

Fernbrook Farms Environmental Education Center 2023 Spring Upper Level Homeschool Semester

The Animal Kingdom

Ages 12-14 years old (students must be 12 years old by the start of classes)

Class Sessions: Tuesdays 9:30am-11:30am, Tuesdays 1:00pm-3:00pm, Thursdays 9:30am-11:30am, OR Thursdays 1:00pm-3:00pm

This semester will be devoted to learning about the animals that inhabit the earth. Though we will focus on the animals found around Fernbrook for comparative purposes, we will touch on other animals of the world as well. This series will cover animal adaptations, and some classes will include group dissection experiences. Students will be able to choose the level of interaction that they want to have with the specimen but are encouraged to participate. The dissection activities are a great way for the students to learn about some of the internal organs that allow specific animals to live the way they do.

Sincerely, Ms. Patty Gurgul Patty@fernbrookfarms.com March 28th or 30th

An Introduction the Linnaean System of Classification

Since 1735, scientists have used this method of categorizing and classifying flora and fauna. During this class the students will learn the different levels of classification as well as how to use a dichotomous key and discover where we, *Homo sapiens*, fall in this order.

Phylum Annelida, Class Oligochaeta

Now that's a mouthful, we are talking about worms! The students will have an in-depth experiential learning experience as they engage in a worm dissection to explore the unique muscular system and internal structure of our soil creators.

Phylum Arthropoda Class Insects & Arachnids

Like reptiles and amphibians, insects and spiders are often studied together. The classes will explore this huge group of unique animals that make up most of the animal kingdom. After capturing some, we will test what we've learned and classify them according to the Linnaean System.

Phylum Arthropoda II Class Myriapods and Crustaceans April 18th or 20th

The class will start out on a hike to hunt for some Myriapods (millipedes and centipedes) so that we can examine the characteristics of this class. Then we will be looking at some Crustaceans which are also Arthropods, and we'll discover why they are also in this group.

Phylum Chordata

Animals with backbones make up just a small portion of animals that live on earth. We will spend the next four weeks focused on this diverse group.

<u>Class Mammalia</u>

April 25th or 27th This group consists of both the largest (blue whale) and smallest (bumblebee bat) vertebrates that live on earth. Though most have four legs, mammals have adapted to living in the water, in trees, on land, and on two legs. We will take a close look at this diverse group and learn how their adaptations aid them. Students will also be dissecting a sheep's eye.

Class Aves

Birds have many adaptations that enable them to not only fly but maneuver, hunt, swim, dive, and feed. We will take a close look at our feathered friends and explore their many adaptations that make them unique.

Class Amphibian and Reptiles

These two classes of chordates are very different, but often lumped together. We will explore and investigate their differences and similarities as we learn which ones make Fernbrook home. *Prepare to get wet*

Class Osteichthyes

Species

Genus

Family

Order

Class

Phylum

Kingdom

Domain

Life

May 16th or 18th Hard to say but these are just the bony fishes. We will dive into this class and discover the diversity of the fishes through hands-on activities and dissections. *Prepare to get wet*

May 2nd or 4th

May 9th or 11th

April 4th or 6th

April 11th or 13th

