

EDUCATION PROGRAMS 2018-2019

SPACE

A JOURNEY TO OUR FUTURE™

NEW EXHIBIT
TO HELP US CELEBRATE



SEE BACK COVER



PRESENTS

Cradle of Aviation Museum

and Education Center



516-572-4066 • www.cradleofaviation.org

Take your class on a trip they'll never forget... to the Cradle of Aviation Museum.

Walk through the history of flight while also walking through the rich history of our region. Explore the past and discover what the future can hold.

Now in our 16th year, thousands of school groups have been captivated by their experience at the Cradle of Aviation. Your students will be exposed to eye-opening experiences that fit perfectly into their curriculum.

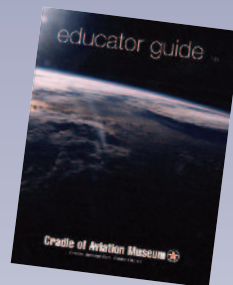
Your students will walk away with a rewarding experience that combines the educational discipline you need in an entertaining way through guided museum classes, live Dome programs, giant screen films and our Aerospace Quest. Each of our eight museum galleries will deliver a "WOW" experience as students travel through time with over 75 air and space craft from hot air balloons and kites to jet aircraft and an actual lunar module on the moon.

Between the Exhibit Galleries, JetBlue Sky Theater Planetarium and National Geographic Dome Theater, a visit to the Cradle of Aviation Museum is an exciting and educational field trip, that's right in your own backyard.

See why we say this is **"Not your ordinary school trip."**

FREE Educator Guide

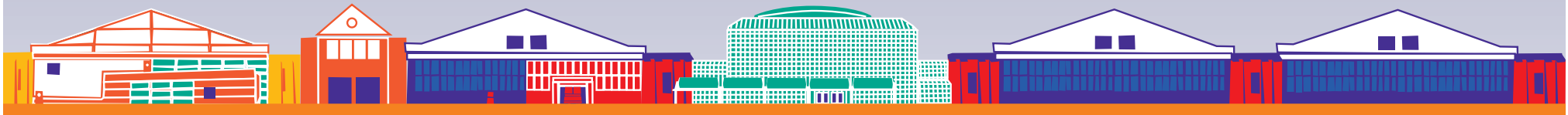
Thanks to a New York State Council on the Arts grant, you can now visit cradleofaviation.org/education and download our 40 page educator guide.



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To make a reservation please call (516) 572-4066



NEW! 3, 2, 1, Blast Off! 30 minutes, grades 4 – 12

Can you imagine taking off in a rocket with powerful boosters? Rockets are the cornerstone of space exploration and ensure satellites get into space! Learn more about how rockets propel beyond Earth's atmosphere while experimenting with basic types of rockets.

Updated! Drones: A Flight to the Future 50 minutes, grades 4-8

From home delivery and journalism to disaster management, “drones” aka UAV's (unmanned aerial vehicles) are taking over the skies. But how did they get their start? How exactly do they work? What else are they used for? Throughout the class, students will be propelled towards the future after learning all about the next step in aerospace engineering! They will explore the history of drones, discover how drones require computer programming, construct a drone, and even experiment flying one.

Tech...Under Construction 30 minutes, grades 4 – 8

Throughout the technology industry change is happening every day. For students to become a part of this revolution they will need to understand how technology works... “under the hood.” Using hands-on activities, students will learn the components of the technology industry from hydraulics to circuits uncovering the essentials to constructing robotics, rovers, drones, and more!

Bot Building 50 minutes, grades 4 – 9

Robotics play an integral role in engineering our futures. From factories to outer space, robots contribute to our society every day, performing jobs people may not be capable of doing. But who builds and creates these “intelligent” machines? Using Lego® NXT Robotics Kits, student teams will be introduced to robotics in an exciting hands-on format, learning the engineering design process and exploring what it is like to be an engineer!

Physics of Toys 30 minutes, grades 2 – 9

Yo-yos, balloons, and slinkies may be found in any kid's closet, but they probably don't realize that they can learn science from them. Students will use common toys to explore inertia, kinetic energy, laws of motion, and many more physics principles in this fun hands-on class.

iRobot 30 minutes, grades 2 – 8

You might be familiar with androids in Star Wars, Star Trek or even the Terminator. However, modeling and engineering robots after humans in the real world is extremely challenging because of the complex systems humans use to do tasks. Using hands-on activities students will compare and determine the essentials needed to engineer a robot like a human while creating excitement about science, technology, and engineering.

