

Field Trips
and Outreach
2019 – 2020

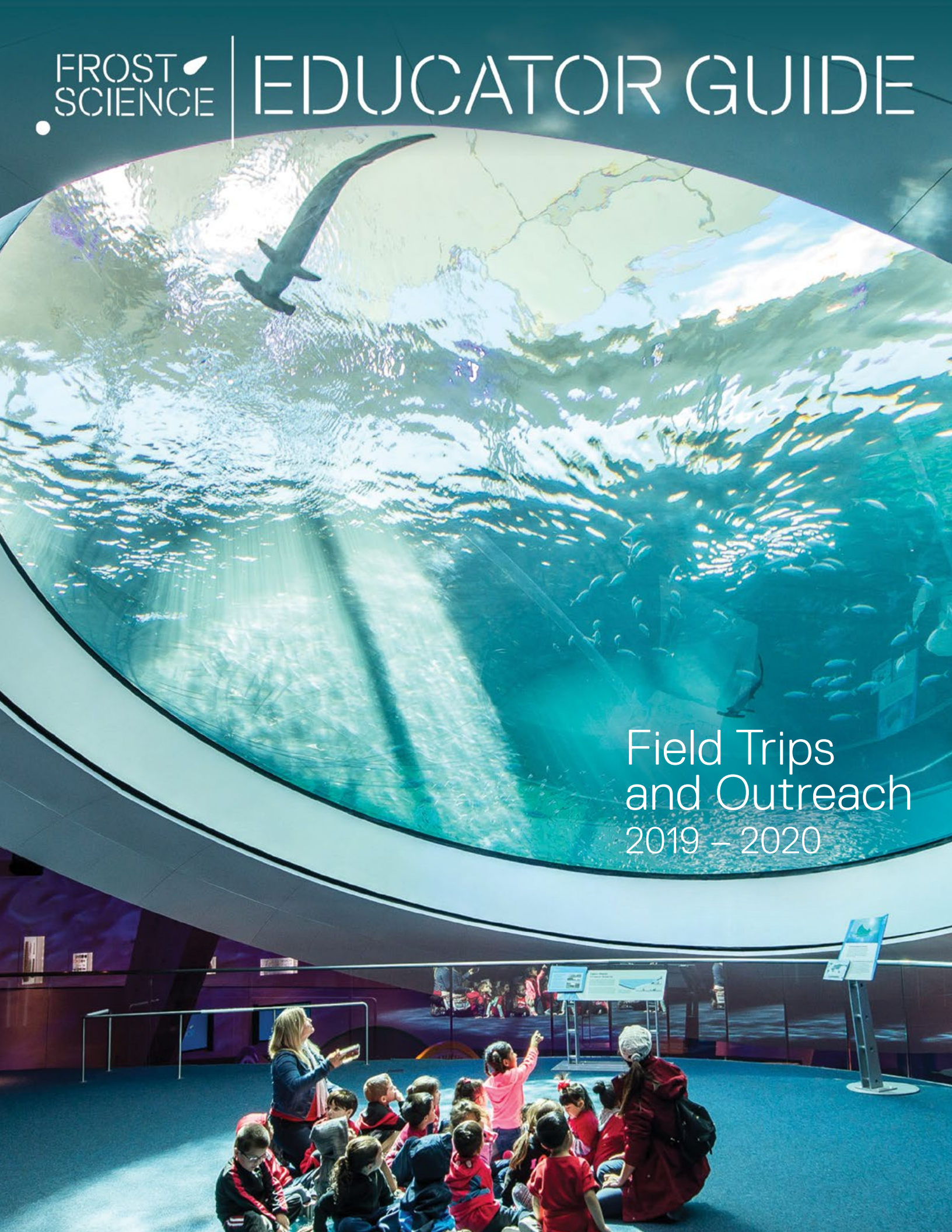


Table of Contents

Planning Your Visit to Frost Science	4
Field Trip Pricing	7
Frost Planetarium Show	7
Enhanced Field Trips	8
Frequently Asked Questions	11
Plan for Success	12
Funding to Support Your Visit	14
Frost Science Exhibitions	16
Outreach	20
Overnight Field Trips	21
Additional Educator Resources	22



PHILLIP & PATRICIA FROST MUSEUM OF SCIENCE
1101 Biscayne Blvd, Miami, FL 33132 | 305-434-9600 @ FROSTSCIENCE



The Phillip and Patricia Frost Museum of Science is supported by the Miami-Dade County Department of Cultural Affairs and the Cultural Affairs Council, the Miami-Dade County Mayor and Board of County Commissioners of Miami-Dade County. This project is supported by the Building Better Communities Bond Program and the City of Miami. Sponsored in part by the State of Florida, Department of State, Division of Cultural Affairs, and the Florida Council on Arts and Culture. The museum is accredited by the American Alliance of Museums, is an affiliate of the Smithsonian Institution and a member of the Association of Science and Technology Centers. Frost Science is an accessible facility. All contents ©Phillip and Patricia Frost Museum of Science. All rights reserved.

Message from the President & CEO



Hello and Welcome,

The Phillip and Patricia Frost Museum of Science has been open now for over two years, and we've been fortunate to share our museum, programs and resources with thousands of students and educators like you. We hope that our guests experience science in a new way at the museum, as one of the world's few planetarium, aquarium and science museum combinations with content that speaks to our community.

