



Highland Lakes Camp Outdoor Learning Center Academic Course Overview

Archery- The history of archery, terms, and proper technique are the focus of the class. Students will practice proper technique and accuracy.

Fishing- This class will focus on the skills and techniques of fishing as well as safety. The class will include visual identification of fish along with weighing and measuring the catch. Most of the class time will be spent fishing.

Nature of Energy – The identification of the types of energy and the practical application of energy is the focus of this class. Using such tools as the Van de Graff generator, solar oven, atom models, potato clock, and solar car, students will have hands on experience with the nature of energy.

Nature Hike- Walking along the banks of Lake Travis, students discover animal evidence as well as a number of trees, cacti, and flowers native to our area. Students will also learn to identify these based on specific characteristics.

Orienteering- Students are taught the parts of a compass and how to use it. Students will follow a series of coordinates to find treasures or complete challenges.

Physics Primer- The purpose of this class is to provide a fast-paced entertaining introduction to physics and the Scientific Method. Group experiments will demonstrate different aspects and application of physics using such tools as “magic tricks” of physics, and the gyroscope, The class will focus on Newton’s Laws of Motion.

Pioneer Living- A student favorite, pioneer living is a lesson in the history of Mudd, Texas. Our outdoor classroom is located on the site of the former settlement. Students will learn about old wagon trails, tools of survival, and Dutch Oven cooking. Students will mix and measure ingredients into a Dutch Oven, cook their creation over burning coals, and enjoy the dessert they created at the end of the class.

Soil Forensics – Students will discover what types of soils grow the best plants by testing for different levels of PH, nitrogen, phosphorous, and potassium.

The Secret Life of Trees - Students will study the inside of a tree to determine age, weather conditions, and even human involvement. The class will focus on photosynthesis and survival of the tree as well as how trees impact our daily lives. At the end of the class, students will make nametags out of tree cookies.

Weather/Climate –This class is a study of various aspects of weather and climate including experiments to demonstrate such things as atmospheric pressure and humidity. Students will gain an

understanding of how ocean currents impact weather and climates around the world.

Worm Composting- Students learn the role of worms as decomposers. The students will be given the opportunity to examine up close the qualities of a worm. Students will document how worms react to sun light and water as well as observe the effect “worm tea” has on plants.