- ➡ September-October save \$2.00 per student on museum/theater combo tickets!
- ➡ December-January visits receive a FREE 30 minute museum class!

Living in Space 30 minutes, All grade levels

There are many things one needs to know before venturing up into space...like how does one go to the bathroom? The most common and practical questions will be answered on what life is like in space. Students will discover where to sleep, what kind of food is available, what astronauts wear and what some hazards are. Some students will even get to try on a space suit!

Kites! 30 minutes grades 1 – 3

3000 years ago the Chinese invented kites and today most of us have attempted to fly one. Learn how kites were precursors to airplanes and build your own kite.

Force and Motion 30 minutes, grades 4 – 12

Experience Isaac Newton in a whole new way! Students will pull, knock and twist their way into a better understanding of Newton's laws of motion through fun, engaging experiments. They will not only have a better appreciation for his laws, but students will never look at their world the same way again. Experiments include pulling a table cloth from under dishes and racing against other students in our Third Law Challenge!

Weather to Fly By 30 minutes, grades 3 – 8

What is something that each and every one of us, including animals and plants, has to deal with everyday, all year long? Yes it is weather! Find out about basic weather patterns, where weather can be found, its effects on aircraft and the ingredients you need to conjure up some destructive forces!

Fly By Math 50 minutes, grades 4 – 9

This math program puts students' skills to the ultimate test - can they safely direct air traffic? Recreating the intense atmosphere of air traffic control centers, it's up to the students to see if they need to change the plane's direction or speed by putting their math skills to use in these real world situations.

How Does It Fly? 30 minutes, grades 1 – 8

What are lift, thrust and drag? These are just a few of the concepts explored in this program that features hands-on demonstrations covering the history of air travel. Explanations of how flight is accomplished will provide insight into the scientific principles of flight.

Guided Tour: Highlights of Long Island Aviation 50 minutes, All grade levels

From ballooning to the Moon...an evolution of aviation, all in under an hour. This museum educator-led program will take your group through the museum's collections focusing upon major events and aircraft in aviation history. Inquiry based learning will help students interpret the history of aviation on Long Island according to the age level and needs of each group. ELL option available upon request.

All classes comply with national and state standards.

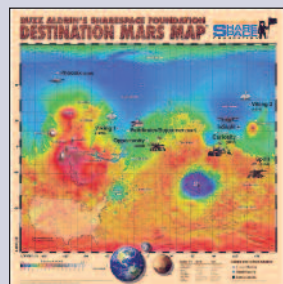
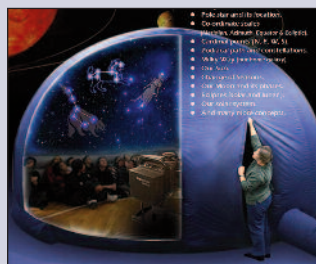
Museum Outreach - We Come to You!

Choose from any of our Museum Classes (pages 4-5) to make learning come alive for children and adults in a variety of settings from schools, libraries, camps, scout meetings to community centers. Led by museum educators, all programs use hands on demos to promote the museum's philosophy of inspiring and educating while entertaining.

Outreach Exclusives!

Digitalis Digitarium - Portable Inflatable Planetarium!

Digitalis is a portable, inflatable planetarium dome that can accommodate up to 30 students per class session. Once inside the dome, discover the majesty of the stars and our universe with its digital technology designed to showcase bright, clear images. The Digitalis dome has a stand-up entrance permitting easy entry for students and teachers, offers interactive learning opportunities and is best suited for your gym or auditorium.



Giant Mars Map - 25ft x 25ft

After taking you to the stars, let museum educators take you and your students to Mars! With our Giant Mars Map, students will be able to explore the Red Planet as a satellite, rover, or astronaut through a variety of educator led activities which allows for a real hands (and feet) on learning experience. Best for students in grades 1-6; book with the Digitarium to unlock a special discount!

Nassau County Outreach Pricing

Base 45 Minute Program.....	\$350.00
Base 45 Minute Digitarium Planetarium Program	\$500.00
Additional 45 Minute Same-Day Programs.....	\$50.00

Please call for outreach pricing in Suffolk, Queens and Kings counties.

Outreach programs for schools are age appropriate and designed to address New York State Learning Standards. To find out more, book a program, or even create customized activities call (516) 572-4029.

