

Fernbrook Farms Environmental Education Center **2019** Winter Upper Level Homeschool Semester



Inquiry and Engineering on the Farm

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

<u>Class Sessions:</u> Tuesdays 9:30am-11:30am, Thursdays 9:30am-11:30am, OR Thursdays 1:30pm-3:30pm

Inquiry and Engineering on the Farm is going to be an exciting hands-on program for the Winter Semester this year. Throughout the semester the students will be designing their own experiments and building various devices with nature in mind. Classes are subject to change based on environmental factors. Students should always dress for the weather. We will be mostly indoors, but with limited heat.

Ms. Patty Gurgul

Meal Worm Experiment

January 15th or 17th

During this first week of the semester the students will be setting up experiments and learning to control variables. The students will also be responsible for setting up an experiment that they will be observing for the remaining 7 weeks of the semester.

Build a Bird's Nest

January 22nd or 24th

The students will spend the first part of class examining different types of bird nests. The students will then design and build a nest using materials they will "purchase" from "Miss Patty's Nest Store". The group will be testing their completed nests to see which is the strongest.

Wiggling Worms

January 29th or 31st

This class will focus on red wiggler compost worms. During this class the students will work to design individual experiments to investigate worm preferences.

Biomimicry I

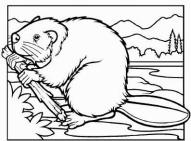
February 5th or 7th

Students will first have an introduction to biomimicry. They will then have to design and create a seed dispersal method that mimics a method found in nature.

Crash Car Eggs

February 12th or 14th

During this class each student will receive an "egg person", and their mission will be to create a safety device that will keep their "egg person" safe during a simulated car crash test.



Beaver Dams

February 19th or 21st

A beaver's ability to shape their environment is beyond impressive. During this class the students will be searching for the trees the beavers have cut down and also search for their dam. After examining the intricate formation of the beaver dam the students will construct their own mini dams and test its strength

Biomimicry II

February 26th or 28th

The students will draw inspiration from nature in order to design and create a "grabbing tool". The students will then test their creations at the end of class to see how they work.

How Smart is a Chicken?

March 5th or 7th

In the final class, the students will be designing an experiment involving a chicken (or two). As a class we will test the chickens to see if they can run races, complete a maze, or find hidden food. The possibilities that the students may come up with are endless.



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Name of Child		Age Date of Birth		Male	Female	
Address		City State				
Zip Code		Current Grade Level				
Parent's Name		Parent's Name				
Home Phone#	Work#	Home Phone#	Wor	Work#		
Email		Email				
Cell#		Cell#				
Employer		Employer				
Emergency Contact (Name, Pl	none #, Relationship)					
□ Please indicate i	8-week Semester runs: Confidential Medical Information information about the registrant(s) t the instructors should know al	on & Required Emergored regarding medication	gency In	formation gies, physical di	sabilities or	
and be transported to responsible for the c		nal, emergency persor □ YES □ NO				
_	n rms Environmental Education Cer romotional or other legitimate reas	-		ographs or video	footage of my	
Parent/Guardian		Date signed _	Date signed			
Registration Fee session registration	- \$139.00 for entire seme	<mark>ster</mark> *Discounts ava	ilable: si	bling, CSA men	ıber, and multi-	
	S PAYABLE TO: Environmental Education Center	MAIL REGIST FFEEC-ULHS	FRATIO I	N TO:		
		P.O. BOX 228				

Bordentown, NJ 08505

REGISTER ONLINE:

On our website at www.FernbrookFarms.com