

School Group Field Trip Programs

2020 - 2021

Pre-K Program

We will engage students with a <u>90-minute interactive lesson</u>. Our stingray touch tank, sea turtles, indoor Coastal Center, and invertebrate touch tank may be visited as part of this scientific exploration. *Student Limit: 15 min./30 max.*

K Program

We will engage students with a <u>90-minute interactive lesson</u>, which will touch on <u>10</u> <u>Next Generation Sunshine State Standards for Science</u>. Our stingray touch tank, sea turtles, indoor Coastal Center, and invertebrate touch tank may be visited as part of this scientific exploration. *Student Limit: 15 min./30 max.*

1st Grade CCE

SC.1.L.17.1—Through observation, recognize that all plants and animals, including humans, need the basic necessities of air, water, food, and space.

SC.1.L.14.3—Differentiate between living and nonliving things.

SC.1.L.14.2—Identify the major parts of plants, including stem, roots, leaves, and flowers.

SC.1.L.14.1—Make observations of living things and their environment using the five senses.

SC.1.E.6.2—Describe the need for water and how to be safe around water.

SC.1.E.5.4—Identify the beneficial and harmful properties of the Sun.

SC.1.E.5.3—Investigate how magnifiers make things appear bigger and help people see things they could not see without them.

SC.1.N.1.3—Keep records as appropriate - such as pictorial and written records - of investigations conducted.

SC.1.N.1.2—Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and motion, and compare their observations with others.

SC.1.N.1.1—Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations.

\$15.00 per participant

(student and teacher) for pre-K through 5th grade programming

2nd Grade CCE

SC.2.L.17.2—Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.

SC.2.L.17.1—Compare and contrast the basic needs that all living things, including humans, have for survival.

SC.2.L.16.1—Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies. SC.2.L.14.1—Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic func-

SC.2.E.7.5—State the importance of preparing for severe weather, lightning, and other weather related events.

SC.2.E.7.1—Compare and describe changing patterns in nature that repeat themselves, such as weather conditions including temperature and precipitation, day to day and season to season.

SC.2.N.1.6—Explain how scientists alone or in groups are always investigating new ways to solve problems.

SC.2.N.1.4—Explain how particular scientific investigations should yield similar conclusions when repeated.

SC.2.N.1.3—Ask "how do you know?" in appropriate situations and attempt reasonable answers when asked the same question by others.

SC.2.N.1.2—Compare the observations made by different groups using the same tools.

SC.2.N.1.—Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.

3rd Grade CCE

SC.3.L.17.2—Recognize that plants use energy from the Sun, air, and water to make their own food

SC.3.L.15.1—Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors. SC.3.E.6.1—Demonstrate that radiant energy from the Sun can heat objects and when the Sun is not present, heat may be lost.

SC.3.N.3.2—Recognize that scientists use models to help understand and explain how things work.

SC.3.N.1.6—Infer based on observation. SC.3.N.1.5—Recognize that scientists question, discuss, and check each other's evidence and explanations.

SC.3.N.1.4—Recognize the importance of communication among scientists. SC.3.N.1.3—Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted. SC.3.N.1.1—Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on

those explorations.

4th Grade CCE

SC.4.L.17.4—Recognize ways plants and animals, including humans, can impact the environment.

SC.4.L.17.3—Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.

SC.4.L.17.2—Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.

SC.4.L.17.1—Compare the seasonal changes in Florida plants and animals to those in other regions of the country.
SC.4.L.16.4—Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.

SC.4.L.16.3—Recognize that animal behaviors may be shaped by heredity and learning.

SC.4.L.16.2—Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.

SC.4.E.6.3—Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.

Students will be engaged through a series of interactive lessons that will touch on **Next Generation Sunshine State Standards for Science**. Due to COVID-19, field trip availability is limited. All students and chaperons will be required to wear facial coverings. Group size will dictate which exhibits are visited during field trips.

Time Frame: 2 hrs. Student Limit: 15 min./35 max.

5th Grade CCE

SC.5.L.17.1—Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.

SC.5.L.15.1—Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.

SC.5.E.7.6—Describe characteristics (temperature and precipitation) of different climate zones as they relate to latitude, elevation, and proximity to bodies of water

SC.5.E.7.5—Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains.

SC.5.E.7.2—Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation process-

SC.5.N.2.2—Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others. SC.5.N.1.4—Identify a control group and explain its importance in an experiment. SC.5.N.1.3—Recognize and explain the need for repeated experimental trials. SC.5.N.1.2—Explain the difference between an experiment and other types of scientific investigation.



School Group Field Trip Programs 2020 - 2021

Seining Adventure Program (4th-12th)

This water-based program includes: Seine netting in the Indian River Lagoon and exploration of exhibits or grade-based lesson.

Program Cost and Details:

Time frame: 3 hours

Student Limit: 15 min./25 max.

Price: \$20.00 per participant (student/adult)

Virtual Field Trips (1st-12th)

Visit Florida Oceanographic without leaving your classroom. Connect with our Education staff for a live, interactive Zoom or Skype-based program focused on biology and conservation. Email for topics and standards addressed.

Program Cost and Details:

Time frame: 50 minute lesson *Price:* \$125/session

FLOORED Program (6th-12th)

The ultimate hands-on experience! A 2-part program that starts with an interactive Zoom or Skype-based classroom lesson about oyster ecology and habitat restoration – followed by an in-water opportunity for your students to study oyster communities and assist with restoration science.

Program Cost and Details:

Time frame: 4 hours (1 hour virtual, 3 hours in person)

Student Limit: 15 min./25 max.

Price: \$24.00 per participant (student/adult)

Secondary Level (6th-12th)

Programs include: Zoom or Skype-based classroom lesson, followed by an in-person interactive activity at the Coastal Center designed to further emphasize the lesson's focus.

Program Options:

Oyster Reefs as Habitat

Identify the organisms that use oyster reefs as a home. Learn about the ecosystem services provided by oysters.

SC.912.L.15.7— Discuss the distinguishing characteristics of vertebrate and invertebrate phyla

Mingling with Mangroves

Explore the mangrove swamp to dig deeper into the food web.

SC.7.L.17.1 - Producers, consumers and decomposers relationships of energy transfer in food webs

Focusing on Fishes

Identify how the characteristics of fish influence their life history.

SC.912.L.15.7— Discuss the distinguishing characteristics of vertebrate and invertebrate phyla

Coastal Center Experience

A guided tour through Florida Oceanographic's various exhibits and nature trail.

Secondary Level Program Details:

Time frame: 3 hours (1 hour virtual, 2 hours in person)

Student Limit: 15 min./25 max.

Price: \$18.00 per participant (student/adult)

For questions or availability, please contact:

Yasmeen Fadlallah at 772-225-0505 ext. 116 or yfadlallah@floridaocean.org

To schedule a field trip, please visit:

www.floridaocean.org/p/121/field-trips