Welcome

The Gwinnett Environmental and Heritage Center is a unique atmosphere for learning and environmental stewardship launched by the Gwinnett County Board of Commissioners. Every student benefits from the long-standing relationship between Gwinnett County Public Schools and the Gwinnett County Board of Commissioners’ Department of Community Services. Every day we strive to transform the concepts of science and history into interactive, learn-by-doing experiences that encourage a student’s natural curiosity and sense of wonder about themselves and the world around them. Students of all ages experience learning outside of the classroom! Exposure to nature, history, and alternative learning surroundings allows students to see and embrace critical academic concepts in different ways. With hikes, outdoor classrooms, a historic site, and a state-of-the-art laboratory, experiences are unique.

K-12 programs for public and private school are matched to the most current standards based learning requirements (see below for more information).

Jason West
Manager
EHCeduction@gwinnettcCounty.com

Table of Contents

QUESTS
Two hour, guided rotations.
Forest Quest (K-5) 4
Museum Quest (K-12) 5

EXPLORATORY FIELD STUDIES
Two hour, unit focused instruction.
Pre-K 6
Kindergarten 7
First Grade 8
Second Grade 9
Third Grade 10
Fourth Grade 11
Fifth Grade 12
Middle School 13
High School 14 – 15
Teacher Reviews 16

OUTREACH
One hour, guided activity brought to you.
Pre-K 17
K – 6 18 – 19
Discovery Dome 20 – 21

GSE/AKS
Standards Based Learning

All K-12 quest, field study, and outreach programs are aligned with current Georgia Standards of Excellence (GSE) and the Gwinnett County Academic Knowledge and Skills Curriculum (AKS). The programs also support the Georgia Career Clusters Pathways, particularly Agriculture, Food, and Natural Resources; Energy; Science, Technology, Engineering, and Math (STEM), and may help a school obtain STEM certification.

Table of Contents

Welcome

STEP ONE - Determine the date
Contact our registration staff to determine date availability:
EHCeduction@gwinnettcCounty.com  770.904.3500

STEP TWO - Choose a Museum/Forest Quest, Exploratory Field Study, or both!*
Once a date is selected and approved, simply choose your program(s). Return the completed reservation form and our knowledgeable staff will take it from there. We strive to meet the needs of all visitors, please include any lunch arrangements and/or special accommodations at this time.
*Doing both programs will require a 4 hour visit.

STEP THREE - Pay the deposit
Program dates are not secured until the $50 deposit is received. A final invoice with the balance due will be provided the day of your visit. The balance is due upon arrival.

Museum Quest, Forest Quest, and Exploratory Field Study Fees*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Fees* per student/chaperon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-K – High School</td>
<td>$8</td>
</tr>
<tr>
<td>High School Lab</td>
<td>$9</td>
</tr>
</tbody>
</table>

*M $20 per group, per day non-Gwinnett fee will apply. Teachers/staff (with a valid school ID) accompanying students on field studies are free! Combining a Quest and a Field Study experience to your visit requires additional time and cost.

Cancel/Reschedule:
• If unforeseen rescheduling becomes necessary, every effort will be made to accommodate. However, our programs are very popular and dates fill quickly; available dates will be limited.
• Programs will only be rescheduled due to inclement weather/forecast if there is a school system-wide closure. If rescheduling is not possible, the deposit will be refunded.

Before your visit:
• Minimum class size is 15 students; maximum daily program capacity varies.
• Programs are held rain or shine. Please ensure teachers, students, and chaperones dress for the weather.
• Since we’re connecting with nature, open toe shoes are not advised. *Sneakers are the best option.
• Chaperones’ MUST pay through the school prior to arrival.
• Chaperones are to actively assist, other children/babies are not permitted. Bring the family back later!

During your visit:
• Teachers must accompany their class.
• Late arrival may reduce program time.
• Schools may bring sack lunches and eat picnic style, but must notify the registration office.
• Schools may choose to purchase Chick-fil-A lunches, but must coordinate through the registration office.

The Gwinnett Environmental and Heritage Center is a unique atmosphere for learning and environmental stewardship launched by the Gwinnett County Board of Commissioners. Every student benefits from the long-standing relationship between Gwinnett County Public Schools and the Gwinnett County Board of Commissioners’ Department of Community Services.
Discover the many S.T.E.A.M. concepts throughout the Environmental & Heritage Center! We’re engaging students in two hour, guided rotations packed with hands-on activities from exhibits to ecosystems! We uniquely design your school’s cross-curricular experience; it’s customized to cater to all grade levels! Quests typically involve indoor and outdoor (weather permitting) activities, but are subject to change.

Get a discount on Discovery Dome Outreach!
Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.
Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an interactive Museum or Forest Quest with your choice of Exploratory Field Study program! An additional $8/student Combining programs will extend your visit to four hours. See page 1 for more information.

Museum Quest
Guided cross-curricular rotations in the following stations for grades K – 12.

