

EDUCATION PROGRAMS 2015-2016

THE FULL DOME EXPERIENCE

All new,
educator led,
interactive,
full dome
programs.

See page 8 for details.

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 while also exploring what the future can hold.

Now in our 13th 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, planetarium shows, 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.”

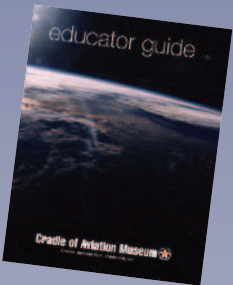
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To make a reservation please call (516) 572-4066

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.



The Daniel Berlin Center for Educational Excellence at the Cradle of Aviation Museum

Support for our educational programs is provided in part by the Berlin Family Foundation

NEW - Lunar Explorers 30 minutes, grades pre-k – 1

In this class, students will learn about the Moon, its orbit, and even surface craters! Through hands-on activities students will explore colors, shapes, and numbers to learn the basic features of our neighbor – the Moon!

NEW - 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!

Invisible Light 50 minutes, grades 3 – 12

Students will learn that in astronomy, different wavelengths of the electromagnetic spectrum will give us different pieces of information about the universe. Through group experimentation, with specialized activities at various workstations, students will discover that invisible light is as real as visible light!

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.

Eyes on Earth 30 minutes, grades 4 – 12

Earth has warmed by about 1°F over the past 100 years. But why? And how? Well, the Earth could be getting warmer naturally, but many of the world's leading climate scientists think that people are to blame. In this interactive class students will look at several elements that can contribute to climate change along with NASA technology that surveys our Earth's changes.

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. 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!

Rockets Away! 30 minutes, grades 4 – 12

Rocketry is an important development in modern day science and technology. This program will guide students through historic milestones leading to some of the current uses of rockets. Demonstrations of basic rockets will be included.

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 program, 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.

All classes comply with national, state and common core standards.

Outreach Programs

Museum Outreach - We Come to You!

Choose from any of our Museum Classes 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 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) 572-4035.



Have **STARLAB** - will travel!

In addition to our museum classes, you can also have our Starlab come to you!

Starlab is a portable, inflatable planetarium dome that accommodates up to 30 students. The inside surface has an aluminized reflective coating designed to clearly display

bright images. Its unique design, kid-friendly entrance tunnel and portability make it ideal for interactive, hands-on, minds-on learning.

Starlab 50 minutes, grades 1-12

Learn all about the current night sky and the beautiful stars that create it while listening to the exciting stories behind them. Some are of Queens, Indians, hunters and dragons while others are about dogs, bears and lions! You will even learn how to tell a star's age and temperature when you enter into this portable planetarium.

Nassau County Outreach Pricing

Base 45 minute program.....\$350
Base 45 minute Starlab program.....\$450
Additional 45 minute same-day programs.....\$50

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



Competitions & Professional Development

Annual Competitions - Free with Museum Admission

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



2015-2016 Competitions

KidWind Challenge - October 21*
Flying Model Contest - January 16
iConnect Challenge - February 1*
Rube Goldberg - February 6
Newton's Egg Drop - March 9
MagLev Contest - March 16*
Junior Solar Sprint - June 6*
Rockets - June 25

*Complimentary professional development workshops available, see below.

Free Professional Development 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) 572-4066.

Free 2015-2016 Teacher Workshops and Development Days

KidWind Challenge Workshop - September 30

Project ASTRO Introductory Day - October 7

- Teachers are pre-selected and must apply for this year-long astronomer partnership

Tech Ed Day - November 3

- Check out the latest in Ed Tech for your class!

iConnect Challenge Workshop - November 3 (a component of Tech-Ed day)

MagLev Contest Workshop - January 13

Junior Solar Sprint Workshop - April 18

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 Bingham at 516-572-4028.

UNIVIEW

Uniview is a visualization and simulation software aimed at presenting and teaching astronomy, astrophysics and earth sciences.

New Interactive Educator Led Programs

Junior Jetsetters - 30 minutes, grades pre-k – 2

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 practice being an astronaut all while learning basic astronomy vocabulary.

Pair with museum classes: Living In Space, Lunar Explorers.

Rocky Planets - 50 minutes, all grade levels

Tour the inner rocky planets of the Solar System! Ever wonder which is the hottest planet? Or how we know there once was water on Mars? Or even how the planets look from space? In this class students will learn all about the rocky inner planets of our solar system, fly through space themselves, and put their knowledge to the test!

Pair with museum classes: Living In Space, Force and Motion, Eyes on Earth.

Gas Giants - 50 minutes, all grade levels

Tour the outer gas planets of the Solar System! Find out what makes the universe go round, what Uranus was supposed to be called, and once and for all, see why Pluto is NOT a planet! In this class students will learn all about the gas giants of our solar system, fly through space themselves, and put their knowledge to the test!

Pair with museum classes: Living In Space, Force and Motion, Eyes on Earth.

Asteroids, Comets, and Meteors - 50 minutes, grades 3 – 12

While space is vast it is not empty, there is much more to it than planets. In this class, students will learn about some of the other objects in the Universe. They will get to be Near Earth asteroids, see where comets come from, and find out what killed the dinosaurs.

Pair with museum classes: Living In Space, Rockets Away.