Annual Competitions - Free with Museum Admission

We are pleased to host a growing list of competitions for young people from across Long Island.



2018-2019 Competitions

KidWind Challenge - October 24*
Machine Madness - February 2
Newton's Egg Drop - March 7
CAM Drones for Good - March 20*
Sustainable Transportation: Eco-Engineers - June 11*

See website for competition details!

*Professional development workshops available, see below.

2018-2019 CTLE Certified Teacher Workshops

KidWind Challenge Workshop - September 27

Project ASTRO - October 15

STEM Hub PD Day - November 6

CAM Drones for Good - November 19

Robotics in Space Exploration - December 12

To New Planets, Galaxies, and Beyond - June 6

To learn more about our professional development programs and to register, please visit: www.cradleofaviation.org/pd

In addition to these offerings, we would be thrilled to design a professional development program for you, your school or your district based on your curriculum. For rates on a custom professional development program, please contact Catherine Gonzalez at 516-572-4028.

Free Previews for Teachers

If you would like to see what we offer for programs, preview a theater show or to just take a look around, do not hesitate to call! Teacher screenings and sneak peeks are free here at the Cradle. You can even have your staff come for a day of Professional Development where we will create a schedule for you to sample a little bit of everything. Reservations are required. Please call (516) 572-4028.



Digistar6 advanced computer graphics technology for digital planetariums provides an immersive dome experience.

Fusion Shows

These 50 minute shows combine live programs with movies for a unique planetarium experience!

Train like an Astronaut & One World, One Sky - grades pre-k – 2

Train like an Astronaut & Asteroids - grades 3 – 5

You have been selected into NASA's new astronaut program! Did you know, astronauts have to train mentally and physically before heading to the International Space Station? Students will learn multilingual astronomy vocabulary, meet a physical challenge, and complete an ISS mission. Find out if you have what it takes! Then, (grades pre-k-2) enjoy One World, One Sky: Big Bird's Adventure or (grades 3-5) will enjoy Asteroid: Mission Extreme.

Junior Jetsetters & One World, One Sky - grades pre-k – 1st grade

The night sky is what led humans long ago to wonder what is beyond Earth. Spark your students' curiosity with an introduction to astronomy. Students will look at constellations, hear stories, and take space steps all while learning astronomy vocabulary. Then, explore the night sky with your favorite friends from Sesame Street in One World, One Sky: Big Bird's Adventure.

Space News & Asteroids - grades 3 – 12

Explore different topics happening in science and astronomy right now. After hearing the latest Space News, sit back and enjoy Asteroid: Mission Extreme. This movie takes audiences on an epic journey to discover the possibilities that asteroids present for space travel.

Live Shows 50 minute educator led planetarium shows!

Solar System Tour - all grade levels

Our Solar System has everything you could want! Planets! Moons! Asteroids! and Comets! All swirling around our one and only star, the Sun. Students will learn all the different objects that populate the Solar System and get a glimpse at the force that keeps worlds spinning. *Pair with museum classes: Living In Space, Force and Motion*

To the Moon! - grades 1 – 8

The Moon lights up our nights but how much do you really know about our night-time neighbor? During this show, students will get their hands on the Moon, see its many phases, learn about its features, and investigate the dark side.

Pair with museum classes: 3, 2, 1, Blast Off!, Living In Space, Force and Motion

Current Night Sky - all grade levels, Boy & Girl Scouts

Long before television, GPS, and street lights there were the stars of the night sky. Students will travel through the seasonal night sky to learn about constellations, hear mythical stories, and observe the magnificent Long Island sky.

Pair with museum class: Living In Space

jetBlue
SKY THEATER
PLANETARIUM

*Get your suitcase ready and
join us on an interactive adventure
through the universe!*

*Journey beyond the Earth and into the sky
LIVE with our educators!*

NATIONAL
GEOGRAPHIC
LEROY R. & ROSE W. GRUMMAN
DOME THEATER

FILMS

Dream Big, Backyard Wilderness
Living in the Age of Airplanes
Mysteries of the Unseen World
Journey to Space
Space Junk

Our full dome theater is a
large-scale immersive environment,
featuring real-time digital planetarium,
visualization and simulation space
and large-format cinema.



NEW!