Our multiple exhibitions, engaging programming and riveting live shows have inspired teachers and students alike, sparking wonder and investigation in classrooms throughout our community. However, no two trips to Frost Science are ever the same. We have permanent exhibitions you can plan curriculum around from one year to the next, as well as a schedule of nationally touring special exhibitions that ensure there will always be something new for you to see at the museum. In fall 2019, we are excited to welcome *A Mirror Maze: Numbers in Nature* and in summer 2020, we will host the world premiere of the new *SUE: The T. rex Experience* exhibition.

We are consistently striving to improve the experience year-round. The leadership and staff at the museum values your support and is committed to exceeding your expectations—whether you're planning a field trip, visiting us using educator benefits or taking advantage of our online educator resources.

Frost Science is here to support your curriculum and serve as a resource in the education of your students.

A handwritten signature in blue ink, appearing to read 'Frank Steslow', written over a horizontal line.

Frank Steslow, President & CEO
Phillip and Patricia Frost Museum of Science

Planning Your Visit to Frost Science

Time to put down your pens and pencils... and make your way to the Phillip and Patricia Frost Museum of Science! Our field trips engage students of all ages with numerous interactive and educational exhibitions that explore the world of science, technology, engineering, art and math (STEAM) in a fun and novel way. Turn the museum into a dynamic classroom for the day as your students learn about the science behind marine ecosystems, the biology of the human body, the physics of flight, the Everglades, the process of engineering and much more.



Organizing a field trip to Frost Science is easy! You'll need to:

- ✔ Plan your trip at least three (3) weeks in advance.
- ✔ Confirm permission for the trip with your school administration.
- ✔ Pick three (3) potential dates for your school trip that work with your school calendar.
- ✔ Confirm that your school buses will be available on those days.
- ✔ Select your field trip program and go to frostsscience.org/fieldtrips to begin the online registration process.
- ✔ Look for an invoice and confirmation email after your reservation request has been submitted.



Origins of Flight

Orígenes del vuelo

Join us for an educational day at Frost Science. Explore the exhibitions, add on a Frost Planetarium show or enhance your field trip with a hands-on activity. The choice is yours! One adult chaperone is required for every 10 children. Plus, book your field trip for earlier in the school year and save!



BOOK YOUR FIELD TRIP
FOR EARLIER IN THE
SCHOOL YEAR
AND SAVE!

Field Trip Pricing

Date of Visit	General Admission*	+ Frost Planetarium Show	+ Enhanced Field Trip
August 12 - October 31	\$11.95	FREE	\$4.00
November 1 - March 13	\$11.95	\$2.00	\$4.00
March 14 - May 31	\$13.95	\$2.00	\$4.00
June 1 - August 11	\$14.95	\$2.00	Not offered

Museum general admission includes self-guided access to the museum's exhibitions. Free educator resources are available on the museum's website to assist you in connecting your visit to your classroom curriculum.

*All prices are per student. Select exhibitions may not be available. One free chaperone per every 10 paying students. Additional chaperones pay the same rate as the students.

Frost Planetarium Show

A Frost Planetarium show allows students to explore the world and universe through a state-of-the-art experience in this awe-inspiring venue. For more information about current shows, please visit frostsscience.org/planetarium.

Please note that shows are filled on a first-come, first-served basis.

NEW: Introducing a live star show!

Hidden Wonders of Our Solar System

Opening October 1, 2019

Take a guided journey with an astronomy educator through our Solar System exploring the objects around us from the Sun to Neptune, Pluto and beyond. Discover the wonders of the planets, moons, asteroids, comets and other celestial objects that inhabit our little corner of the universe, before taking a tour of what will be visible in the night sky* of South Florida that evening.

**Actual night sky viewing is weather dependent so you may not be able to see what is shown in the presentation.*





Enhanced Field Trips

You and your students can dive deeper into science with a 45-minute facilitated, hands-on learning experience in our Knight Learning Center. Led by a museum educator, topics include marine science, earth science, space, and engineering themes with standards-aligned options for grades Pre-K through 12th. The experience can accommodate a maximum of 30 students per class and is subject to availability. Enhanced field trips are only available during the academic year.

**Please check with your reservation representative if you are interested in adding a Frost Planetarium show.*

Pre-K

Rain, Rain, Learn Away

Students will explore weather and the role it plays in nature. A facilitator will lead the group on how to identify rain by using their senses, including an interactive storytelling, before introducing them to key science tools like a thermometer and rain gauge as they play and learn through a weather station game. As young meteorologists, they will form predictions by recognizing patterns based on their observations. Students will then check in with Frost Science's own weather station to discover Miami's weather patterns before creating a giant thunderstorm together using their hands and feet.

Sea Life Sorting

Students will sort, classify and compare shells in this ocean and coastal themed experience that celebrates the biodiversity of life on Earth. Hands-on activities will teach students how to observe, investigate and categorize our diverse mollusk (shell) collection gathered over decades from all around the globe, ranging from rare finds to common Florida shells. Students will learn to recognize the similarities and differences in shapes, colors and sizes, and will be guided to match sea creatures needs with their environments and habitats.

Grades K-2

Crocogators

Young biologists will sink their teeth into the world of some of the oldest animals on Earth: crocodiles, alligators, caimans and gharials! Students will go on a journey that follows the evolution of these remarkable reptiles while exploring their unique adaptations through engaging activities, including a special viewing of both crocodile and alligator skulls from our museum's collection. Then, students will compare physical features of alligators and crocodiles and choose their favorite by making their own alligator or crocodile face mask.

