

Course Description:

In First Grade Science, students in this course will complete projects that are designed to allow for exploration and discovery. Students observe their surroundings and through observations of the natural world conduct inquiries into topics related to their healthy development.

Module	Lesson Title	Objectives
Module 1: Scientists	Think Like a Scientist	<ul style="list-style-type: none"> Understand how scientists view the world. Participate in science activities safely. Identify the difference between facts and opinions in science.
	Act Like a Scientist	<ul style="list-style-type: none"> Ask scientific questions. Investigate a scientific question. See themselves as scientists.
Module 2: Seasons and Patterns	Seasons and Daylight Exploration	<ul style="list-style-type: none"> Set up a nature corner showing the four seasons. Complete a leaf printing. Draw pictures representing the different seasons. Continue observing the phases of the moon. Compare how the time of year is related to the amount of daylight.
	Patterns and the Moon	<ul style="list-style-type: none"> Identify moon phases, Identify patterns of summer.
Module 3: Nature and Soil	Observing and Classifying Nature	<ul style="list-style-type: none"> Use simple tools to observe nature. Classify and arrange objects of nature.
	Explore Soil	<ul style="list-style-type: none"> Observe and compare different types of soil. Explain the importance of soil for growth.
Module 4: Seeds and Living Things	Role of Seeds	<ul style="list-style-type: none"> Explain the role seeds play in the life of a plant. Draw a picture of a plant with its root system. Collect seeds.

Module	Lesson Title	Objectives
	Living and Nonliving	<ul style="list-style-type: none"> Differentiate between living and nonliving things. Classify living and nonliving things.
Module 5: Animals	Observing Animal Tracks	<ul style="list-style-type: none"> Describe the characteristics of animal tracks found in nature or in books. Describe the types of animal tracks that can be found where students live. Draw and label tracks.
	Biomimicry	<ul style="list-style-type: none"> Design a piece of playground equipment that is safe for kids and would blend into the environment. Use ideas from nature to solve a problem.
Module 6: Birds	Birds in Nature	<ul style="list-style-type: none"> Describe the birds that live in your area. Draw pictorial representations of birds. Describe bird behavior during the seasons.
	Flightless Birds	<ul style="list-style-type: none"> Describe the characteristics of birds. Identify unique characteristics of flightless birds.
Module 7: Basic Needs	Basic Needs of Animals	<ul style="list-style-type: none"> Consider animals' basic needs of food, water, air, and shelter. Observe animals in nature. Draw animals.
	Human Needs	<ul style="list-style-type: none"> Identify what humans need to survive and thrive Create a book to demonstrate how humans survive and thrive.
Module 8: Weather Charts and Light	Making a Weather Chart	<ul style="list-style-type: none"> Observe weather. Make connections between weather and people's lives. Make a wind vane and chart weather observations for the week.
	Light	<ul style="list-style-type: none"> Define light and explain why it is important. Make observations that objects in darkness can be seen only when illuminated. Explore light and shadow.

Module	Lesson Title	Objectives
Module 9: Clouds	Cloud Formation	<ul style="list-style-type: none"> • Observe cloud formations. • Identify different cloud formations.
	Rain Clouds	<ul style="list-style-type: none"> • Observe how clouds are formed by making a cloud in a jar. • Explain how clouds are an important part of the water cycle.
Module 10: Adaptation and Change	Animals and Weather Change	<ul style="list-style-type: none"> • Observe the sensory experience of animals as they react to changes in the weather. • Illustrate how animals prepare for winter months.
	How Humans Adapt	<ul style="list-style-type: none"> • Explain ways humans adapt to changing seasons.
Module 11: Living with Nature	Living with Nature	<ul style="list-style-type: none"> • Observe the ways humans and nature support each other. • Illustrate your observations about humans and nature.
	Living with Nature II	<ul style="list-style-type: none"> • Illustrate helpful and harmful ways humans interact with nature. • Identify ways to help preserve the beauty of nature.
Module 12: Adaptation and Offspring	Animal Adaptation and Offspring	<ul style="list-style-type: none"> • Identify how local animals adapt to seasonal changes. • Illustrate animal adaptations.
	Animals and Their Offspring	<ul style="list-style-type: none"> • Match common animals with their offspring
Module 13: Winter and Temperature	Winter and Snow Formation	<ul style="list-style-type: none"> • Identify various winter activities around the world. • Illustrate winter activities. • Describe how snow is made.

Module	Lesson Title	Objectives
	Hot and Cold	<ul style="list-style-type: none"> Sort items based on temperature (hot and cold). Describe the difference between melting and freezing. Observe how heat transfers from one object to another.
Module 14: Trees and Investigations	Comparing Tree Types	<ul style="list-style-type: none"> Recognize deciduous and coniferous trees. Compare deciduous and coniferous trees.
	Investigations	<ul style="list-style-type: none"> Observe how changing a question changes an investigation/experiment. Design an experiment to answer a question.
Module 15: Responses and Light	Wild Animal Responses	<ul style="list-style-type: none"> Observe wild animals and how they respond to the seasons. Create a collage to demonstrate how animals adapt to the different seasons.
	Light and Dark	<ul style="list-style-type: none"> Describe how light travels. Conduct investigations to determine the effect of placing objects made with different material in the path of a beam of light.
Module 16: Hibernation and Migration	Concept of Hibernation	<ul style="list-style-type: none"> Describe the idea of hibernation. Draw a picture representing hibernation. Compare human needs in winter to needs of hibernating animals.
	Migration	<ul style="list-style-type: none"> Explain why some animals migrate and others do not. Describe the connection between animal migration and survival.
Module 17: Erosion and Water	Concept of Erosion	<ul style="list-style-type: none"> Describe the forces that cause erosion. Illustrate the concept of erosion.
	Bodies of Water	<ul style="list-style-type: none"> Describe the difference between salt water and fresh water. Identify different bodies of water and what lives in them. List basic water-safety rules.

Module	Lesson Title	Objectives
Module 18: Constellations and the Sun	Constellations in the Night Sky	<ul style="list-style-type: none"> • Observe the night sky. • Locate and identify various constellations. • Illustrate constellations.
	The Sun, Our Closest Star	<ul style="list-style-type: none"> • Explain the reason for night and day. • Identify characteristics of the Sun.