



## Highland Lakes Camp Outdoor Learning Center Adventure Course Overview

**Archery-** A brief history of archery, terms, proper technique, and safety are the focus of the class. Students will have an opportunity to practice archery skills in a safe and carefully supervised outdoor classroom.

**Fishing-** This class will focus on the skills and techniques of fishing, fish habitats, environmental responsibilities, and safety. The class will include visual identification of several species of fish. 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 tools such 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, and along the nature trail, students discover animal evidence as well as a number of trees, cacti, and flowers native to our area. Students will learn to identify plants and animal evidence based on observation of specific characteristics.

**Orienteering-** Students will earn basic orienteering skills, and 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 takes the students back to the early 1800’s. Our outdoor classroom is located on the site of the former settlement of Mudd, Texas. 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. In addition, students will love a mystery based on the soil forensic evidence.

**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 name-tags 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. They will also explore how worms might impact the environment and economy.