Day and Night

Students will blast off into outer space to explore the key components for our planet, including our star, the sun, and our natural satellite, the moon. A facilitator will guide students to discover the key roles the sun and moon play in the repeating patterns that make day and night. Then they will explore how positions and rotations help to create the four seasons. Students will put together a planetary orbital model with a special focus on the positioning between the sun, moon and earth to uncover how these celestial bodies can result in solar and lunar eclipses.

Wind Tunnel Design

Students will get to apply their engineering skills and explore how they can make flying contraptions go higher, further and faster. Using a variety of materials—including everyday objects—they'll be encouraged to create their own flying contraptions and then given the opportunity to test them out in our own vertical wind tunnel. Their flying contraptions will go through different challenges, all encouraging design readjustments and trial and error—a friendly part of the engineering process.

Grades 3-5

Building the Future

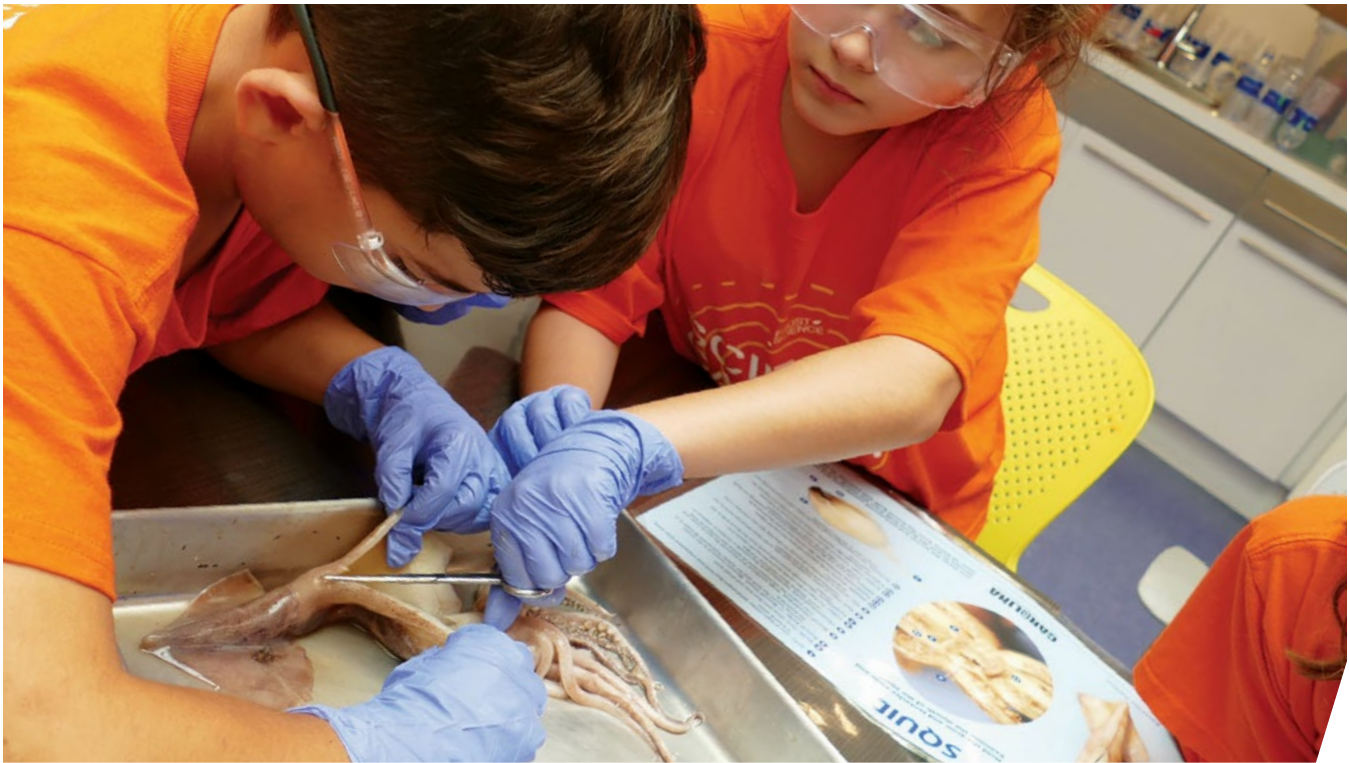
Students will have the chance to let their creativity flow as they prepare to become the next generation of problem solvers by exploring the fundamentals of engineering. This hands-on introduction to the engineering design process will encourage creative thinking, team work and perseverance while students tackle a bridge building challenge. Teams will plan, build and test how their designs respond to weight and length demands and then be challenged to redesign and retest to create the ultimate bridge.

Fingerprints of Light

Students will have the opportunity to jump into an astrophysicist's shoes as they study how light's properties and behavior are applied to astronomy and human space exploration. Students will experiment using tools like color filters, diffraction gratings and colorful spectrum gas tubes to note how gases (especially the ones we as humans need) emit light and have their own unique light pattern, or "fingerprint." Practicing the principles they've learned, they will then decide whether to pursue space exploration to different case planets by analyzing their light spectrums.

