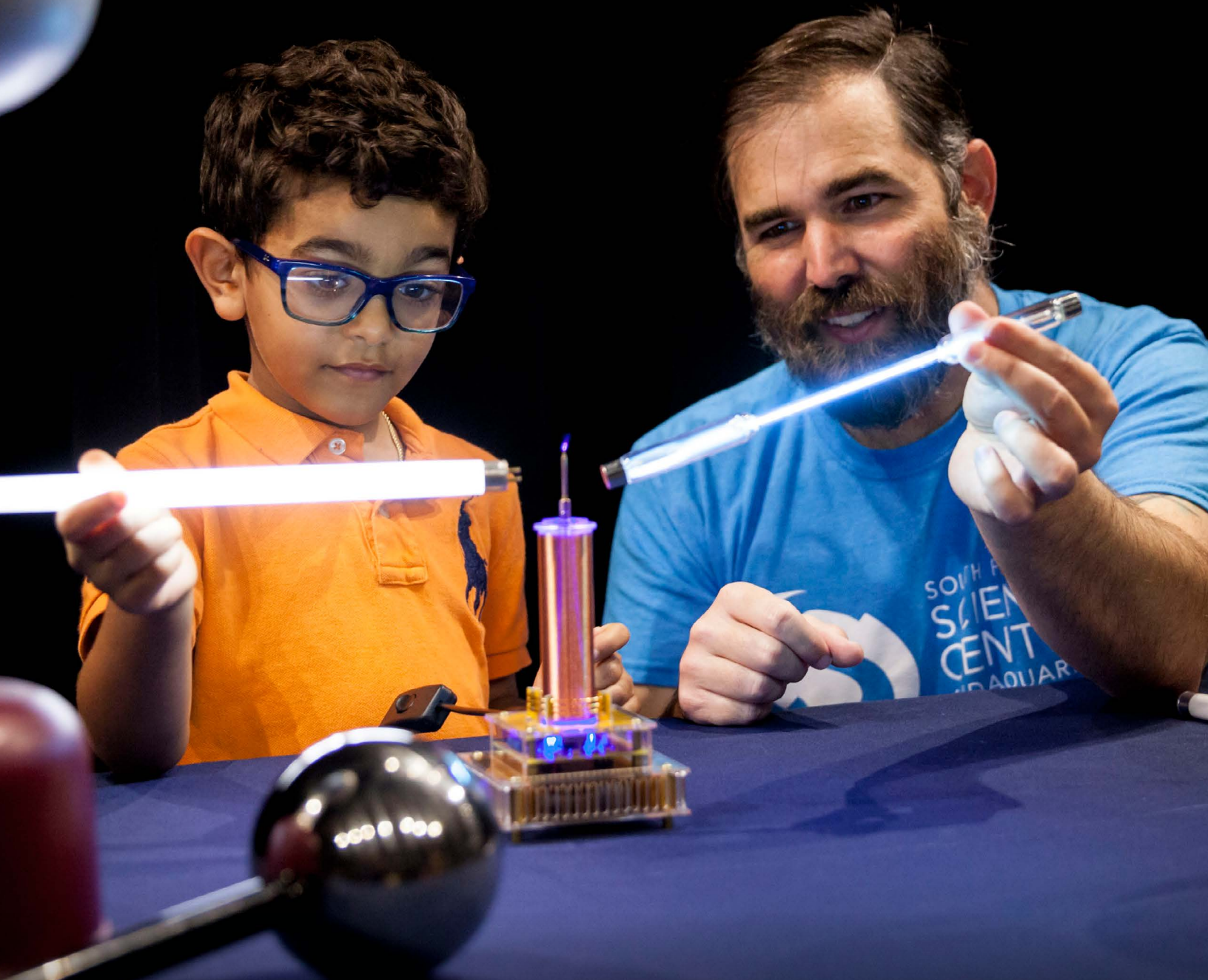


SOUTH FLORIDA SCIENCE CENTER AND AQUARIUM



EDUCATION GUIDE

2021-2022

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Your visit is now safer than ever!

