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Meet our

PROGRAMS TEAM



Shannon Moss
Director of Education



Michelle Lewis
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Director, Planetarium & Technology



Pia McMahon
Education Coordinator



Kat Alfaro Reservations Specialist

STEAM PROGRAMS OVERVIEW

As well as arranged time for hands-on learning in our museum exhibits, we offer additional educational programming that can be tailored to fit your preferred schedule. Let us provide your class with an unforgettable learning experience that is engaging, relevant to your curriculum, and aligned to the NGSS standards.



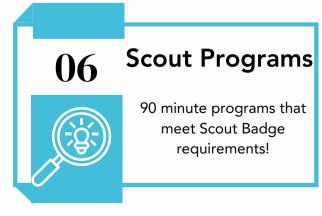
A hands-on classroom experience for K-12 aligned to NGSS standards.

Planetarium Visit our upgraded planetarium for one of our exciting shows or an out of this world tour.









LEARNING LAB **LEARNING LEARNING LEARNING LEARNING**

LABS

PRE K, K-2

Up to 20 students, \$12.50 per additional student. Maximum of 30 students per classroom.

LABS

3-5

\$ 350

Up to 20 students, \$12.50 per additional student. Maximum of 30 students per classroom.

LABS

6-8

\$ 350

Up to 20 students, \$12.50 per additional student. Maximum of 30 students per classroom.

LABS

9-12

Up to 20 students, \$12.50 per additional student. Maximum of 30 students per classroom.

Program

Additional Information

Exhibit Admission Only

Exhibit Admission Add-On

Scout Badges

Traveling Science

Challenger Missions

\$12.50 per student

\$8 per student

\$18 per student, \$9 per adult

Cost of programming, additional fees apply.

\$650 +

Does not include planetarium show. Chaperones \$10 per adult.

Does not include planetarium show. Chaperones \$10 per adult.

> Includes general admission to exhibits.

Varies with location.

Prices start at \$650

For additional programming such as homeschool classes or overnights please contact us.









\$300

Up to 20 students, \$10.00 per additional student.

Maximum of 65 adults + children per show.

\$350

Up to 20 students, \$12.50 per additional student. Maximum of 65 adults + children per show.

\$350

Up to 20 students, \$12.50 per additional student. Maximum of 65 adults + children per show.

\$12.50

Up to 160 students. \$8 when purchased with additional programming.

Chaperones (including teachers) are free in a 1:5 ratio for preschoolers and 1:10 ratio for K and up. Additional chaperones are \$10 each.

AVAILABLE DISCOUNT PACKAGES

DIGITAL SHOW

Book a Digital Show in our planetarium for up to 65 people for a flat fee of \$600.

CHALLENGER PLANETARIUM ADD ON

Book a planetarium show with your Challenger Mission and receive 50% off the price of a digital show or 20% the price of a live show.

CHALLENGER MULTIPLE MISSION

Book two or more Challenger Missions and get a free digital live show in the planetarium.

EARLY BIRD

Early Bird Discount please contact us for our current early bird discount pricing.

For additional programming such as homeschool classes or overnights please contact us.









DIGITAL PLANETARIUM SHOWS

From constellations and space exploration to telescopes and dark matter, the Discovery Science Center's full-dome Henry B. duPont III Planetarium is an experience your students will enthusiastically embrace!

All planetarium shows are offered on a reserved basis for groups and must be booked in advance. Our Digital shows are pre-recorded.

One World, One Sky: Big

Bird's Adventure

*

We Are Aliens

*

Birth of Planet Earth

*

Secret Lives of Stars

Dawn of the Space Age

*

Seeing: A Photon's

Journey

*

Ice Worlds

*

From Earth to the

Universe

*

Stars of the Pharaohs

Edge of Darkness

*

Forward! To the Moon

*

The Hot and Energetic

Universe

*

The Sun, Our Living Star

*

The Dark Matter Mystery

*

Europe to the Stars

*

Mayan Archeoastronomy



LIVE PLANETARIUM EXPERIENCE

EXPERIENCE A CUSTOM SHOW

Live planetarium experiences give students the opportunity to explore in real time and take students on a journey anywhere in our known Universe. Students have the opportunity to explore and ask the expert questions in this interactive experience.

