Erosion and Deposition
Geologic Changes
Plate Tectonics
Earth Dynamics
Earthquakes and Volcanoes
Clues to Earth's Past
Geologic Time
Weather and Climate
Earth's Atmosphere
Water and Other Resources
Earth's Water
Oceans
Freshwater
Natural Resources
Virginia's Natural World

Skills:

Identify organisms using a key
Construct and use a field guide
Develop an understanding of scientific principles and methods
Use basic laboratory and field equipment
Practice measurement skills and conversions
Construct lab reports using a standard lab report format
Practice scientific writing skills
Use two facts, ideas, or events to discover a third fact or idea
Utilize learning management system

Text and Resources:

McGraw Hill Earth and Space iScience Student Edition
Various field guides
Jr. Master Naturalist workbook series
Verified websites
Guest lectures

Methods of Instruction:

Field work
Lab work
Projects
Group collaboration
Science apps
Lectures
Interactive presentations and apps

Methods of Evaluation:

Labs
Demonstration Analysis
Tests
Quizzes
Homework
Individual and Group Work
Observations
Online assessments

