

Environmental Education Residential Program Class Descriptions

Residential (overnight) Environmental Education class descriptions are listed alphabetically and divided into Day Classes (2hrs) and Evening Classes (1hr). All classes are taught by Burton 4-H staff except for vendor classes which are Dolphin Cruise, Discovery Cruise and, Sea Kayak Trips. For vendor classes, please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location. Please note additional costs and reservations. To guarantee vendor classes and supplies, please submit reservation request a *minimum of 10 weeks prior to trip*.

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, dune stabilization, identifying native plant and animal species, and beachcombing.

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

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, crocs, closed-toe 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. Students may be allowed to take shoes off at beach.

Additional Info: 14-passenger minibus transportation are only vehicles allowed due to Tybee Island parking limits. Burton staff will organize your transportation with 13:1 or 12:2 student to adult ratio teaching groups.

2. BIRDS (ORINTHOLOGY)

Introduction to the study of birds.

Topics include: What is a bird, characteristics of birds, beak and bill adaptations, niches, migration, ecological roles, using binoculars, field guides, and identifying native bird species.

Methods: Students will learn about bird anatomy and adaptations, species identification, and how to use ID guides and binoculars. Part of the class will take place at the beach and salt marsh for "birding."

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

3. CHOOSIES

Introduction to guided beach activities and creating student connections.

Methods: Students "choose" activities they would like to participate that are being offered by Burton staff. Examples include but are not limited to beach combing, sports activities (volleyball, touch football, soccer, ultimate Frisbee, etc.), sandcastle building, seashell jewelry making, and more!

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

What to wear: Clothes and shoes (sandals with a back strap, water shoes or closed-toe shoes) that can get wet and sandy are strongly suggested. Clothing must be worn over bathing suits.

4. COASTAL CRITTERS

Introduction to a combination of reptiles, fishes and invertebrates.

Topics include: Taxonomy, marine phyla, discovery tanks, reptile and amphibian identification

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

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

Additional Info: This is a combination class and not available if taking Reptiles and/or Marine Invertebrates.

5. COMMUNITY SERVICE

Introduction to opportunities to engage with the community and/or natural environment to continue the Georgia 4-H motto to “make the best better!”

Methods: Instructors will lead students thorough hands-on opportunities intended to benefit visiting guests of Burton 4-H Center and Tybee Island. Opportunities include but are not limited to landscaping, weeding, planting native plants, picking up pollution at local beaches and/or salt marshes and more. Needs will be determined before arrival by full-time staff at the Burton 4-H Center.

What to wear: Closed-toed shoes and comfortable clothing to perform manual labor tasks.

6. FORT PULASKI TOUR

Introduction to Georgia history and military operations at Fort Pulaski.

Topics include: History of military technology, Georgia history, Civil War, and simple machines.

Methods: Instructors will lead students on a historical tour inside and around the fort to discover uses of simple machines, the Third Defense Fort System, life in the 1800’s, and Battle of Fort Pulaski on April 10th 1862.

Additional costs & reservations: Students and Adults are FREE.

Transportation: Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.

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

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

7. MARINE INVERTEBRATES

Introduction to marine invertebrates.

Age minimum: 4th Grade

Topics include: Taxonomy, invertebrates vs. vertebrates, marine phyla, and invertebrate identification.

Methods: Students will observe and touch invertebrates in the discovery tanks, practice capturing invertebrates with dip nets, and observe their findings under microscopes.

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

Additional Info: This class is not available if taking Coastal Critters.

8. MARITIME FOREST ECOLOGY

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

Topics include: Zones of a coastal maritime forest, barrier islands, biotic and abiotic factors, succession, trophic levels, food webs and chains, and identifying native plant and animal species.

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

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

9. REPTILES (HERPETOLOGY)

Introduction to native and nonnative reptiles of the Southeast.

Topics include: Reptile characteristics, reptiles vs amphibians, venomous vs poisonous, native vs nonnative species, keystone species, ecological roles, adaptations, misconceptions and conservation.

Methods: Students will learn about reptiles by observing and touching our education animals.

What to wear: Shoes with heel straps or closed-toe shoes. Otherwise, comfortable inside and outside clothing.

Additional Info: This class is not available if taking Coastal Critters.

10. SALT MARSH ECOLOGY

Introduction to Georgia's salt marshes.

Topics include: Zones of the salt marsh, plankton identification, tides, functions of wetlands, living shorelines, trophic levels and identifying native plant and animal species.

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

What to Wear: Rain/muck boots are required. Boots can be borrowed from our boot wall on-site. Clothes and shoes that can get muddy and wet are strongly suggested.

11. SHARK DISSECTION (ICHTHYOLOGY)

Introduction to dissection and fish anatomy.

Age Minimum: 4th Grade

Topics include: Marine vertebrates, fish biology, shark anatomy, the importance of sharks and reasons to dissect.

Methods: Students will learn safe dissection procedures and how unique sharks are through a guided dissection. This is a great advanced dissection class.