All planetarium shows are offered on a reserved basis for groups and must be booked in advance.

SKIES OF TONIGHT

Coming to a dark sky near you! Join our experts as they take you on a fantastic journey through the nighttime sky. Students are shown how to locate and identify the stars, planets, and constellations visible in the evening sky at the time of their visit. The Galaxy awaits...

TOUR OF THE SOLAR SYSTEM

Join our educators for a tour of Earth's nearest neighbors! From planets and dwarf planets to moons and more, you'll see some of the major bodies in our solar system and learn about how our understanding of our place in the universe develops with each new discovery.

CUSTOM

Join our experts for a special planetarium show created to support your learning goals! Shows must be booked a minimum of four weeks in advance, and the Director of the Henry B. duPont III Planetarium must be consulted a minimum of six weeks prior to your show. Pricing varies with content and production. Please call (203) 416-3529.



LIVE DEMONSTRATIONS

LIVE DEMONSTRATIONS







LIVE DEMONSTRATIONS

LIVE DEMOSTRATIONS

ELECTRICITY *

Learn about how electricity can be created. Discover the differences between static and current electricity. See electromagnetism at work and witness the power of lightning bolts and light bulbs illuminated without wires. You don't want to miss this shocking science experience!

CHEMISTRY

Is it science or magic? You decide! In this demonstration, explore changes of state (solids to liquids, liquids to gases), mixtures, solutions, and chemical reactions. Chemistry is all around us—come check it out!

ENGINEERING FOR SPACE

It's hard enough to escape the Earth's gravitational pull and make it safely to space, but staying safe in space presents a whole new set of engineering challenges. Astronauts must be protected from extreme heat, cold, vacuum, fast-moving debris, and they need to be able to breathe! We'll learn about the amazing innovations of space gear in this exciting demo that showcases the fascinating engineering challenges and solutions for exploring the "final frontier".

WEATHER

What is weather? What are the key factors that create all the different types of weather we experience? Explore the causes and effects of thunder and lightning, learn about what creates wind currents, and see a tornado demonstration. You won't want to miss this exploration of some of our wildest weather!



LIVE DEMONSTRATIONS

MORE LIVE DEMONSTRATIONS

THE LAWS OF MOTION*

The force is all around us... the forces of motion that is! We'll explore all three laws of motion to test how things interact. See the power of inertia, learn how you can change acceleration by changing mass, and become a rocket scientist! You'll be strong with the knowledge of forces after this demo!

LIGHT

How does our eye see images? How do we see color? What is the difference between subtractive and additive color mixing? Are there invisible colors that we can't see? And just what does it mean when we say our sunglasses are polarized? Discover the answers to these questions and more in our illuminating demonstration about light.

SOUND*

Listen to the interactions of sound waves. Learn about pitch, volume, and the transmission of sound. Watch as instruments, music boxes, and other devices demonstrate the concept of sound. See how machines translate sound from recordings to our ears.

DON'T TRY THIS AT HOME!*

Get ready for the coolest, hottest, most explosive activities that you can imagine. Mad Scientists are welcome as we combine common sense with scientific principles and fascinating fun.



PRESCHOOL

Our preschool programs are designed to fit the learning style of preschoolaged children. Our objective is to bring out your preschoolers' natural curiosity and increase their understanding of the world around them. Onsite preschool groups will receive an age-appropriate planetarium show included with the purchase of an on-site Learning Lab program.

SPACE SCIENCE

I Want to Be an Astronaut*

Learn how astronauts live and work in space. Learn about gravity and how rockets launch astronauts and their cargo into space. Students will make a twirly spacecraft and we will launch a mini-rocket in class!