Our facility has achieved **GBAC STAR™** facility accreditation from the Global Biorisk Advisory Council (GBAC), a Division of ISSA - The Worldwide Cleaning Industry Association, to prevent and respond to infectious disease outbreaks. **Learn more about our efforts to enhance cleaning, disinfection and prevention protocols: www.sfsciencecenter.org/GBAC.**

Welcome to the South Florida Science Center and Aquarium

Meet our Science Education Team!



Chris Pait, Natasha Rocha, Adam Newton, Veronica Martinez, Chris Ortiz

Quick Program Guide

Grade Level	Distance Learning Programs	In Person Programs (at school or at the Science Center)
Early Childhood <i>Pre-K and Kindergarten</i>	Squishy Circuits Creepy Crawlies Ocean Commotion Space Explorers Wacky Weather	All About Me Balloons and Bubbles Creepy Crawlies Ocean Commotion Space Explorers Wacky Weather We are the Dinosaurs
Elementary School <i>Grades 1-5</i>	Chemical Concoctions Circuit Science Everglades: All About the Alligator Exciting Electrons Investigating Insects Nitromania Shark Tooth Lab	Chemical Concoctions Circuit Science Dissections (squid, frog) Exciting Electrons Investigating Insects Nitromania Planetarium Shows (At SC only) Pollinating Plants and Flower Dissection Shark Tooth Lab
Middle School <i>Grades 6-8</i>	Brain in Action Chemical Concoctions Everglades: All About the Alligator Exciting Electrons Nitromania Shark Tooth Lab	Brain in Action Chemical Concoctions Dissections (squid, frog) Exciting Electrons Nitromania Planetarium Shows (At SC only, see pg. 10) Shark Tooth Lab 3D Printing and Design (At SC only)
High School <i>Grades 9-12</i>	Brain in Action	Brain in Action Dissections (Squid and Frog) Planetarium Shows (At SC only, See pg. 12) 3D Printing and Design (At SC only)



Earth Matters

Rethink the future

Presented by




























December 13, 2021 - May 8, 2022

Early Childhood

PreK and Kindergarten



PLANETARIUM SHOWS (only at Science Center)		Big Ideas / NGSSS
Kaluoka’hina: The Enchanted Reef 	A digital full dome planetarium show, this animated feature film transports the viewer to a tropical reef, a one-of-a-kind world inhabited by amazing creatures.	<i>Investigation and Inquiry Life Science</i>
One World One Sky 	Take an imaginary trip from Sesame Street to the moon with Big Bird and Elmo as they explore the night sky with Hu Hu Zhu, a Muppet from the Chinese co-production of Sesame Street.	<i>Investigation and Inquiry Life Science Earth and Space</i>







LABS		Big Ideas / NGSSS
All About Me  	Explore the wonders inside the human body with Mr. Bones, our inflatable skeleton and animal bone replicas. Experiment with the five senses by becoming listening, feeling, and smelling detectives and make your own “snot” to take home!	<i>Investigation and Inquiry, Physical Science, Life Science</i>
Balloons and Bubbles  	Bubble fun begins when students make their own bubble solution and bubble wands to play outside. Using dry ice, students will be amazed as we “magically” blow up a balloon and make bubbles filled with smoke.	<i>Investigation and Inquiry, Physical Science</i>
Creepy Crawlies   	Become an entomologist and learn where bugs live, how they eat, and how they help in the environment. Examine and touch live species of bugs!	<i>Investigation and Inquiry, Life Science, Environmental Awareness</i>
Ocean Commotion   	Explore the fascinating world of aquatic animals, their habitats, and their amazing senses through animal puppetry and toy replicas. Touch real shark jaws and fossils and create your own shark tooth necklace.	<i>Investigation and Inquiry, Life Science, Earth and Space</i>
Space Explorers   	Put on a space helmet and travel to the inner and outer planets of our solar system with hands-on inflatable planets. Make “sun-indicator” necklaces and watch the beads change color as we head outside to learn about the sun.	<i>Investigation and Inquiry, Earth and Space</i>
Squishy Circuits   	Explore electrical energy and harness the power of electrons! Learn how we use electricity by building simple circuits.	<i>Investigation and Inquiry, Physical Science</i>
Wacky Weather   	Discover and explore sun, rain, clouds, snowflakes and rainbows with our wacky weather puppets. Experience very cold and very hot temperatures through sun necklace activities and making your own “snow”!	<i>Investigation and Inquiry, Physical Science, Earth and Space</i>
We are the Dinosaurs  	Students will become paleontologists as they examine fossils, learn about the dinosaurs’ extinction, make their own fossil, and watch a volcano erupt!	<i>Investigation and Inquiry, Life Science</i>




















