

Environmental Education Program Class Descriptions

Program Options	Program Day(s)	# of Day Classes included	# of Evening Classes included	Total # of Field Study Classes
1-day program	-Fridays <i>*varies with reservations</i>	1-3 day classes	0 evening classes	1-3 classes
2-day/1-night program	-Monday-Tuesday -Wednesday-Thursday -Thursday-Friday	3-5 day classes <i>*varies with schedule</i>	2 evening classes	5-7 classes
3-day/2-night program	-Monday-Wednesday -Wednesday-Friday	5 day classes	2 evening classes	7 classes
4-day/3-night program	-Sunday-Wednesday	6 day classes	2 evening classes	8 classes
4-day/3-night program	-Wednesday-Saturday	7 day classes	2 evening classes	9 classes
5-day/4-night program	-Monday-Friday	10 day classes	4 evening classes	14 classes

Day Classes: 2-hours per class

1. BEACH ECOLOGY

Introduction to coastal Georgia's beaches.

Topics include: Zones of the beach, barrier islands, biotic and abiotic factors, erosion and deposition/accretion.

Methods: Students apply what they learn by going to the beach and participating in hands-on activities at the beach.

Water Rules: Students will be allowed to go ankle deep in water if weather, water conditions and instructors permit.

What to Wear: Clothes and shoes (sandals, water shoes, close-toed shoes) that can get wet and sandy are strongly suggested. Otherwise, plan to dress for the season with comfortable, quick-dry clothing, layers, sunscreen and/or bug spray.

2. MARSH ECOLOGY

Introduction to Georgia's salt marshes.

Topics include: Plankton identification, tides, functions of wetlands and zones of the marsh.

Methods: Students apply what they learn by going to the marsh and participating in hands-on activities at the marsh.

What to Wear: Closed-toed shoes are required, preferably rain boots. Boots can also be borrowed from our boot wall on-site. Clothes and shoes that can get muddy and wet are strongly suggested.

3. MARITIME FOREST ECOLOGY

Introduction to Georgia's maritime forests and barrier island ecology.

Topics include: Zones of a coastal maritime forest, succession, "FBI"-fungus, bacteria and insects and identifying species.

Methods: Students will visit a maritime forest to identify different species and their roles in an island ecosystem.

Additional costs: Maritime forest trails are located at Fort Pulaski National Monument. Students are free and groups receive 1 free adult per 5 students. All additional adults are \$10.00 per adult.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing, bug spray and sunscreen.

4. COASTAL CRITTERS

Introduction to a combination of native reptiles and invertebrates of the Southeast.

Methods: Students will learn about coastal reptiles, invertebrates and have an opportunity to observe and touch our environmental education animals and specimens.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

Additional Info: This class cannot be taken with Herpetology and/or Invertebrates because this class is the combination option of the 2 classes with 1-hour of each class.

5. HERPETOLOGY

Introduction to reptiles and amphibians of the Southeast

Topics include: Characteristics and adaptations of reptiles and amphibians, venomous, poisonous and native vs nonnative.

Methods: Students will learn about reptiles, observe and touch our environmental education animals.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

6. INVERTEBRATES

Introduction to marine invertebrates.

Age minimum: 4th Grade

Topics and activities include: Taxonomy, invertebrates vs. vertebrates, marine phylum's, belly biology (using dip nets), discovery tanks and an invertebrate microscope lab.

Methods: Students will get a chance to learn about, observe and touch invertebrate specimens during class.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

7. ORNITHOLOGY

Introduction to the study of birds.

Topics include: What is a bird, bird's beaks and their niches, parts of a bird, using binoculars and native bird species.

Methods: Students will learn how to use binoculars and go to the beach and marsh for "birding."

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

8. ORIENTEERING

Introduction to proper use of a compass and pacing technique.

Age Minimum: 4th Grade

Topics Include: Math skills and problem solving, parts and how to use a compass, GPS and how to find pace.

Methods: Students will calculate their pace and complete an interactive compass and/or GPS course at the center.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

9. POLLUTION SOLUTIONS

Introduction to marine debris in our oceans.

Topics include: Marine debris, microplastics, composting, the 3 R's, types of pollution, data collection and bioaccumulation.