CHEMISTRY

Bubbles*

Get ready to get messy as we make observations of bubbles and learn what makes them "pop!" We'll explore their strength, shape, colors, and more as we blow bubbles everywhere!

EARTH SCIENCE

Wild Weather*

What's the weather today? Learn about weather patterns as we identify how the life cycle of a cloud can help us understand what the weather might be like tomorrow. Make a cloud identifier to help you keep track at home!



PRESCHOOL

CHEMISTRY

Icky & Sticky

Get sticky with us as we explore the sense of feeling! Mixing, stirring and experimenting are all part of this fun class where we make a mess! Use describing words with us as we compare different mixtures.

SPACE SCIENCE

Party with the Stars

What is a star? What are constellations? Are there really animals in the sky? Learn all about the stars and explore the Universe with us. Includes a sticker craft and a planetarium show.

LIFE SCIENCE

I Want to Be a Zoologist*

Discover a new species with us and study how it has adapted to its environment. Be on the look out for mermaids, unicorns and yeti's as we explore if they are really that suited and adapted to their environments!

ENGINEERING

Float Your Boat*

Why do some objects sink and others float? Your students will find out as they make predictions and test different materials to see what sinks and what floats. Students will build and test their own boat to apply their understandings of why certain objects float, then see what happens when they add cargo to their creations.



GRADES K - 2

Learning Labs run 75 minutes in the classroom. Our labs are designed to support Next Generation Science Standard cross-cutting concepts and content. Each lab is hands-on and utilizes science and engineering skills and practices.

SPACE SCIENCE

Over the Moon*

Does the Moon shine, or is it simply reflective? Does it change shape, or is it in shadow? Your students will be over the moon as they learn all about our Moon and study its phases. Learn how big the Moon is, how far away the Moon is, and what the Moon is made of, as well as why its appearance changes through the month.

EARTH SCIENCE

Water You up To?

Water is all around us, and has a powerful effect on our planet. Sometimes that effect can be sudden (hurricanes, floods, mudslides, blizzards), and sometimes it can be gradual (erosion, glaciers, river formation). We'll explore erosion and problem solve how water has the ability to shape the land and structures around it.

CHEMISTRY

Slimeology

Do you like to make a mess? Experiment with Oobleck as we explore states of matter, learning about non-Newtonian fluids and properties in chemistry.



GRADES K - 2

FORCES & MOTION

Motion Commotion*

Students will learn about forces and practice using different forces to change the motion of various objects. Students will use pushes and pulls as well as tools to create changes in the motion of the cars and then use ramps to study the force of gravity acting on the cars

SPACE SCIENCE

Solar System Explorers

Join us in the Planetarium as we take an out-of-the-world tour of the solar system with some surprising planetary landmarks on the way! Includes making a take home model of our solar system.

LIFE SCIENCE

Amazing Adaptations

We as humans have adapted to our environment in order to survive for thousands of years. We have done this both physically and behaviorally. Animals have similarly adapted to their environments in many ways from camouflage to strange but useful appendages. Compare with us as we look at adaptations of different species.

LIFE SCIENCE

We're Only Human

Explore the differences between our human traits and those of animals. How do our various systems work together to keep us alive?



GRADES 3 - 5

Learning Labs run 75 minutes in the classroom. Our labs are designed to support Next Generation Science Standard cross-cutting concepts and content. Each lab is hands—on and utilizes science and engineering skills and practices.

EARTH SCIENCE

Natural Disasters

Have you heard of Pangea? We'll go back in time to learn about the moving plates that have shaped the continents we know today. We'll learn about what happens when plates move against each other, including earthquakes and volcano formation. Join us as we think about how these hazards impact communities.

SPACE SCIENCE

Our Home in Space

Join us in the planetarium as you fly from Earth to other planets and learn about what is around us. See the Earth orbiting around the Sun, and look at what causes observable patterns in space such as night and day, months and years.