 In Person, at Science Center  In Person, at school  Distance Learning









Elementary School

Grades 1-5

PLANETARIUM SHOWS (only at Science Center)		Big Ideas / NGSSS
Astronaut 	Would you like to learn what it's like to travel through space or to work on the International Space Station? Learn what it takes to be an astronaut as you travel into space in this digital full dome planetarium show.	<i>Big Ideas: 5- Earth in Space and Time 14- Organization and Development of Living Organisms</i>
Bugs!: A Rainforest Adventure 	This full dome show will take you into the fascinating universe of insects magnified up to 250,000 times normal size where a leaf weighs as much as a car and a single raindrop can quench the largest thirst.	<i>Big Ideas: 14- Development of Living Organisms 15- Diversity of Living Organisms 16- Heredity and Reproduction 17- Interdependence</i>
Dinosaurs Alive (Grades 3-5) 	Journey through the Triassic and Cretaceous periods with renowned paleontologists hunting for fossilized clues, uncovering evidence that dinosaur descendants may still walk (or fly) among us today.	<i>Big Ideas: 1- The Practice of Science 15- Diversity and Development of Living Organisms</i>
Kaluoka'hina: The Enchanted Reef 	A digital full dome planetarium show, this animated feature film transports the viewer to a tropical reef, a one-of-a-kind world inhabited by amazing creatures.	<i>Investigation and Inquiry Life Science</i>
Solar System Odyssey 	Learn about all of the planets and major moons in our solar system on a futuristic space mission to explore the necessities for life.	<i>Big Ideas: 2- The Characteristics of Scientific Knowledge 5- Earth in Space and Time</i>
Stars and Constellations 	What are stars made of? Is there a cold star? Find out as our science educator takes you into the night sky in our 360° planetarium and reveals the myths behind famous constellations.	<i>Big Ideas: 5- Earth in Space and Time</i>

LABS		Big Ideas / NGSSS
Chemical Concoctions   	Students will have the opportunity to make their own polymers while conducting experiments that reinforce chemistry concepts of atoms, density and changes in states of matter.	<i>Big Ideas: 1- The Practice of Science 8- Properties of Matter 9- Changes in Matter</i>
Circuit Science   	Students create their own functioning electrical circuits while they discover open and closed circuits and the difference between conductors and insulators.	<i>Big Ideas: 10- Forms of Energy</i>
Dissections  	Study anatomical structures and how these relate to body systems' function in a squid or frog.	<i>Big Ideas: 14- Organization and Development of Living Organisms 17- Interdependence</i>
Everglades: All About the Alligator  	Students will learn all about food webs, Florida's fascinating ecosystems and the anatomy of a real alligator.	<i>Big Ideas: 14- Organization and Development of Living Organisms</i>
Investigating Insects   	Hold live insects in the palm of your hand as we discuss habitats, characteristics and the beneficial role that insects play in our environment.	<i>Big Ideas: 14- Organization and Development of Living Organisms 17- Interdependence</i>
Pollinating Plants and Flower Dissection  	Enjoy an interactive flower dissection activity and find out more about the flower petals, sepals, anther, stamens, and how each play a role in the life cycle of all living things.	<i>Big Ideas: 14- Organization and Development of Living Organisms</i>
3D Printing and Design 	Students will use new software to create designs that they can view in a 3D environment.	<i>Big Ideas: 10- Forms of Energy</i>
Shark Tooth Lab   	Student teams will utilize scientific observation to sort and classify genuine fossil shark teeth, examine real shark jaw specimens, learn about various shark habitats, and create their own shark tooth necklaces.	<i>Big Ideas: 15- Diversity and Development of Living Organisms 16- Heredity and Reproduction 17- Interdependence</i>