Films available from our library:
(group minimums apply)

Air Racers, Back to the Moon,
Lewis and Clark

One World, One Sky: Big Bird's Adventure
Shackleton, Sea Monsters and Sunstruck.



Schedule a Visit

Please call reservations, Mon.-Fri, 9:30-4:00 at (516) 572-4066

Booking - The following information is needed when booking.

- Date of visit
- Arrival and departure times
- Number of visitors including both children and adults
- Grade(s) of school group
- Chosen options
- Contact details
- Lunch requirements: purchase special box lunch or bring you own.

Arrival

- Please arrive on time and leave book bags on the bus
- Lunches will be collected and held until lunch time
- Review museum schedule
- Before disembarking your group, please check in at the Box Office
- If you should come late, rescheduling dome show times and educational programs are contingent upon ticket and educator availability.

Requirements

- Supervision requirements is no less that one adult per ten children
- 24 hour notice is required for reservation adjustments
- Adult chaperones are responsible for keeping their groups together and maintaining order
- NO FOOD, DRINK, GUM or BACKPACKS are permitted in the museum

School Group Rates

Museum	Theater Show	Museum & Theater Show	Museum Classes (30 min.)	Museum Classes (50 min.)	Nunley's Carousel
\$6.50	\$7.00	\$11.50	\$1.00	\$2.00	\$1.50

- We accept cash, checks made payable to the Cradle of Aviation Museum, Master Card, Visa and AMEX.
- Payments must be made two weeks prior to date of visit
- We reserve the right to cancel your reservation if payment is not made and a representative can not be contacted
- NO REFUNDS will be given if your group numbers decrease the day of your visit

SPECIAL DISCOUNTS DURING OFF-PEAK PERIODS!

- > September and October – save \$2.00 per student on a museum ticket when combined with a theater ticket purchase.
- > December and January – receive a FREE 30 minute class with your visit!

For field trip funding opportunities, visit www.cradleofaviation.org/education.

Directions & Contact Info

Directions for Buses: Long Island Expressway, exit 39S, Glen Cove Road South. Glen Cove Road turns into Clinton Avenue. when you cross Old Country Road. Make a left onto Stewart Avenue. Take Stewart until you reach Eisenhower Park and make a right onto Merrick Avenue. On Merrick make a right at the first light onto Charles Lindbergh Blvd. Go two traffic lights on Charles Lindbergh and make a right into our parking lot. The entrance is the glass fronted Reckson Center building.



Hours:
Monday: Open for Groups (Min. 100)
Tuesday–Sunday: 9:30–5:00

Reservations:
(516) 572-4066

Reservations Fax:
(516) 572-4065

Address:
Cradle of Aviation Museum
Charles Lindbergh Blvd.
Garden City, NY 11530

More info at www.cradleofaviation.org
Join the conversation at facebook.com/cradleofaviation

Countdown to Apollo at 50!

Countdown to Apollo at 50 is our multi-year celebration of the 50th anniversary of the Apollo Space Program featuring:

- > New Exhibit - Space: A Journey to Our Future
- > Museum Visits from Astronauts, Scientists and Aerospace Professionals
- > Live Astronomy Shows for all ages
- > Film Screenings with special guests
- > School Competitions and Contests
- > Family Programs



For more details, please visit
www.cradleofaviation.org/apollo

NEW EXHIBIT!

SPACE

A JOURNEY TO OUR FUTURE™

The greatest adventure in the history of mankind is now your once-in-a-lifetime adventure with our spectacular new exhibit, SPACE: A Journey to Our Future.

This immersive exhibit takes you from the dawn of man's earliest visions of space exploration to the heroic achievements of the past, the unfolding discoveries of today, and the frontiers of the universe that lie ahead.

FREE 1-Year Memberships for Educators

Benefits include FREE admission to museum galleries for up to six people and much more. Previous educator members renew at a deep discount.

To take advantage of this offer, simply fill out our short online survey designed to help us understand how better to serve you.

Visit <http://bit.ly/free-museum-membership-2018>

STEM Partnerships



Elementary STEM Partnerships

STEM Partnerships with local school districts allow students to explore relevant and current challenges in STEM through project based learning

Please contact us at 516-572-4033
for more information.

Great Add-on



Nunley's Historic Carousel

Built in 1912, the 40 horse carousel entertained generations of Long Islanders in its Baldwin home for over 50 years. Nassau County has put a tremendous amount of resources to not only restore the carousel but also build its beautiful new home.