

# CLASS DESCRIPTIONS

## LIMNOLOGY

Become immersed in Limnology, the study of inland waters. Visit the turtle room in our Ethology Lab and study learned behaviors and inherited traits. Hold an actual Red Eared Slider from our turtle touch tank. Take an incredible journey as a water molecule and learn about the water cycle. Become a Limnologist and conduct a water quality analysis in our wet lab using actual scientific equipment. Discover whether the claims on the labels of a fish food producer are accurate by testing them at our test pond. Visit Sky Ranch's Adventure Pond to collect and identify various types of macroinvertebrates.

## EXPEDITIONS

Travel to Sky Ranch Expedition's base camp to observe reptiles, mammals, and arthropods. Determine the difference between learned behaviors and inherited traits. Discover the meaning of a habitat and a niche. Learn the structures and functions of various animal parts. Compare and contrast compost samples and collect data on the stages of decomposition and study the carbon and nitrogen cycles. See the impact of man on the environment, and learn about recycling and repurposing.

## FORCES IN NATURE

Explore the Forces in Nature which shape our environment. Learn about gravity and friction while using Sky Ranch's state-of-the-art potato head zip line. Discover gases and pressure by building and launching air rockets. Take a nature hike to observe the rock cycle and the effects of weathering agents, erosion, and deposition on the landscape.

## AMERICAN INDIANS

Join Renè-Robert Cavalier, Sieur de La Salle, as the first French explorer to enter East Texas. Meet woodland and plains Indians and learn how they lived before the influence of European culture. Compare and contrast the structure of a tipi and a wigwam. Taste samples of foods eaten by many American Indian tribes. Test your hunting prowess with a bow and arrow. Hold tools crafted with bone, stone and sinew. Make a bead necklace or bracelet and learn how paints were made. Finish the journey by earning your tribal name.

## RANCH LIFE

Experience life on a real Texas ranch! Spend time in the organic garden discovering natural farming methods. Interact with common ranch animals in our petting zoo. Ride a horse in an actual trail ride while learning the history of the Texas cattle industry. Discover the Texas cowboy's day-to-day challenges as you pack a saddle bag with supplies and learn about famous cattle trails and the importance of barbed wire.

**(Upgraded charge of \$6 per person)**

## TEXAS HISTORY

Travel back to the year 1836 and relive events during the Texas Revolution! You will meet Major General Sam Houston and survivor Susanna Dickinson as they come together in Gonzales to discuss the fall of the Alamo and prepare for the Runaway Scrape. Join Sam Houston as he conducts reconnaissance, sneak through a forest on a scout training mission to locate nearby threats, unload on targets using slingshots in a thrilling Texas Ranger marksmanship exercise, engage with a U.S. salesman in “purchasing” a variety of goods, develop a livestock brand, and learn how to lasso.

## ORIENTEERING

Learn basic compass skills including the difference between Magnetic North and True North. Become a field ecologist and conduct a plot survey. Set a 10 meter x 10 meter plot and identify each tree species. Using a GPS unit, determine the coordinates of your plot. Measure the tree diameter and learn what tree rings can teach us concerning the age of a tree and the history of the ecosystem. Using your sample data, construct a mathematical model to estimate the number of trees in Sky Forest.

## FISHING

Discover the fun of fishing while learning basic fishing skills, including hook safety, knot-tying, casting, and bait selection. Identify fish species located in East Texas such as bass, catfish, sunfish, and crappie. Learn about predator/prey relationships, food web, learned and inherited traits.

## CHALLENGES

Learn the value of good communication, trust, and cooperation in an atmosphere fostering creativity, problem solving, and experiential learning. Be a part of a team to solve problems and accomplish goals. Put critical thinking skills into action.