Motion of the Ocean

Students will gain a broader understanding of how ocean currents are a constantly moving, interconnected energy system powered by forces that play a key role on our planet. Drawing inspiration from a real-life serendipitous experiment with rubber ducky drifters, students will engage with a hands-on simulation model to observe how wind and landmasses affect movement for surface currents and plot data of paths taken as they monitor a drifter. They will then be introduced to how new technology can further aid science research by checking in on ocean drifters' tracks as part of the Global Ocean Observing System and apply their new knowledge to predict future drifter tracks.



Grades 6 – 8

Earth Formations

Students will investigate the geophysical phenomenon of tectonic plates and how they have continuously changed the surface of our planet from Pangea to Modern Earth. They will visualize movements through various props and puzzle pieces while learning how to interpret maps before making predictions based on information gathered as to where earth's topography may be going. As they uncover the different layers of the earth, they will also have the opportunity to observe and categorize striking pieces of the museum's rock and mineral collection and use tools to view them up-close to identify patterns within the rock cycle and how weathering and erosion play a part in their formation.

Fluorescing Fish

Students will light up with curiosity as they explore the science of luminescence. Starting with an exploration of the properties of light and identifying examples of how luminescence exists in the natural world, students will then take a closer look at how fluorescence, a form of luminescence, is used as a scientific tool by exploring a real-world application in biology where genetically modified fluorescent fish are used to better understand genetics, including an illuminating introduction to Punnett Squares.

Squid Dissection

Students will dive into a slimy (and sometimes smelly!) dissection that investigates the biology of one of the earth's most highly developed invertebrates: squid. Students will examine and identify the special and unique features and adaptations these mollusks have developed over time to help them survive. They'll also analyze the squid's role in the marine food web along with the characteristics they share with their mollusk relatives. Don't worry, the smell comes off, with a little soap and water—but the memory lasts forever!

Grades 9 – 12

Water Quality Testing

Students will dive into a water chemistry-based experiment by comparing and contrasting variables such as temperature, acidity, salinity and nutrient balance from sources such as freshwater, local bay water and even water from our own aquarium. As they gather results, students will make inferences on what they mean for an aquatic system, especially for aquatic creatures to live and thrive. As they conclude their lesson, they will review real life studies that are responding to the changing climate and pollution including research at Frost Science that is working on increasing the heat tolerance of corals as ocean temperatures rise.

Frequently Asked Questions

Questions? That's quite alright! Here are answers to some of our most commonly asked ones. You can also find more information on the website at frostsscience.org/fieldtrips.

How do I reserve and pay for my visit?

Field trip reservations are on a first-come, first-served basis. A non-refundable deposit of \$75 or 25% of the total due (whichever is greater) must be received no later than three (3) weeks after your reservation has been confirmed to ensure your field trip date is secured. Reservations without paid deposits are subject to cancellation. Deposits can be made by credit card or check/money order. Please make checks or money orders payable to "Frost Science" and mail to:

Frost Science Reservations Department

1101 Biscayne Blvd., Miami, FL 33132

Purchase Orders (MDCPS and BCPS) can also be submitted in lieu of a deposit.

Final payments are due the day of your scheduled field trip. The museum requires that one payment be made for all reservations. The lead teacher is responsible for collecting payment from additional chaperones attending the field trip prior to arrival. Any chaperones not included in the reservation and choosing to pay separately will pay the regular museum admission rate and will not be guaranteed seats in shows/activities scheduled for your field trip. Museum memberships and guest passes/vouchers are not valid for field trip entrance.

What if my final count of students changes?

The final count of students is required five (5) business days prior to the visit. Payment based on that final count will be required in full at the time of arrival for the field trip and there will be no refunds for any no-shows. Additional students and chaperones may be added at the group rates, but there is no guarantee that they will be able to participate in the scheduled venues/shows with the larger group and are subject to availability.

What exhibitions can I see with my group?

The exhibitions available to groups will vary depending on the time of the year. The Marine Sciences Lab and Design Lab: *Engineering* exhibition (excluding the workshop portion) have a limited capacity, therefore groups need to enter in smaller sizes—approximately 20 individuals—at a time. Due to time and capacity constraints, the workshop portion of the Design Lab: *Engineering* exhibition is not available to groups during field trips. Our exhibitions are subject to closure at any time without advance notification. To see all exhibitions available at Frost Science, please visit frostsscience.org/exhibition.

What time does our field trip begin?

All field trips at Frost Science are three (3) hours in duration, typically beginning at 10:00 a.m. Groups are expected to arrive 15 minutes prior to their scheduled start time. NOTE: Late groups might miss scheduled activities, and will not have an opportunity to reschedule for later shows or receive a refund.





Plan for Success!

Prior to Your Visit

- Complete required school documentation (field trip permission forms, transportation forms, etc.).
- Secure chaperones for the field trip and ensure they are aware of arrival and departure times.
- Confirm your final head count. Chaperones not included in the reservation and choosing to pay separately will pay the regular museum admission rate and will not be guaranteed seats in shows/activities scheduled for your field trip.
- Place any lunch orders with the reservations team. Lunch orders require a final count five (5) business days prior to your field trip date or the original reserved number will be used.
- Review field trip educator resources located at frostsscience.org/fieldtrips.

Day Before the Field Trip

- Assign student groups to chaperones (10 students per one chaperone required).
- Prepare final payment, which is due upon check-in at Frost Science. Final payment is due in the form of a single check, cash or credit card via one transaction. No refunds will be issued after the payment has been received.
- If the school is not paying for additional chaperones, please ensure that the chaperones know which venues/shows they will need to purchase tickets for and that admission to the same venues/shows being attended by the students may not be available at the time of purchase. Chaperones cannot use a membership or guest pass/voucher to enter with a group.
- Remind students of proper museum etiquette as outlined in the field trip confirmation documentation.