ROBOTICS & CODING

Basically Bots

Learn to code with us with this introductory coding class. You'll have the opportunity to program your own robots and build your own obstacle course for your robot to navigate.



GRADES 3 - 5

CHEMISTRY

Chemistry Matters

Learn about states of matter, conservation of mass, and physical and chemical changes. We will learn how to identify and classify materials and even test out some Non-Newtonian fluids to see how they defy classification!

ENGINEERING

The Engineered Egg Drop

You can't engineer an omelette without breaking a few eggs. Can you figure out the best design solution for a problem? You'll compare a set of solutions and select the best one for the job, then implement your chosen design plan. With limited materials and time, you'll need to make important decisions to accomplish this challenge.

FORCES & MOTION

Coasters in Motion

Learn about forces and motion and how Newton's Laws of Motion work in the everyday world. In this class you'll design and build your own prototype for your rollercoaster while doing a series of challenges to test your design.



GRADES 6 - 8

Learning Labs run 75 minutes in the classroom. Our labs are designed to support Next Generation Science Standard cross-cutting concepts and content. Each lab is hands—on and utilizes science and engineering skills and practices.

ENGINEERING

Engineering for Earth

Are solar panels and wind energy helping us curb the negative effects of human consumption of the Earth's resources? Let's assess where our weaknesses are and devise a strategy to help our planet. Water consumption and conservation will be discussed along with the construction of a prototype water filtration system.

LIFE SCIENCE

Gene Lab*

Learn about DNA and the genetic code that determines our features. You'll have the opportunity to join us on the Dragon Reserve and Conservation Operation (DRACO) to breed your own dragon! We'll learn the differences between genotype and phenotype to create highly adapted new generations!

CHEMISTRY

Molecule Mysteries

Learn about the motion and stability of the tiniest particles on Earth. Investigate how they react with one another and theorize what happens if we are to introduce a chemical reaction.



SCIENCE ON A **SPHERE**

Many of our learning labs include a brief presentation using our Science on a Sphere (SOS). SOS enables an immersive exploration of the Earth, our solar system, and beyond, animated on a five-foot diameter globe. With over 500 datasets, topics can be customized for specific lessons. Contact us for more information and current options.





GRADES 6 - 8

EARTH SCIENCE

Digging Through Time

What does the geosphere tell us? Dig deeper through the Earth as you study the layers and stratify of the planet you live on. What scientific information can you collect along the way that can be used to guide scientists in the future?

LIFE SCIENCE

Comparative Anatomy

Explore different species and their anatomy as we study the evidence of biological evolution. In this class you'll see examples that demonstrate common ancestry as we compare species and their ancestry.

SPACE SCIENCE

Challenger Center - Space Simulation Mission

Discovery Science Center's Challenger Learning Center is a mock space station and mission control simulation environment that promotes awareness of how technologies make space exploration possible. The simulation creates a cooperative learning atmosphere where students have opportunity to test out a STEM career underscored by teamwork, communication, problem-solving, and decision-making.





HIGH SCHOOL

LIFE SCIENCE

Neuroscience*

Why is a brain cell so specialized? Learn more about brain science with the option to choose from a range of topics from aging, sleep science, addiction and diseases of the brain.

CHEMISTRY

DNA Profiling

Why is DNA profiling so crucial for criminal cases? Learn more about the biology and chemistry of DNA profiling and experiment with gel electrophoresis to narrow down suspects!

SPACE SCIENCE

Mission LEO*

This program will simulate a mission where students will have the opportunity to study a new planet and determine if the planet is suitable for human life. This four-part lesson series will allow your students to explore coding and robotics, biological sciences and engineering while working in a collaborative team. Please contact us for more information and pricing.



HIGH SCHOOL

EARTH SCIENCE

Stellar Stars

In Stellar Stars, we will learn about different types of stars, stellar life cycles, and how astronomers use spectroscopy to determine their properties. This lab includes visualizations in our planetarium.