Methods: Students will learn about different types of pollution, go to the beach and record their pollution findings. Burton staff will record student pollution data and submit results for the Ocean Conservancy.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

10. WETLAND MONITORING

Introduction to wetlands.

Age Minimum: 5th Grade

Topics include: Scientific method, wetland functions, chemical testing, water quality, eutrophication and data collection.

Methods: Students will perform physical and chemical tests, such as turbidity and temperature, pH, nitrates, phosphates, dissolved oxygen on Horsepen Tidal Creek. This data is collected and entered in the Georgia Adopt-A-Stream database.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

11. CHOOSIES

Methods: Instructors will lead activities at the beach for students to "choose" which activities they would like to participate in. Examples include but are not limited to; beaching combing, flying kites, shark teeth hunting, sports activities (volleyball, football, soccer, ultimate Frisbee, etc.), sandcastle building, seashell jewelry making, birding and fun!

Water rules: Students will only be allowed to go ankle deep in the water. Swimming is not permitted.

What to wear: Clothes and shoes (sandals with a back strap, water shoes or close-toed shoes) that can get wet and sandy are strongly suggested. Bathing suits must be worn underneath clothing.

12. SURF SLEUTH (SEINING)

Introduction to scientific data collection, fishing and team building.

Seasonal: Only offered April-October. If water or weather advisory, will do an alternative class.

Topics include: Data collection, what and how to use a seine net, what species can be found in the surf and parts of a fish.

Methods: Students will go to the beach and use a seine net to record sample species they discover in coastal Georgia's waters. Burton staff will record student data and results for the Georgia Department of Natural Resources (DNR).

Water rules: Students will only be allowed to go knee deep in the water.

What to wear: Required to wear shoes in the water. Clothes and shoes (sandals with a back strap, water shoes, close-toed shoes) that can get wet and sandy are strongly suggested. No Crocs allowed. Bathing suits must be worn under clothing.

13. SHARK DISSECTION

Introduction to dissection and fish anatomy.

Age Minimum: 4th Grade

Topics include: Marine vertebrates and fishes, why are sharks important and reasons to dissect.

Methods: Students will learn dissection procedures and how unique sharks are.

Additional Costs: \$3.50 per student

What to wear: Required closed toed shoes. Otherwise, comfortable clothing.

14. FORT PULASKI TOUR

Introduction to Georgia history and military history of Fort Pulaski.

Topics include: Military technology, Georgia history, Civil War and simple machines

Methods: Instructors will lead students on a historical walk inside and around the fort to discover simple machines, the Third Defense System Fort and life in the 1800's. Students will also learn about the Battle of Fort Pulaski on April 10th 1862.

Additional costs: Students are free and groups receive 1 free adult per 5 students. All additional adults are \$10.00 per adult.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing, bug spray and sunscreen.

Website: <https://www.nps.gov/fopu/index.htm>

15. TYBEE ISLAND LIGHTHOUSE TOUR

Introduction to Georgia history and architecture.

Topics include: Georgia history, Civil War, Great Depression, Tybee and Savannah history.

Methods: Students will climb to the top of the lighthouse, explore the lighthouse grounds and Fort Screven.

Additional costs: \$8.00 per person

What to wear: No backpacks allowed. Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

Website: <https://www.tybeelighthouse.org/>

16. DISCOVERY CRUISE

Introduction to trawling on a coastal tidal creek.

Methods: Students will learn about coastal ecology and also get to participate in a trawl!

Additional costs: \$11.00 per person and 20-person minimum. Alternatively, groups less than 20 can pay for 20 people.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

Website: <https://www.bullriver.com/>

17. DOLPHIN CRUISE

Introduction to coastal mammals and Tybee Island history.

Methods: Captain Derrick's Dolphin tour will cruise to the mouth of the Savannah River. Students will learn and see dolphins from the boat.

Additional costs: \$11.00 per person and 20-person minimum. Alternatively, groups less than 20 would pay for 20 people.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

Website: <http://tybeedolphinadventure.com/>



18. SEA KAYAK & STAND-UP PADDLE BOARDING TRIP

Introduction to teambuilding and coastal barrier island ecology.

Topics include: beach ecology, marsh ecology, maritime forest ecology, birding, coastal animals, teambuilding and more.