Day of Field Trip: Arrival

- Please arrive 15 minutes prior to your scheduled start time. Museum staff will direct bus drivers to the appropriate drop-off location; however, please note that we do not provide school bus or motor coach parking. Visit www.miamiparking.com for bus parking options.

(Paid automobile parking is available in the museum parking garage at the posted rates.)

- Upon arrival, the lead teacher will need to go to the Member and Guest Relations Desk to pay any remaining balance for the field trip.
- Lunches brought to the museum will be unloaded from the bus by the teachers and chaperones and pre-collected in large bins (no large plastic bags or individual lunch bags/boxes will be accepted) and must be clearly labeled with the school name and lead teacher's name.
Note: refrigerated storage will not be available.
- If you are running late for any reason, please contact the reservations office at 305-434-9564.

Day of Field Trip: During Your Visit

- All tours are self-guided; therefore, it is the chaperones' responsibility to arrive to ticketed shows on time.
- Chaperones must remain with their students throughout the visit and are responsible for their group's behavior.
- For everyone's safety, no running or rough play is permitted. Please emphasize the importance of using inside voices while at the museum.
- If your group visits the museum's gift store, please note that a maximum of 15 students (accompanied by a chaperone) are allowed at a time.

We want our visitors to enjoy their experience at Frost Science and expect all groups to respect other visitors. If these guidelines are not followed, you may be asked to leave the museum. If this occurs, you will not be refunded for your visit.

Day of Field Trip: Departure

- When your group is ready to depart, please call for your bus only when your entire group is at the bus pick-up area and ready to leave. Buses will not be allowed to wait in the designated pick-up lanes for your group to arrive and will need to exit the museum drive if your group is not ready to leave.

Cancellation

If you must cancel your field trip, please send written cancellation no less than 10 business days prior to your visit. Written cancellations must be sent via email (fieldtrips@frostsscience.org).

Please note that deposits are non-refundable. Deposits are transferable, however, and can be used towards a future field trip. This credit must be used within one (1) calendar year from the date paid. After this date, the non-refundable deposit will be donated to the Frost Science general fund.

For additional questions, please contact the reservations department at 305-434-9564 or fieldtrips@frostsscience.org.

Field Trip Lunch

A pre-ordered meal can make lunchtime a little more convenient for you and your students. Options include your choice of sandwich (ham, turkey or vegetarian), a bag of chips and bottled water. These can be ordered online in advance of your visit at frostsscience.org/fieldtrips.

Field Trip Lunch	\$8.00 per person (plus 8% sales tax)
------------------	--

Travel For Science

Getting to Frost Science has never been easier. With discounted rates and exclusive services, Brightline makes traveling to the museum from Fort Lauderdale and West Palm Beach convenient and fun. For groups of 10 or more, contact Julia.Glick@gobrightline.com and take advantage of exclusive Brightline travel perks, including discounts on catered food & beverages on the train, train station parking and more.

Funding to Support Your Visit

Frost Science and its generous supporters are committed to making field trips accessible for your students and have the following opportunities in place to assist you with your visit.



Funding for General Admission

Through the support of our donors, including a lead gift from The Miller Family Foundation, Frost Science is able to provide free or discounted admission to groups visiting from Title I schools and non-profit community-based organizations. This free or discounted admission is subject to the availability of funding.

Healthy Mind, Healthy Body: 4th Grade Field Trip

Fourth grade students attending Miami-Dade County Public Schools are invited to participate in a special field trip designed specifically for them—free of charge. This field trip, generously sponsored by Baptist Health South Florida, features a visit to the MeLaß in the Baptist Health South Florida Gallery, where students will have an opportunity to learn about how everyday choices can impact one’s health and happiness. The field trip also includes an opportunity to visit a second exhibition in the museum (exhibition depends on time of year and will be selected by the museum), as well as standards-based pre- and post-visit materials to help ensure your experience is well-connected to the classroom curriculum.

The program is available Monday through Thursday on regular MDCPS school days, excluding holidays and teacher planning days. Some blackout dates may apply and dates are subject to availability based on reservations. The session is from 10:00 a.m. to 1:00 p.m. and includes time for students to break for lunch.

To learn more about the program, including registration and access to additional resources, please visit frostsscience.org/melabfieldtrip.