Additional Costs: *\$6.50 per student (2 students per shark) **Prices are subject to change due to vendor availability and stock.*

What to wear: Required closed-toe shoes. Crocs are not considered closed-toed. Otherwise, comfortable clothing.

12. SURF SLEUTH (SEINE NETS)

Introduction to scientific data collection, fishing and team building.

Seasonal: Only offered March-October. Students do not go seining if there is a weather or water advisory. A back-up class may be necessary even during warmer months.

Topics include: Data collection, what a seine net is and how to use it, coastal fish of Georgia, and parts of a fish.

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

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

What to wear: Required to wear shoes in the water during class. Clothes and shoes (sandals with a back strap, water shoes, and closed-toe shoes) that can get wet and sandy are strongly suggested. No crocs allowed. Clothing must be worn over bathing suits.

Day Classes (led by vendor): 2-hours per class

UGA requires groups to pay vendors directly for their vendor led class reservations. W-9 and Sales Tax Exemption forms (ST-5) are required for vendors. Groups unable to provide these forms will be subject to 7% Georgia sales tax. Burton 4-H Center will make the reservation and send your information to the vendor for invoicing and required forms (as requested by vendor).

13. DISCOVERY CRUISE

Introduction to trawling on a coastal tidal creek.

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

Additional costs & reservations: \$300.00 per boat minimum booking prior to taxes and gratuity. \$14.00 per person additional after \$300.00 minimum met. Groups with more than 38 people (boat maximum capacity) will have to book multiple boat trips and times.

Transportation: Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.

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

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

14. 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 about and see dolphins from the boat.

Additional costs & reservations: \$16.50 per adult, \$12.50 per student, added on \$1.00 gratuity per person and \$300.00 group minimum booking prior to taxes and tips.

Transportation: Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.

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

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

15. TYBEE ISLAND LIGHTHOUSE TOUR

Introduction to Georgia history and architecture.

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

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

Additional costs & reservations: \$10.00 per person. Required a 1:7 adult to student ratio.

Transportation: Please arrange your own transportation for the group and we will send a Burton staff member to guide your driver and/or escort group to location.

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

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

16. SEA KAYAK & STAND-UP PADDLE BOARDING TRIP

Introduction to teambuilding and coastal barrier island ecology.

Topics include: barrier island ecology, birding, coastal animals, teambuilding and more.

Methods: Sea Kayak Georgia will teach students how to kayak in Tybee's intercoastal waterways.

Additional costs & reservations: \$55.00 per person plus gratuity. Burton staff requires reservation request a *minimum of 10 weeks prior to trip. Requires additional signed waivers per person and a deposit paid to vendor.*

What to wear: Shoes with heel straps or closed-toe 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. Water bottle is required on trip.

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

Evening Classes: 2-hour per class (select one class only)

1. DUSKWALK / NIGHTWALK

Introduction to the beach at dusk/night, animal adaptations in the dark, and astronomy.

Seasonal: Due to sunset times, darkness and lightness levels will vary and direct activities. Night walk takes place throughout October-February with limited light. Duskwalk takes place throughout March-September with limited darkness.

Topics include: Astronomy, nocturnal, crepuscular, and diurnal animal adaptations, bioluminescent plankton, sensory awareness, and much more.

Methods: Students will participate in group activities that test their senses while exploring the beach at dusk or night. Students will also get the chance to view constellations and enjoy a solo sit on the beach.

What to wear: Shoes with heel straps or closed-toe shoes. Otherwise, plan to dress for the season with comfortable clothing and bug spray.

Additional info: *If selected this is your only evening class option.* The class time will include students walking to 6th Street Beach from the Burton 4-H Center with instructors.

Evening Classes: 1-hour per class (select two classes)

2. CAMPFIRE (SONGS, SKITS & STORIES)

Introduction to outdoor songs, skits and stories around a burning campfire.

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 recreational setting.

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

Additional info: 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 as well.

3. REPTILES (HERPETOLOGY)

Introduction to native and nonnative reptiles of the Southeast.

Topics include: Reptile characteristics, reptiles vs amphibians, venomous vs poisonous, native vs nonnative species, key stone species, ecological roles, adaptations, misconceptions and conservation.

Methods: Students will learn about reptiles by observing and touching our environmental education animals.

What to wear: Shoes with heel straps or closed-toe shoes. Otherwise, comfortable inside and outside clothing.

Additional Info: Limited for groups with less than 50 students as an evening class. No group limits as a day class.

4. SEA TURTLES (CHELONIOLOGY)

Introduction to the life cycle of sea turtles.

Topics include: Sea turtle life cycle, types of sea turtles, conservation, threats, bio-facts, and sea turtle facts.

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

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

5. SQUID DISSECTION (TEUTHOLOGY)

Introduction to dissections and the life cycle of squids.

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 through guided dissection.

This is a great first dissection class.

What to wear: Required closed-toe shoes. Crocs are not considered closed-toed. Otherwise, comfortable clothing.

Additional Costs: \$1.00 per student (1 student per squid).