DEMONSTRATIONS		Big Ideas / NGSSS
Exciting Electrons   	Electrifying, hands-on demonstrations which include testing the strength of an electromagnet and experiencing the static electricity from a Van der Graaf Generator.	<i>Big Ideas: 10- Forms of Energy</i>
Nitromania   	Students will see physical changes occur before their very eyes as they learn about the states of matter in this "chilling" program about liquid nitrogen.	<i>Big Ideas: 8- Properties of Matter 9- Changes in Matter</i>




















 In Person, at Science Center
  In Person, at school
  Distance Learning







Middle School

Grades 6-8



PLANETARIUM SHOWS (only at Science Center)		Big Ideas / NGSSS
Astronaut 	Would you like to learn what it's like to travel through space or to work on the International Space Station? Learn what it takes to be an astronaut as you travel into space in this digital full dome planetarium show.	<i>Big Ideas: 5- Earth in Space and Time 14- Organization and Development of Living Organisms</i>
Dynamic Earth 	Students will explore the inner workings of Earth's climate system as they ride along on swirling ocean and wind currents, dive into the heart of a monster hurricane, come face-to-face with sharks and gigantic whales, and fly into boiling volcanoes.	<i>Big Ideas: 5- Earth in Space and Time 7- Earth Systems and Patterns</i>
Black Holes: The Other Side of Infinity 	Viewers encounter a range of spectacular cosmic wonders, including a depiction of the beginning of the universe, the first stars, the collision of two galaxies, and a virtual trip into the center of the Milky Way galaxy, as they witness a scientifically accurate perspective on black holes.	<i>Big Ideas: 2- The Characteristics of Scientific Knowledge 5- Earth in Space and Time</i>
Dinosaurs Alive 	Journey through the Triassic and Cretaceous periods with renowned paleontologists hunting for fossilized clues, uncovering evidence that dinosaur descendants may still walk (or fly) among us today.	<i>Big Ideas: 1- The Practice of Science 15- Diversity and Development of Living Organisms</i>
Solar System Odyssey 	Learn about all of the planets and major moons in our solar system on a futuristic space mission to explore the necessities for life.	<i>Big Ideas: 2- The Characteristics of Scientific Knowledge 5- Earth in Space and Time</i>
Stars and Constellations 	What are stars made of? Is there a cold star? Find out as our science educator takes you into the night sky in our 360° planetarium and reveals the myths behind the famous constellations.	<i>Big Ideas: 2- The Characteristics of Scientific Knowledge 5- Earth in Space and Time</i>

LABS		Big Ideas / NGSSS
Brain in Action   	Hold a brain in the palm of your hand to discover the structure and function of this three pound organ and its role in coordinating all five senses.	<i>Big Ideas: 14- Organization and Development of Living Organisms</i>
Chemical Concoctions   	Students will have the opportunity to make their own polymers while conducting experiments that reinforce chemistry concepts of atoms, density and changes in states of matter.	<i>Big Ideas: 1- The Practice of Science 8- Properties of Matter 9- Changes in Matter</i>
Dissections  	Study anatomical structures and how these relate to body systems' function in a squid or frog.	<i>Big Ideas: 15- Development of Living Organisms</i>
Everglades: All About the Alligator  	Students will learn all about food webs, Florida's fascinating ecosystems and the anatomy of a real alligator.	<i>Big Ideas: 14- Organization and Development of Living Organisms</i>
Investigating Insects   	Become an entomologist by observing insects and exploring some of the oldest living creatures on earth. Hold live insects in the palm of your hand as we discuss habitats, characteristics and the beneficial role that insects play in our environment.	<i>Big Ideas: 14- Organization and Development of Living Organisms 17- Interdependence</i>
Pollinating Plants and Flower Dissection  	Enjoy an interactive flower dissection activity and find out more about the flower petals, sepals, anther, stamens, and how each play a role in the life cycle of all living things.	<i>Big Ideas: 14- Organization and Development of Living Organisms</i>
3D Printing and Design 	Students will use new software to create designs that they can view in a 3D environment.	<i>Big Ideas: 10- Forms of Energy</i>
Shark Tooth Lab   	Student teams will utilize scientific observation to sort and classify genuine fossil shark teeth, examine real shark jaw specimens, learn about various shark habitats, and create their own shark tooth necklaces.	<i>Big Ideas: 15- Diversity and Development of Living Organisms 16- Heredity and Reproduction 17- Interdependence</i>