Methods: Sea Kayak Georgia will teach students how to kayak and stand-up paddle board in Tybee's intercostal waterways.

Additional costs: \$45.00 per person

What to wear: Shoes with heel straps or closed toed shoes and clothes that can get wet and sandy are strongly suggested. Otherwise, plan to dress for the season with comfortable, quick-dry clothing, layers, sunscreen and/or bug spray.

Website: <https://www.seakayakgeorgia.com/>

Evening Classes: 1-hour per class

1. NIGHTWALK / DUSKWALK

This is an introduction to the beach at dusk/night.

Seasonal: Due to sunset times, darkness levels will vary. Nightwalk is October-March and Duskwalk is April-September.

Topics include: Astronomy, nocturnal, crepuscular, diurnal, bioluminescent plankton, rods and cones, solo sit, sensory awareness and many more.

Methods: Students will participate in group activities while exploring the beach at dusk or night.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

2. CAMPFIRE SONGS SKITS & STORIES

Methods: Campfire is a fun-filled evening for the students. Burton staff will lead the students in campfire songs, skits, jokes, games and stories. Students have the opportunity to interact socially in an educational and entertaining setting.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

Please note: The last ten minutes of campfire can be designated for s'mores. Burton can only provide s'more sticks and wood so please supply the rest of s'more materials. Alternatively, s'mores can be done on the school led evening.

3. REPTILES

Introduction to native and non-native reptile species of the Southeast.

Methods: Students have an opportunity to view and touch our environmental education animals while learning about the native species of reptiles to Georgia and the Southeast.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

Additional info: This class cannot be selected if taking Coastal Critters or Herpetology as a day class.

4. SEA TURTLES

Introduction to the life cycle of sea turtles.

Topics include: Sea turtle life cycle, types of sea turtles, conservation, predators, artifacts and sea turtle facts.

Methods: Students will get to view our sea turtle, play sea turtle related games and learn how they can help sea turtles!

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.

5. SQUID DISSECTION

Introduction to dissections and marine invertebrates.

Topics include: External and internal anatomy, squid adaptations, squid life cycle, importance of squid and human uses.

Methods: Students will learn dissection procedures and how unique squids are. This is a great first dissection class.

What to wear: Required closed toed shoes. Otherwise, comfortable clothing.

Additional Costs: \$0.50 per student

6. ASTRONOMY

Introduction to astronomy.

Seasonal: Only offered from November-mid February due to sunset times.

Topics include: Stars, constellations, moon, planets, comets and other celestial matter outside of the Earth's atmosphere.

Methods: Students will participate in a "planet walk," learn the phases of the moon and stargaze from our dock.

What to wear: Shoes with heel straps or closed toed shoes. Otherwise, comfortable clothing.



School Led Evening Suggestions

Please note: This evening is typically the Tuesday or Thursday night during your trip from 6:30-9:30pm. To ensure a smooth evening, all equipment and facilities must be reserved on your class selection form. Groups should plan for 1-3 activities for your evening. Please also keep in mind that other groups on site may request the same activities. Refer to your schedule for your assigned times and day.

- Walk to 6th Street Beach
- Savannah Trip (you provide transportation)
- Campfire – we only provide wood, s'more's sticks and matches
- Free time outside (volley ball, basketball, 4-square, tether ball, etc.)
- Movie night
- Rec Hall Dance Party/Talent Show
- Volleyball or basketball tournament
- Burton 4-H Quiz Show (Jeopardy style! We provide you with supplies)
- Dinner out
- Walk to Ice Cream Shop (please call ahead)
- Thank you cards/posters to staff
- Science projects

School Led Day Suggestions

Please note: This day is typically the Sunday before arrival or the Wednesday, Friday or Saturday after your program and/or trip departure. The following are just suggestions if your group would like to experience more beyond our program in the Savannah and Tybee Island. To ensure a smooth day, please contact make reservations and plans in advance.

- Trip to Savannah and River Street
- Fort Pulaski Tour
- Tybee Island Lighthouse Tour
- Dolphin Cruise
- Discovery Cruise
- Trip to the Savannah Wildlife Refuge
- Juliet Low Gordon Birth House
- Sea kayak & paddle boarding
- Ships of the Sea Maritime Museum
- Mighty Eighth Air Force Museum