Solar System Tour - 50 minutes, 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 feel the force that keeps worlds spinning. The Solar System Tour offers a sampling of Rocky Planets, Gas Giants, and Asteroids, Comets, and Meteors classes.

Pair with museum classes: Living In Space, Force and Motion, Eyes on Earth, Rockets Away.

To the Moon! - 50 minutes, grades 1 – 8

The Moon is the only other place in space where people have walked on the surface. In this class students will learn all about the moon; how it was formed, its phases, why it is full of craters, and the important role Long Island played in sending people there.

Pair with museum classes: Living In Space, Force and Motion.

Current Night Sky - 50 minutes, 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

THE FULL DOME EXPERIENCE

FILMS

Living in the Age of Airplanes
Mysteries of the Unseen World
Space Junk
Air Racers

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

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

Films available from our library:
(group minimums apply)

One World, One Sky: Big Bird's Adventure
Lewis and Clark, Whales
Back to the Moon and Sea Monsters.



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 Group Sales desk
- 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 or GUM is permitted in the museum

School Group Rates

Museum on your own	Theater only	Theater & Museum	Museum Classes (30 min.)	Museum Classes (50 min.)	X-Ride Theater	Nunley’s Carousel
\$5.50	\$6.00	\$10.50	\$1.00	\$2.00	\$1.00	\$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

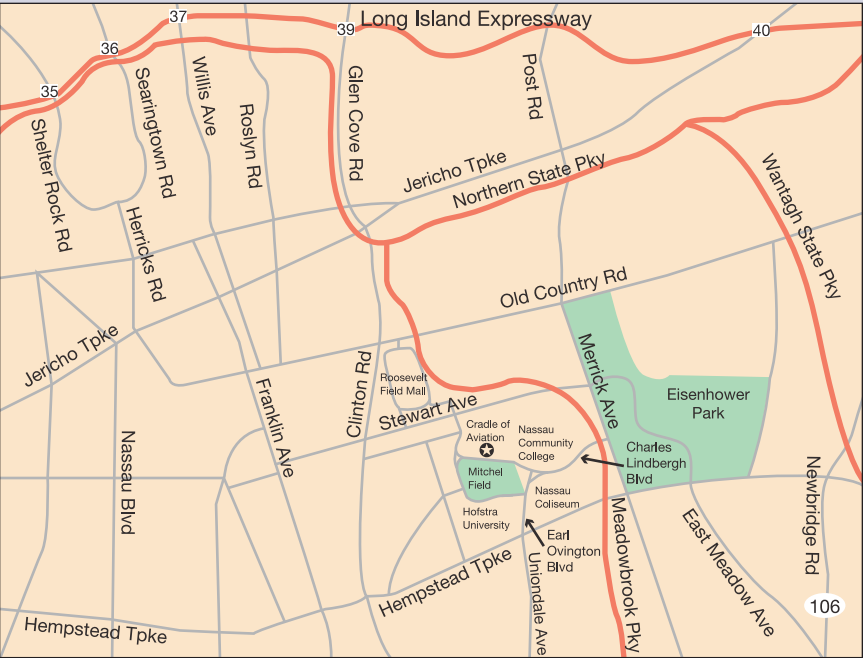
SPECIAL DISCOUNTS DURING OFF-PEAK PERIODS!

- > 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

Mailing Address:

Cradle of Aviation Museum
One Davis Avenue
Garden City, NY 11530

More info at www.cradleofaviation.org

Join the conversation at facebook.com/thecradleofaviation

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.

Go to: <http://bit.ly/edu-member-fall-2015>

Elementary STEM Partnerships at the Cradle!

The Cradle of Aviation is dedicated to helping increase the participation, performance and excitement of America's students in Science, Technology, Engineering, and Mathematics (STEM). The museum continues to serve as home to the first STEM Magnet Academy on Long Island. This unique collaboration between the Museum and the Westbury School District provides a select group of students with the opportunity to utilize the museum as a living classroom to explore STEM subject matters. Building on this successful model, the Cradle of Aviation Museum has developed several innovative partnerships with school districts like Franklin Square, Freeport and Wantagh to help get students excited in STEM learning. These STEM Partnerships allow students to explore relevant and current challenges in STEM, emphasizing the methods and processes required to find solutions to problems. Each student is provided with a dynamic environment to excel in these challenging content areas. Please contact us at 516-572-4033 for more information.

Discovery Carts

Discovery carts are mobile and can be moved throughout any part of the museum or exhibit. Each cart will include a series of hands on activities that communicate the significance of the gallery and showcase important principles, concepts or artifacts. The Cradle has developed 4 Discovery Carts to date, including, Early Flight, WWII, Space Exploration and Climate & Energy funded by The National Grid Foundation.

Great Add-ons to Enhance Your Visit!



The X-Ride Theater is a five minute, multi-sensory motion based experience. The fully enclosed simulator capsule can accommodate up to 30 passengers.

Ride films include: *Fly with the Blue Angels* - Be in the cockpit of the Blue Angels' F/A-18 Hornet Strike Fighter for the ultimate simulation experience and *Deep Sea: The Ride* - You are a passenger aboard a Deep Sea submarine, searching for signs of life in the dark and mysterious ocean depths.



Historic Nunley's Carousel at Museum Row

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 a beautiful new home on Museum Row to compliment the Cradle of Aviation Museum.