DEMONSTRATIONS		Big Ideas / NGSSS
Exciting Electrons   	Electrifying, hands-on demonstrations which include testing the strength of an electromagnet and experiencing the static electricity from a Van der Graaf Generator.	<i>Big Ideas: 10- Forms of Energy</i>
Nitromania   	Students will see physical changes occur before their very eyes as they learn about the states of matter in this "chilling" program about liquid nitrogen.	<i>Big Ideas: 8- Properties of Matter 9- Changes in Matter</i>



In Person, at Science Center



In Person, at school













Distance Learning

High School

Grades 9-12



PLANETARIUM SHOWS (only at Science Center)		Big Ideas / NGSSS
Dynamic Earth 	Students will explore the inner workings of Earth's climate system as they ride along on swirling ocean and wind currents, dive into the heart of a monster hurricane, come face-to-face with sharks and gigantic whales, and fly into boiling volcanoes.	<i>Big Ideas: 5- Earth in Space and Time 7- Earth Systems and Patterns</i>
Black Holes: The Other Side of Infinity 	Viewers encounter a range of spectacular cosmic wonders, including a depiction of the beginning of the universe, the first stars, the collision of two galaxies, and a virtual trip into the center of the Milky Way galaxy, as they witness a scientifically accurate perspective on black holes.	<i>Big Ideas: 2- The Characteristics of Scientific Knowledge 5- Earth in Space and Time</i>
Dinosaurs Alive 	Journey through the Triassic and Cretaceous periods with renowned paleontologists hunting for fossilized clues, uncovering evidence that dinosaur descendants may still walk (or fly) among us today.	<i>Big Ideas: 1- The Practice of Science 15- Diversity and Development of Living Organisms</i>
Stars and Constellations 	What are stars made of? Is there a cold star? Find out as our science educator takes you into the night sky in our 360° planetarium and reveals the myths behind the famous constellations.	<i>Big Ideas: 2- The Characteristics of Scientific Knowledge 5- Earth in Space and Time</i>

LABS		Big Ideas / NGSSS
Brain in Action   	Hold a brain in the palm of your hand to discover the structure and function of this three pound organ and its role in coordinating all five senses.	<i>Big Ideas: 14- Organization and Development of Living Organisms</i>
Dissections  	Study anatomical structures and how these relate to body systems' function in a squid or frog. Our expert educator will provide specimens, equipment and worksheets for this hands-on dissection lab.	<i>Big Ideas: 14- Organization and Development of Living Organisms 17- Interdependence</i>
3D Printing and Design 	Students will use new software to create designs that they can view in a 3D environment.	<i>Big Ideas: 10- Forms of Energy</i>

 In Person, at Science Center  In Person, at school  Distance Learning

Science Center Exhibits

Aquariums of the Atlantic

The Science Center's 3,000 square foot Aquariums of the Atlantic takes visitors through the depths of Florida's diverse ecosystems of Everglades, Coral Reefs, Gulf Stream, and Open Ocean, home to the most beautiful native fish such as queen angels, moray eels, stingrays and seahorses.

The Hidden World of the Everglades

Experience the Florida Everglades ecosystem and listen to the sounds of Florida's wildlife in their natural habit in this interactive exhibit about America's only sub-tropical wilderness.

Florida Conservation Station

This conservation-learning laboratory includes hands-on experiments and research activities that transform visitors into real-world biologists. The station gives visitors an idea of the immense variety of life in Florida and complex relationships among living things.

