Cape Fear Botanical Garden Classroom Program Guide 2019-2020

Classroom programs match various objectives within the North Carolina Essential Standards for Science and other subjects.

Classroom Programs: Elementary School

The Cape Fear Botanical Garden is proud to offer free environmental education classroom programs for Cumberland County Public Schools. For these programs, a trained environmental educator will come to your classroom. Our six classroom programs are adjusted for specific grade levels and meet grade level learning objectives based on NC Essential Science Standards. All class room programs are 30 min. long, with an optional 30 min. extension.

How Much Does it Cost?

The 30 minute classroom programs are **free** for Cumberland County public schools, while the 30 minute extension program is **\$1.50 per student** to cover the cost of materials.

Option One: Classroom Program Free (30 students max per class) Approx. 30 min

Option Two: Classroom Program + Extension

\$1.50 per student (30 students max per class) Approx. 1 hour

WALKING TOURS

Classes for Each Grade Level

K: Wacky Weather, Transformations (Life Cycle), Seeds and Sprouts, Remarkable Reptiles
1st: Transformations (Life Cycles), Seeds and Sprouts, Remarkable Reptiles, Soil Science
2nd: Wacky Weather, Transformations (Life Cycles), Seeds and Sprouts, Remarkable Reptiles
3rd: Seeds and Sprouts, Soil Science
4th: Remarkable Reptiles, Animal Detectives
5th: Wacky Weather, Animal Detectives
Special Needs: Animal Detectives

Scheduling a Program

To schedule a program, please contact Barbara Goldentyer, CFBG Education Manager, by email at <u>bgoldentyer@capefearbg.org</u>. Please allow for plenty of advanced notice as programs are offered when staff are available on a first-come, first-serve basis. We are particularly busy in the spring months.

Can we combine classroom programs with a field trip?

Absolutely! In fact, we offer a 20% discount if you schedule a field trip within 2 months of a classroom program. We also offer Exploration Field Trips only available to groups who have attended a classroom program. Explorations are designed to extend the learning students do during classroom trips with in-depth outdoor adventures.



CLASSROOM PROGRAMS 2019-2020



Wacky Weather

Grades: K, 2nd, 5th

Learn how weather forms with demonstrations of extreme weather events, including tornados, lightening, and storm clouds. This class also covers what weather is, understanding weather patterns, and how people predict the weather. Kindergarteners sort weather pictures by season, while 2nd and 5th graders examine tools for measuring the weather. The optional half hour extension allows students to make their own wind vanes.

Transformations (Life Cycles) Grades: K – 2nd

An introduction to the incredible wonders of metamorphosis, this class will get students excited about learning how frogs grow. The class includes a short story book, a puppet skit, a hands-on life cycle activity, and an opportunity for students to take home their own "frog eggs". The optional half hour extension allows students to explore butterflies as well, including using a magnifying glass to look at preserved specimens. **Note: The 1st grade and kindergarten versions of this lesson plan involve an activity about what a frog needs to survive in place of the story book.**

Seeds and Sprouts Grades: K – 3rd

Students will learn everything plants need to grow, how a seed works, and the parts of a plant. The class starts with a fun garden story. Then each student will have the opportunity to dissect his or her own seed. Finally, students will make rubbings of different plants and flowers, while older students can label the parts of the plant. The optional half hour extension allows students to rotate through plant activity stations, including the opportunity to plant their own seeds.

Remarkable Reptiles Grades: 4th – 5th

NOTE: Involves 2 live reptiles!

Students will learn what makes an animal a reptile and have the opportunity to meet two live reptiles. Younger students will focus on what reptiles need to live and how they move, while older students learn reptile adaptations and their roles in their native ecosystems. The optional half hour extension allows students to rotate through our reptile activity stations to try "shedding", examine snake skin up close, test their own abilities against a reptile's, and make reptile rubbings featuring reptiles from around the world.