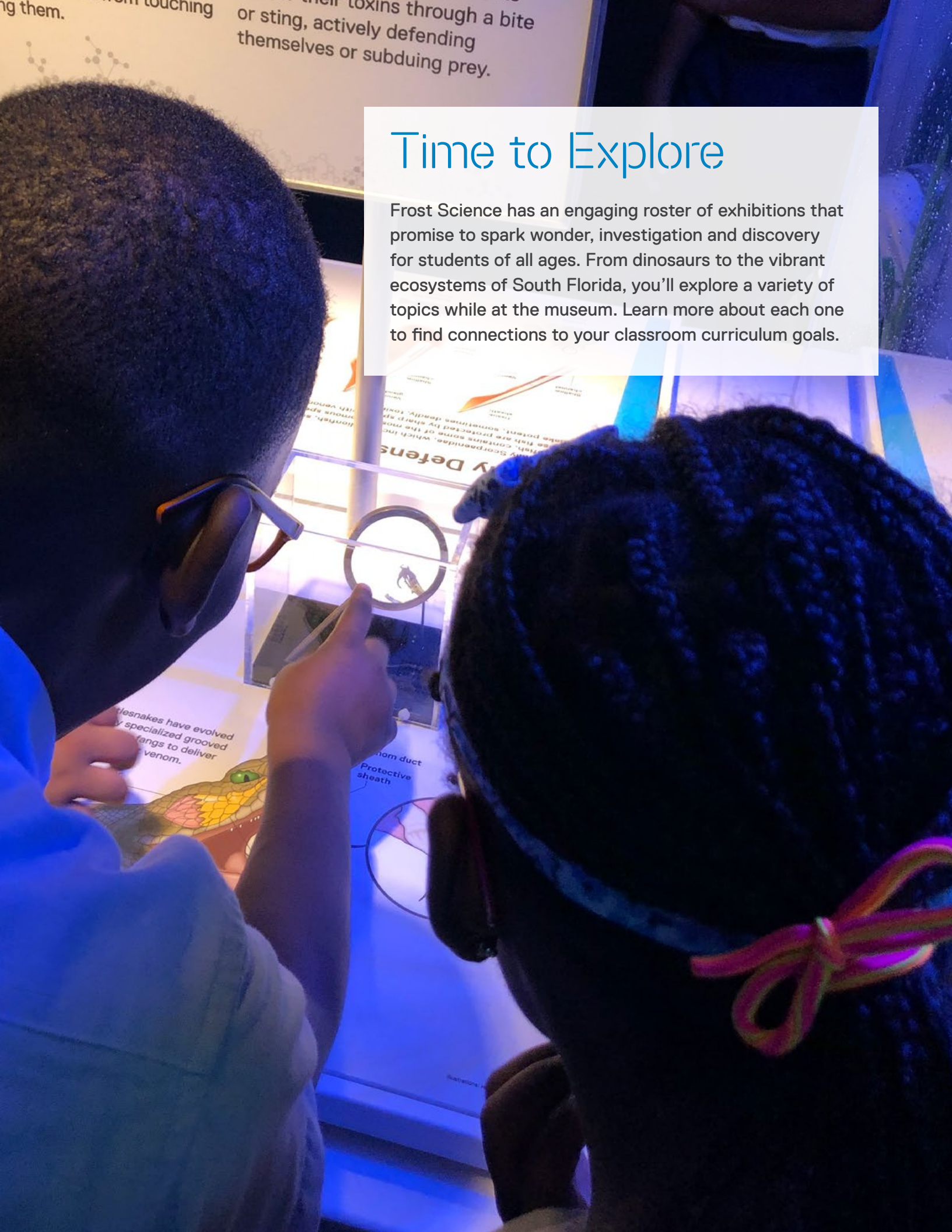


Baptist Health South Florida

...them.
...from touching
...their toxins through a bite
or sting, actively defending
themselves or subduing prey.

Time to Explore

Frost Science has an engaging roster of exhibitions that promise to spark wonder, investigation and discovery for students of all ages. From dinosaurs to the vibrant ecosystems of South Florida, you'll explore a variety of topics while at the museum. Learn more about each one to find connections to your classroom curriculum goals.



...lesnakes have evolved
...y specialized grooved
...rangs to deliver
...venom.

...nom duct
Protective
sheath

...y Defens

...ome potent, sometimes deadly, toxic
...fish, contains some of the most

...dolphin, a
...th venom

Frost Science Exhibitions

Aquarium

A masterpiece of living science, the three-level Aquarium (Vista, Dive, Deep) carries you from the surface to the depths of South Florida's crucial aquatic ecosystems and beyond.



Royal Caribbean Vista Level 4

A massive outdoor deck, the Vista level puts you at the surface of key South Florida ecosystems. In the 500,000-gallon Gulf Stream Aquarium, mahi-mahi and scalloped hammerhead sharks cruise the waters, while rehabilitated green herons navigate the spaces of the Mary M. and Sash A. Spencer Aviary. Red mangroves and a 22-foot gumbo limbo hold court just beyond the Florida Bay Touch Experience, where you can meet and touch gentle stingrays that thrive in our state's shallow backwaters.

Dive Level Level 3

Throughout the Dive level, nearly 30 aquariums and interactive vessels offer an intimate view into the subtropical sea, where colorful damselfish dart through corals and predators search for their bait through mangrove forest shadows. At the Dive Bar, students will get an up-close encounter with some of our favorite marine invertebrates and learn about their unique features.

Deep Level Level 2

With a revealing look at the mysterious and vast depths of the Gulf Stream, the lowest level of the aquarium is where drifters such as jellies reside. A one-of-a-kind 31-foot-wide oculus lens forms the bottom of the Gulf Stream Aquarium and gives you a direct view of the scalloped hammerhead sharks and tuna swimming overhead.





Frost Planetarium

One of the most advanced spaces like it in the United States, the 250-seat Frost Planetarium uses 16-million-color 8K projection, surround sound and a vast dome screen to take students on a visual joyride that both thrills and educates. The dome is tilted forward at 23.5 degrees, allowing its 67-foot span to fill viewers' field of vision and make it feel as if they're flying. Imagery comes in from above, below and around peripheral edges, creating a nearly 360-degree view of whatever world your students are exploring—from the depths of the ocean to our universe and beyond. Frost Planetarium also presents spellbinding laser light events, innovative live programming and is available for private presentations.