Science on a Sphere

Observe atmospheric storms, climate change, and ocean temperatures on this room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere.

Journey Through the Human Brain

In collaboration with the FAU Brain Institute, *Journey Through the Human Brain* features the latest neuroscience research and innovations, with high-tech displays, immersive experiences, and state-of-the-art equipment. It takes a bottom-up approach to telling the story of the human brain, from the molecular level to the integrated circuitry that reveals how the brain informs our senses, creates our thoughts and emotions, and how it has evolved into the most complex structure in the universe.

Discovery Center

Children 6 years old and younger can play and discover in their very own space at the giant 16x5-foot water table and story time area.

Brainy Acts

Exercise your mind with puzzling challenges for all ages!

Sun, Earth, Universe

In collaboration with NASA and the National Informal STEM Education Network (NISE), Sun, Earth, Universe is an engaging and interactive exhibition about Earth and space science for family audiences.

Hands and Minds on Science

Science enthusiasts of all ages will have fun discovering the basic principles of science with these interactive hands –on displays such as Jacob's Ladder, plasma ball, conversion machines, brain teaser puzzles and more!

Hurricane and Tornado Simulators

See destructive forces in action as you view the swirling force of a tornado and dial up the winds of a Category 1 Hurricane. Experience the force of 78 mph winds in the hurricane simulator and learn how to protect yourself and property during and after a hurricane storm.

Out of This World

See our collection of rare space artifacts and real rocks from space featuring a Mars rock found in Nigeria in 1962, a 232 pound meteorite, and a real moon rock brought back on an Apollo mission.

Marvin Dekelboum Planetarium

Palm Beach County's only public planetarium is a 61 seat theater including advanced full dome digital projection equipment and a brand new laser system that will transport visitors beyond the skies.

Marmot Observatory

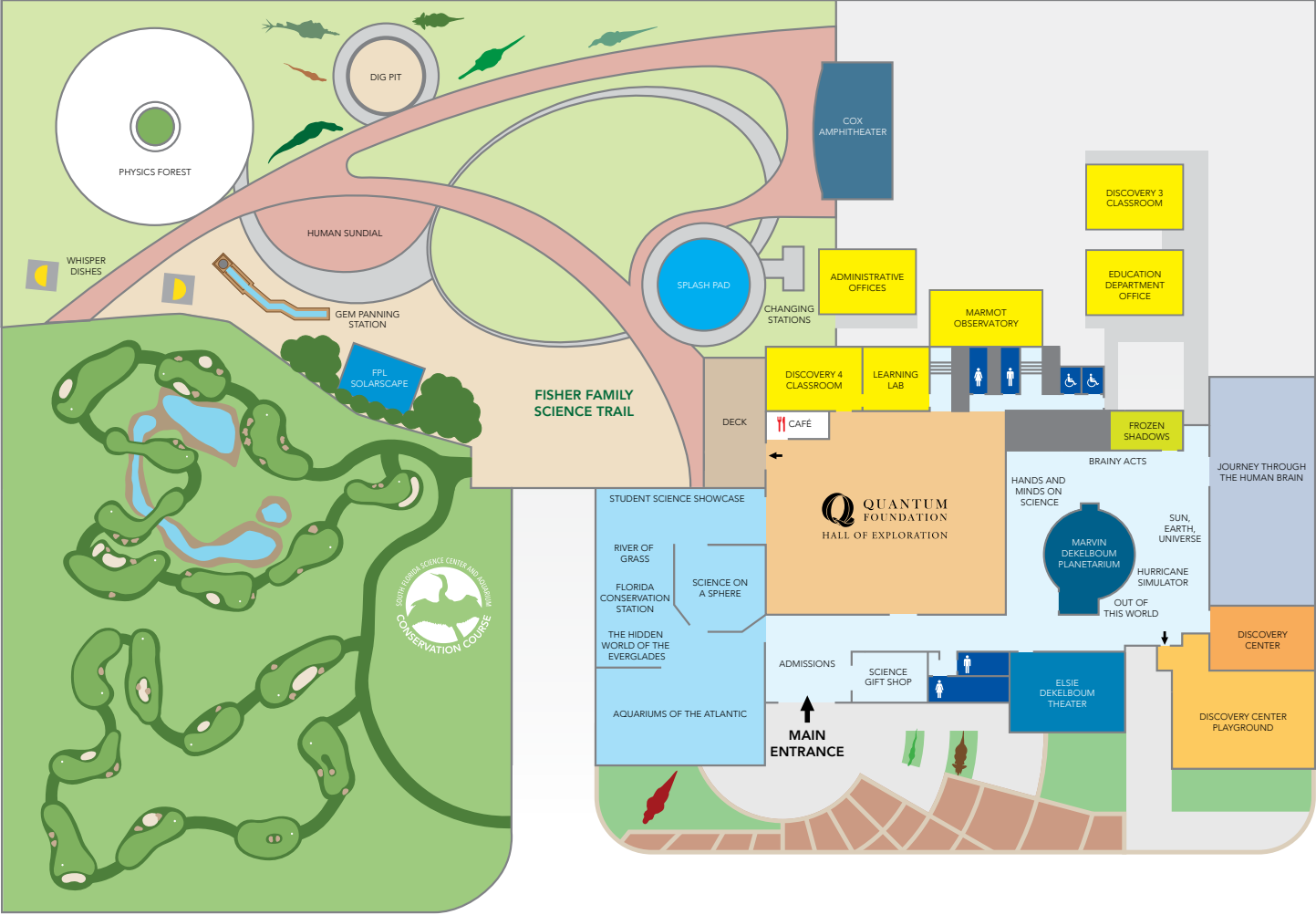
Our newly remodeled observatory features one of the largest refractor telescopes in the state, equipped with a solar filter to view the sun during daylight hours and amazing optics for nighttime viewing of the planets, moon and other objects that come to life with it. The observatory also features a modern meteorology station for the public that keep tabs on our ever-changing weather.