Animal Detectives

Grades: 4th – 5th, special needs

This program introduces students to the many types of animal signs, such as tracks and scat,

which allow us to gather information about animals we can't actually see. Many mammals are nocturnal and animal signs are often the easiest way to know when these animals have been around. The class includes a grade specific introduction to the most common mammals in our area, followed by 6 animal sign stations, which allow students to match animal tracks, compare scat replicas, examine a real nest, and use all their senses to explore a wide variety of animal signs. The optional half hour extension allows students to create their own animal tracks to take home. Note: This class is highly adaptable and typically a great option for special needs or inclusion groups.

Soil Science

Grades: 1st and 3rd

Students will learn the different components of soil and how they help plants grow. Students will feel the differences between clay, silt, and sand, explore soil layers with sediment jars, and play a game modeling the passage of water through soil. 1st graders also "sort" soil into its various components, while 3rd graders integrate a scientific use of fractions to create a pie chart displaying the different components of soil. The optional half hour extension allows students to take a real soil core from natural areas near their school and enjoy a delicious "dirt" pudding cup with all the layers of real soil. Note: Allergy restriction may prevent some students from participating in the edible "dirt" pudding activity. Please contact us for details.



Frequently Asked Questions

How do we book a classroom program?

Email Barbara Goldentyer, CFBG Education Manager, at <u>bgoldentyer@capefearbg.org</u> with your top 3 dates. Please allow plenty of advanced notice as programs are offered when staff are available on a first-come first-serve basis. We are particularly busy in the spring months and around holidays.

How do we pay? Full payment is due on the date of your program. You can pay with a check made out to the Cape Fear Botanical Garden or pay over the phone at 910-486-0221 if you wish to use a card.

How should my class prepare for the classroom

program? No preparation is required though teachers may wish to review basic vocabulary with students before hand. Most important is that the students be prepared to listen, enjoy, and participate in the program.

Can we book a classroom program if we're not a public school? Absolutely! However you should be prepared to pay a fee for any materials used in the program. An estimate for this cost can be given when you're booking the program. Please call: 910-486-0221 ext. 43.

Will you do a program for our whole grade?

Each program is designed for one class of students to allow for hands-on activities and class participation. We are happy to have our instructors rotate through multiple classes in the same day. However, we are not prepared to conduct auditorium style programs.

Can your program be modified for students with special needs?

Yes! The Garden really enjoys teaching students with diverse abilities. Please let us know your group's needs and we will do everything possible to accommodate your students.

Can we combine our classroom program with a field trip? Absolutely! In fact, we offer a 20% discount if you schedule a field trip within 2 months of a classroom program. We also offer Exploration Field Trips only available to groups who have attended a classroom program. Explorations are designed to extend the learning students do during classroom trips with in-depth



outdoor adventures. Please see our Field Trip Guide for more information!

Can we book a classroom program for another grade level?

We may be able to accommodate requests for classroom programs offered to other grade levels. For example, if your third grade is learning about reptiles we can adjust the reptile class for your grade level. However, grade level adjusted programs may not meet National Science Standards and not all programs are adjustable for all ages.

I have another question not addressed here.

Please contact Barbara Goldentyer, Environmental Education Manager at bgoldentyer@capefearbg.org or (910) 486-0221 x43.

Correlation to NC Essential Standards



Classroom Programs	К	1 st	2 nd	3 rd	4 th	5 th
Wacky Weather	K.E.1		2.E.1			5.E.1
Transformations (Life	K.L.1	1.L.1.1	2.L.1.1			
Cycles)			2.L.1.2			
Seeds and Sprouts	K.L.1.2	1.L.1.1	2.L.2.1	3.L.2.1		
				3.L.2.3		
Remarkable Reptiles	K.P.1.2	1.L.2.2	2.L.1		4.L.1.1	5.L.2.2
	K.L.1.2				4.L.1.2	
Animal Detectives					4.L.1.1	5.L.2.2
						5.L.2.3
Soil Science		1.E.2.2		3.L.2.4		