LIFE SCIENCE

The Beginning of Brains*

Humans are intelligent species, but we don't have the biggest brains. Study neuroscience, biological anthropology and evolution in this learning lab as we find out more about what makes our brain unique.

CUSTOM

Our team will work with you to create programming for your students that is engaging, interactive and meets your required criteria and learning standards. Please contact us if you are looking for tailor made high school programming.



JUST FOR FUN! GRADES K - 3

Sink and Float!*

How did people learn how to travel over water? Your students will find out as they test different materials to see what sinks and what floats. Students will build and test their own boats to apply their understandings of why certain materials and shapes float, then see what happens when they add cargo to their creations.

Bridge Builders*

What are bridges and why are they important to society? Join us as we discuss the skills it takes to design and build these expansive structures that help to connect our world. We will dabble in bridge design, review bridge types and assess how tension and compression play a role in the structures. We will also try some construction of our own using the techniques used by real architects and engineers!

Sleep Science*

Why do you need to sleep? What happens to your body and brain while you sleep? What are good and bad sleep habits? In this class we will reflect on our own sleeping patterns and look into the biology of the brain to figure out why sleep is so necessary for us, while comparing sleep in different species.



JUST FOR FUN! GRADES 4 - 6

Light Fantastic

This lab is all about light and how we see it, and don't see it! Witness what happens when colors mix, learn about forms of light, the light spectrum, prisms, filters, lenses and diffraction. Can your eyes be tricked? This lab can also be combined with a light demonstration.

Electricial Circuits

We use electricity all the time, but what is it really? We will define electricity, where it comes from, and how it works. Students will work with circuit diagrams to complete a simple circuit to turn a light on, before moving on to other types of complex circuits.

Great Rocket Challenge

Students compete in a design challenge to bid on a NASA rocket contract, complete with test launch! Plan, budget, build, and test a rocket to see which team has what it takes to win the contract. Students work cooperatively in teams to use math, engineering, and interpersonal skills. Be sure to ask us about a special discount on our Dawn of the Space Age planetarium show to complement this lab! Please note this is a 90-minute lab.



TRAVELING STEM

Let us come to you!

Save on bus fees and travel time - we bring the science to you! The Discovery Science Center's education staff will come to your school with exciting participatory programs. All you need to do is provide the audience and the space, and we'll do the rest! For even more excitement, pair one of our demonstrations with a science lab and make the most out of our visit!

PRESCHOOL PROGRAMS

45 Minute Programs - Starting from \$250

In-state - minimum fee for up to 18 students, add \$12.00/student up to a maximum of 22. Classes in excess of 22 require an additional instructor and additional minimum fee. Out of state travel fees apply with additional \$5 per student.

GRADES K - 8

75 Minute Programs - Starting from \$280

In-state - minimum fee for up to 20 students, add \$14.00/student up to a maximum of 30 students. Classes in excess of 30 require an additional instructor and additional minimum fee. Out of state travel fees apply with additional \$5 per student.

LIVE DEMONSTRATIONS

Traveling Demonstrations (45 minutes) - Starting from \$350

Minimum fee for a single demonstration, plus \$150 - \$250 fee for each additional same demonstration which occurs at the same location on the same day.

CHALLENGER LEARNING CENTER

"CHALLENGER IS A VISUALLY EXCITING, STATE-OF-THE-ART EDUCATIONAL EXPERIENCE".

Discovery Science Center's Challenger Learning
Center is a mock space station and mission control
simulation environment that promotes awareness of
how technologies make space exploration possible.
The simulation creates a cooperative learning
atmosphere where students have opportunity to
test out a STEM career underscored by teamwork,
communication, problem-solving, and decisionmaking.



Book two same-day missions, get a free digital planetarium show!

2 HOUR MISSION

Start your mission prep in school and arrive ready to go for your mission! All participants must complete Challenger Training prior to Mission and arrive with completed crew manifest. Chaperones (including teachers) are free in a 1:10 ratio.