Fisher Family Science Trail

Enjoy the outdoors while continuing your science exploration! The upgraded, quarter-mile Fisher Family Science Trail connects 15 new exhibits including the Cox Amphitheater, a Physics Forest, interactive splash pad, fossil dig pit, gem panning station, a dinosaur walk, picnic areas and much more.

Conservation Golf Course

Enjoy our 18-hole miniature golf course focused on the Everglades and designed by Jim Fazio and Gary Nicklaus.



In Preparation For Your Visit

ON THE DAY OF YOUR VISIT

- Please arrive 15 minutes before your scheduled time.
- Buses can drop students off at the front entrance and then park in designated spots, west of traffic loop. Vehicles may not remain parked in the traffic loop. Drivers can enter exhibit area at no charge.
- When you arrive, please know the total number of students and chaperones in your group. The group leader should check in at the front desk upon arrival.
- Your group will be greeted by Science Center staff and directed to your first activity.
- Students must be supervised by their teacher at all times.
- Due to material limitations, presentations may not be able to be added the day of the program

CHAPERONE NOTES

One chaperone is required per 10 students at \$8 per chaperone. Chaperones must be accounted for when final headcount is submitted.

OUTREACH PROGRAMS

- Our science educator will need a table at the front of the room.
- Laboratories require students to be seated at tables and access to a sink.
- The Science Educator should have an area to demonstrate their activity, with a 4 ft table to display their demonstration activity supplies.
- The class must have an in-class facilitator to hand out any supplies to the students.

PAYMENT POLICY AND FEES

- A 20% non-refundable deposit is due within 14 days of confirming your reservation.
- No refunds or credits will be made for no-shows the day of visit.
- Final payment must be received by the day of your visit, or reservations are subject to cancellation and your group may not be admitted. NO REFUNDS WILL BE GRANTED.
- On the day of your scheduled visit, check in for your group at the Front Desk under your group/contact name. Additional tickets may be purchased at the group rate, on the day of your scheduled visit, providing space is available.
- Acceptable forms of payment are check, money order, or credit card (Visa, MasterCard).
- Please make checks or money orders payable to:
South Florida Science Center and Aquarium
4801 Dreher Trail North, West Palm Beach FL 33405
Attention: Group Sales
- Surcharges may apply for special event days and holidays.
- Science Center Memberships, coupons and other discounts are not applicable with school group rates.
- Teacher Members receive \$25 off the total cost of their first program.
- Instructors reserve the right to stop a program at any time if student behavior is inappropriate.