Feathers to the Stars

The Batchelor Foundation Gallery, Supported by Christine Allen

Discover the amazing story of how ancient evolution gave birth to animal flight and how humans used imagination and engineering to get airborne and travel to outer space. Students will come face-to-face with a 30-foot dinosaur, the *Yutyrannus huali*, while exploring interactive stations with handrails that reveal the secrets of birds' biomechanics. They'll meet the daredevil inventors who pioneered human aviation by risking their lives to figure out the aerodynamic principles of thrust, drag, weight and lift before building and launching their own air rockets in an exploration of the physical laws that guide rockets through the Earth's atmosphere.



MeLaβ

Baptist Health South Florida Gallery

MeLaβ guides students through the amazing ways the body and mind work together and how daily choices contribute to their health. In this exhibition, they'll get to challenge their brain with problem-solving tasks, stop a 'virtual virus' or learn how dance can be a healthy form of exercise. Their partner in MeLaβ is beta, a digital character they'll build as they answer questions in each learning zone. The more questions they answer, the more they'll customize beta, and learn about themselves.



River of Grass

William R. Kenan, Jr. Charitable Trust Gallery

The wet, wild and mysterious River of Grass provides young explorers with an interactive way to learn more about the Everglades through two related spaces. In the outdoor area, children see, feel and experiment with the physics of water, introducing them to the concepts that keep the 300-mile Everglades and all its creatures alive. Inside, children venture into an interactive virtual environment where animal characters come to life during a “day in the life” of the Everglades. They’ll chase otters, spot a panther using a flashlight, and by the end of the journey, learn that life in the Everglades is rich and worth protecting. This exhibition is specially designed for children 3-6 years of age.



The Sun Spot

Florida Power & Light Company Solar Terrace

Experience the power of the sun as a renewable source of energy through several interactive solar-powered activities. Begin by feeling the power it takes to energize everyday objects with an outdoor bike or hand crank. Then, discover the science and engineering behind solar panels and explore the dynamic nature of the sun while safely viewing it with a Sunspotter. Students are also invited to get into the engineering mindset as they investigate why we need different types of renewable energies and explore why innovation in batteries may be the solution to the future of clean energy.



Design Lab: Engineering

Part exhibition, part laboratory, guests will learn about the challenges engineers face while putting their critical thinking skills to the test in a laboratory setting. In this exhibition, students will encounter vintage iterations of everyday objects and discover how engineering challenges were solved. They’ll also participate in hands-on activity tables that will help them learn about the engineering design process first-hand.

Please note: due to time and capacity constraints, the workshop portion of Design Lab is not available to groups during field trips.

Special Exhibitions

Frost Science also has spaces dedicated to nationally touring temporary exhibitions. This ensures a regular rotation of topics and experiences for you and your students to explore.



Strange Matter

Now through October 13, 2019 | West Wing, Levels 2 and 3

Discover the secrets of everyday stuff in *Strange Matter*, presented locally by HEICO Corporation. From metals to crystals to magnets to glass, *Strange Matter* gives guests the chance to dig into the science behind the materials they use every day. A dynamic blend of physics, chemistry and engineering, discover how things are put together, how they might be improved or how they can change to create brand new materials.

Strange Matter is produced by the Ontario Science Centre and presented by the Materials Research Society. The exhibition and its tour are made possible by the generous support of the National Science Foundation, Dow, Ford Motor Company Fund, Intel® Innovation in Education, Rio Tinto Alcan, and the 3M Foundation.



A Mirror Maze: Numbers in Nature

October 12, 2019 – April 12, 2020 | Hsiao Family Special Exhibition Gallery

A Mirror Maze: Numbers in Nature exposes and explains the mathematical patterns that surround us every day in the natural world—from the nested spirals of a sunflower's seeds, to the ridges of a majestic mountain range, to the layout of the Universe. The exhibition features an immersive theater presenting an introduction to how math surrounds us every day, depicting stunning footage of nature, the human body, and even art and architecture. Hands-on activities within the exhibit allow for further exploration of mathematics—such as fractal branching, spirals, Voronoi patterns, the Golden Ratio, and more.

A Mirror Maze: Numbers in Nature was created by The Museum of Science and Industry, Chicago (MSI).



SUE: The T. rex Experience

May 23, 2020 – September 7, 2020 | Hsiao Family Special Exhibition Gallery

SUE: The T. rex Experience, a special exhibition from the Field Museum of Natural History, will invite visitors to encounter SUE—the largest, most complete, best-preserved Tyrannosaurus rex ever found—and the world SUE lived in as never seen before. Featuring a new, fully articulated SUE cast, a one-of-a-kind narrated show and realistic computer animated scenes, *SUE: The T. rex Experience* is a journey through the Hell Creek Formation in South Dakota, one of the most well-documented ecosystems from the age of dinosaurs. Touchable fossil replicas, scent stations and a naturalistic soundscape create an immersive, multi-sensory experience.

To see all current exhibitions, please visit frostsscience.org/exhibition.

Outreach

Frost Science is on the go! Outreach with Frost Science brings hands-on learning directly to schools and communities. Each experience inspires the audience to investigate our world and universe through the lens of science.