Additional chaperones are \$12.00 each, maximum of 6 chaperones per mission. hours. \$650.00 minimum fee for up to 26 students, add \$25.00/student up to a maximum of 28.

VIRTUAL MISSION

You can also book a virtual Challenger mission that can be done from anywhere with an internet connection.

Virtual missions run 45-60 minutes. All virtual missions include pre- and post-mission content to bring back to your classroom.

Virtual missions run \$300 per experience up to a maximum of 30 participants.



CHALLENGER LEARNING CENTER

AVAILABLE MISSIONS

NEW! Expedition Mars

Grades 5 and up



The year is 2076. A handful of facilities have been established on Mars, including a greenhouse, a mobile geological survey base, and a centralized research habitat. The primary human habitat is not on Mars, but on one of its moons, Phobos. A large shuttle regularly ferries astronauts. However, when crew members discover an imminent threat to their MTV and the Martian surface facilities, they must act quickly to save their stations, their research, and their lives...

COMING 2024! Lunar Quest

Grades 7 and up



NASA recently identified areas on the Moon that may support a sustainable long-term habitat for humans. In order to confirm this finding, NASA issued a directive for astronauts to return to the Moon! In this Mission, a team of astronauts must board a spacecraft and launch to the Moon, while a team of scientists and engineers on Earth command and assist the astronauts in Mission Control. However, when the spacecraft crew begins to receive troubling readings from below the surface, the two teams must work together and make critical decisions to turn a possible catastrophe into NASA's finest hour!

VIRTUAL SIMULATION - 45-60 MINUTES

Currently available for Grades 5 and up. You can book a virtual Challenger mission that can be done from anywhere with an internet connection. Virtual missions run 45-60 minutes. All virtual missions include pre- and post-mission content to bring back to your classroom. Virtual missions run \$250.00 per experience up to a maximum of 30 participants.



PLANNING YOUR VISIT

Our educators and Science Center staff are ready to provide you and your students with the very best educational enrichment programs available. Challenger Mission educators are trained to lead realistic, communication-based simulation experiences to achieve a unique, cooperative learning atmosphere.

Multiple programs, booked for the same group and visit, are often available at a discounted rate. Many group leaders design a custom day by selecting from the wide variety of science offerings available. Plan now so that your group may join the thousands of students participating in Science Center programs this year.

Please have the following information ready when you call:

- Date of your visit (our schedule fills up quickly, so please have a list of alternative dates available).
- Title of the program(s) in which your class will participate.
- Address and phone number of the school.
- Phone number and email of the teacher.
- Group size: students/chaperones.
- Grade level(s) and the number of students per grade level.
- Contact: the person who will lead the class visit to the Science Center (day-of telephone number will be requested).
- Responsible billing party information.
- Accessibility considerations for the class or for individual students. This includes any students or teachers/chaperones that require use of an elevator or additional seating.

To reserve your schedule of activities, call 203-416-3558. If you wish to use the dining facilities or visit our gift shop, please inform the scheduler. Reservations are taken on a first-come, first-serve basis and are subject to availability.







SCOUT PROGRAMS

GIRL SCOUTS

Daisies

- Mechanical Engineering
- Space Science Explorer
- Eco-Learner

Brownies

- Mechanical Engineering
- Space Science Adventurer
- Home Scientist
- Bugs

Juniors

- Detective Badge
- Space Science Investigator
- Balloon Car Design Challenge
- Paddleboat Design Challenge
- Entertainment Technology

Cadettes

- Space Science Researcher
- Programming Robotics

Seniors

- Sky
- Programming Robotics



SCAN ME



SCOUT PROGRAMS

BOY SCOUTS

Tiger

• Sky is the Limit

Wolf

- Digging in the Past
- Motor Away

Bear

- Forensics
- Super Science

Webelos

- Adventures in Science
- Into the Woods

Boy Scouts

 New programs in development -Please contact us to request a program, or scan the QR code below for our most recent offerings.



SCAN ME