DISTANCE LEARNING PROGRAM INFORMATION

- All of our Distance Learning programs take place via Zoom. Classes are 30 – 45 minutes in length.
- Please plan to have a working Zoom account set-up prior to the class. It is the responsibility of the school or site to troubleshoot all technical problems
- If you are experiencing technical difficulties with the visibility or audio of the program, we reserve the right to re-schedule the program, after the technical difficulties are fixed.
- The Zoom link will be emailed out with the email confirmation.
- Please treat the Zoom program as you would a regular class. Disruptive behavior or talking over the educator will result in the program ending before its designated time.
- If you would like to use a platform other than Zoom, please email programs@sfsciencecenter.org to make alternative arrangements.

Program Cost *(minimum 15 students)*

AT THE SCIENCE CENTER

Admission per student.....	\$8
Admission per chaperone.....	\$8
Admission per university student.....	\$12
Demonstrations and planetarium programs.....	+\$4
Lab Program.....	+\$6
Conservation Golf Course (pay in the store)	\$1

DISTANCE LEARNING PROGRAMS

Distance Learning Program (30 – 45 min).....	\$200
Each additional Distance Learning Program (same day)	\$150

OUTREACH PROGRAMS (AT YOUR SITE)

Outreach Mileage Fees (per mile).....	\$1
Demonstrations (up to 75)	\$400
Additional Demonstrations (up to 75).....	\$250
Labs (per student, min 15).....	\$13
Early Childhood program (up to 25)	\$250
Each additional Early Childhood class (up to 25).....	\$100

Free grant programs are available for Title 1 Schools. Please email programs@sfsciencecenter.org to check availability.

Science Center Visit & Program Request Form

PLEASE FILL OUT THIS FORM COMPLETELY AND MAIL, FAX OR EMAIL TO:

South Florida Science Center and Aquarium
Attn: Group Sales Office
4801 Dreher Trail North
West Palm Beach, FL 33405
Fax (561) 832-4461; or programs@sfsciencecenter.org.

Allow one to two business days for an email confirmation and please note that your reservation date is not secured until our group sales office has contacted you with a confirmation.

Teacher’s Name: _____ Phone: _____

Preferred Email: _____

School Name: _____ Fax: _____

School Address: _____

School Phone Number: _____ Grade Level: _____

Number of Teachers: _____ Number of Students: _____ Number of Chaperones: _____

Date of Visit: _____ Arrival Time: _____ Alternative dates for visit: _____

- Activity (choose one) ☐ Exploration at Science Center only
☐ Outreach Program at School
☐ Exploration at Science Center and Program (list programs below)
☐ Distance Learning Program

Program(s) Requested

- 1.
- 2.
- 3.
- 4.

A 20% non-refundable deposit is due within 14 days of confirming your reservation. Final headcount and full payment are due 14 days prior to your scheduled visit. NO REFUNDS WILL BE GRANTED. You must cancel at least 24 hours before your scheduled program by phone or email to avoid a \$50 cancellation fee.



South Florida Science Center and Aquarium
4801 Dreher Trail North
West Palm Beach, FL 33405

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West Palm Beach, FL
Permit No. 123



Fun with STEM

Let the South Florida Science Center and Aquarium help you host a mind-blowing STEM event for your students and families.

Day or night, each program offers 20 interactive activities, experiments, and demos that are sure to amaze!

Please call (561) 832-2026 or email programs@sfsciencecenter.org for more information.



IN-PERSON AND VIRTUAL

BIRTHDAY

PARTY



Plan an epic in-person or virtual extravaganza with a live science demonstration, science goody bags and a personalized birthday background. Available Saturday and Sunday from 11–6pm.

Please contact Kristian Zambrana (561) 370-7703 or email kzambrana@sfsciencecenter.org for more information.