Frost Science Outreach Programs include:

- ✓ STEM-focused, NGSSS-aligned curriculum (standards available upon request per grade)
- ✓ All hands-on activities and supplies needed for each program
- ✓ Two specially trained science educators to bring your outreach experience to life

Cost*:

- ✓ Egg Drop Engineering Challenge – \$500 for four 30-min sessions
- ✓ Family Science Night – \$1,000 for 2-hours of programming
- ✓ Frost Science Portable Planetarium – \$1,000 for four 30-min presentations
- ✓ Night Sky Telescope Viewing – \$1,000 for 2-hours for up to two telescopes
- ✓ Build Your Own Outreach – Starting at \$1,000 for 2-hours of programming

For more information and to reserve your Outreach with Frost Science, please visit: frostsscience.org/outreach.

*Depending on distance and travel time from Frost Science to the outreach location, an additional travel fee may apply.





Overnight Field Trips

Available starting October 1, 2019

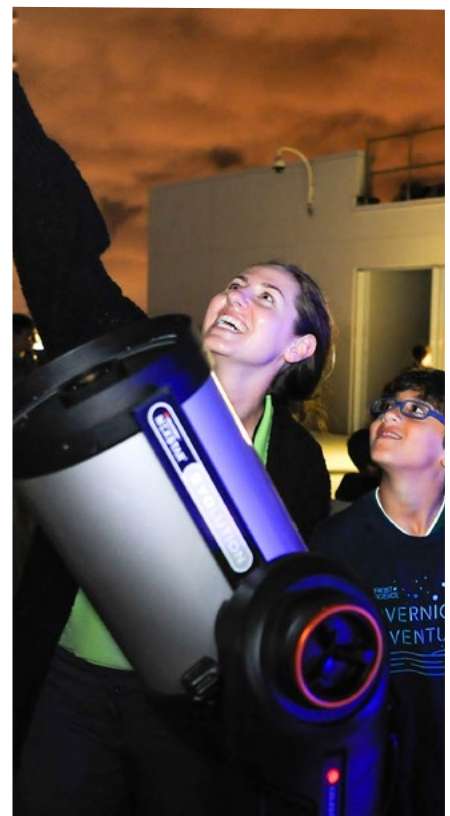
Science never sleeps... especially at Frost Science! Classes and field trip groups with children aged 5 – 17 (must be accompanied by chaperones) are invited to join us for an overnight adventure where you will experience the exhibitions after dark along with special programming and a private planetarium show.

Each evening of fun includes:

- ✓ After-hours access to selected exhibitions
- ✓ Hands-on, inquiry-based STEM activities
- ✓ An interactive presentation bringing science to life
- ✓ State-of-the-art Frost Planetarium show
- ✓ Special t-shirt for youth participants
- ✓ Dinner and breakfast
- ✓ Complimentary voucher for a return visit

Cost: \$75 per person (adult or child). Minimum of 75 participants required. Dates subject to availability. One chaperone per 10 children required.

For more information and to reserve an overnight field trip, please visit frostsscience.org/overnights.



Additional Educator Resources

Supporting Field Trip Materials

We know educators are incredibly busy. To help you prepare for your field trip—as well as reinforce the lessons learned at the museum back in your classroom—we've created standards-based pre- and post-visit materials for grades Pre-K - 8th that align with each of our exhibitions. These resources include activities to use before and after your visit, and provide insight into what you can expect during a Frost Science field trip.

Standards-aligned curriculum materials can be downloaded free of charge from frostsscience.org/fieldtrips.



Special Educator Membership for South Florida Educators

Experiencing a field trip destination can be helpful in planning how to share the experience with students. Frost Science is committed to supporting educators in achieving this goal.

Educators in Miami-Dade County, Broward County, Palm Beach County and Monroe County can receive a complimentary, individual Educator Membership at Frost Science, valid for complimentary admission for one adult educator cardholder year-round, plus guest privileges for select member events and exhibition previews. Annual processing fee of \$15 will apply. Proof of current school year employment is required. A school-issued photo I.D. and/or a current paycheck stub are acceptable forms of proof (additional verification may be required). School websites, health insurance cards or a class syllabus are NOT acceptable proofs. To receive the educator membership, please visit the Member and Guest Relations Desk at Frost Science or email a copy of your current school I.D. and/or paycheck stub to membership@frostsscience.org.

Please note: the Educator Membership is valid for complimentary admission for the educator only; complimentary admission benefit does not extend to guests.

Educator Ticket Discount

Educators not located in Miami-Dade County, Broward County, Palm Beach County or Monroe County receive a \$3 discount on Explorer Ticket admission with proper identification. One Explorer Ticket admission includes access to all museum exhibitions, aquarium and your choice of one Frost Planetarium show (based on availability). Discount is valid during normal museum operating hours and do not apply to special programming, events and Laser Friday shows. Discount only available at the onsite Ticket Center.

Please note: there is limited self-parking available in the museum garage during regular museum hours. This parking can fill up quickly. For a more economical option, you can also access the museum via public transportation. Detailed parking information, including current parking rates, can be found at frostsscience.org/parking.





For more information or to reserve your field trip, please visit frostsscience.org/fieldtrips.

For additional assistance, please email fieldtrips@frostsscience.org or call 305-434-9564.

PHILLIP & PATRICIA FROST MUSEUM OF SCIENCE

1101 Biscayne Blvd, Miami, FL 33132 | 305-434-9600

   @FROSTSCIENCE