September 22, 2018 – January 2, 2019*

Roots of Wisdom
Native Knowledge. Shared Science
Dig into the ways traditional Native American knowledge and cutting-edge science are combined to provide solutions to today’s ecological and health challenges. Through the voices of elders and youth, hands-on activities, and clever video games, visitors gather resources, examine data, and take part in sustainability and reclamation of age-old practices!
The exhibit was produced and is toured by the Oregon Museum of Science and Industry (OMSI) and made possible with funds provided by the National Science Foundation.*For field studies scheduled outside of the traveling exhibit dates, another activity/rotation will be delivered.

Water Ways
Explore how humankind interacted with the environment throughout history. Discover how the land and water shaped Georgia’s earliest inhabitants – the Cherokee, Creek, and early settlers and explore how our environment and natural resources impact us today.

Discover H2O
A hands-on exploration of water science, water cycle, states of matter, potential and kinetic energy, water treatment processes, topographic maps, watersheds and more.

Chesser-Williams House
Discover the art and science of historic preservation, restoration, and conservation. Enjoy an interpretation of daily life on a mid to late 1800s Georgia farmstead.

Green Building
Discover this unique, environmentally built museum. Get an up close look at Gwinnett’s first LEED certified building featuring current technology and innovative engineering concepts.

Outdoor Interpretive Hike
Enjoy a guided walk along the trails and uncover the dynamic environment that many plants and animals call home.

Blue Planet
Get immersed in this multi-sensory presentation as you discover the wonders of water! See and feel the power and fragility of our ecosystem and understand our most precious natural resource.

Combine an interactive Museum or Forest Quest with your choice of Exploratory Field Study program! An additional $8/student Combining programs will extend your visit to four hours. See page 1 for more information.

Water Ways
Explore how humankind interacted with the environment throughout history. Discover how the land and water shaped Georgia’s earliest inhabitants – the Cherokee, Creek, and early settlers and explore how our environment and natural resources impact us today.

Discover H2O
A hands-on exploration of water science, water cycle, states of matter, potential and kinetic energy, water treatment processes, topographic maps, watersheds and more.

Chesser-Williams House
Discover the art and science of historic preservation, restoration, and conservation. Enjoy an interpretation of daily life on a mid to late 1800s Georgia farmstead.

Green Building
Discover this unique, environmentally built museum. Get an up close look at Gwinnett’s first LEED certified building featuring current technology and innovative engineering concepts.

Outdoor Interpretive Hike
Enjoy a guided walk along the trails and uncover the dynamic environment that many plants and animals call home.

Blue Planet
Get immersed in this multi-sensory presentation as you discover the wonders of water! See and feel the power and fragility of our ecosystem and understand our most precious natural resource.

Discover the many S.T.E.A.M. concepts throughout the Environmental & Heritage Center! We’re engaging students in two hour, guided rotations packed with hands-on activities from exhibits to ecosystems! We uniquely design your school’s cross-curricular experience; it’s customized to cater to all grade levels! Quests typically involve indoor and outdoor (weather permitting) activities, but are subject to change.

Get a discount on Discovery Dome Outreach!
Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.
Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an interactive Museum or Forest Quest with your choice of Exploratory Field Study program! An additional $8/student Combining programs will extend your visit to four hours. See page 1 for more information.

Museum Quest
Guided cross-curricular rotations in the following stations for grades K – 12.

September 22, 2018 – January 2, 2019*

Roots of Wisdom
Native Knowledge. Shared Science
Dig into the ways traditional Native American knowledge and cutting-edge science are combined to provide solutions to today’s ecological and health challenges. Through the voices of elders and youth, hands-on activities, and clever video games, visitors gather resources, examine data, and take part in sustainability and reclamation of age-old practices!
The exhibit was produced and is toured by the Oregon Museum of Science and Industry (OMSI) and made possible with funds provided by the National Science Foundation.*For field studies scheduled outside of the traveling exhibit dates, another activity/rotation will be delivered.

Water Ways
Explore how humankind interacted with the environment throughout history. Discover how the land and water shaped Georgia’s earliest inhabitants – the Cherokee, Creek, and early settlers and explore how our environment and natural resources impact us today.

Discover H2O
A hands-on exploration of water science, water cycle, states of matter, potential and kinetic energy, water treatment processes, topographic maps, watersheds and more.

Chesser-Williams House
Discover the art and science of historic preservation, restoration, and conservation. Enjoy an interpretation of daily life on a mid to late 1800s Georgia farmstead.

Green Building
Discover this unique, environmentally built museum. Get an up close look at Gwinnett’s first LEED certified building featuring current technology and innovative engineering concepts.

Outdoor Interpretive Hike
Enjoy a guided walk along the trails and uncover the dynamic environment that many plants and animals call home.

Blue Planet
Get immersed in this multi-sensory presentation as you discover the wonders of water! See and feel the power and fragility of our ecosystem and understand our most precious natural resource.

Discover the many S.T.E.A.M. concepts throughout the Environmental & Heritage Center! We’re engaging students in two hour, guided rotations packed with hands-on activities from exhibits to ecosystems! We uniquely design your school’s cross-curricular experience; it’s customized to cater to all grade levels! Quests typically involve indoor and outdoor (weather permitting) activities, but are subject to change.

Get a discount on Discovery Dome Outreach!
Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.
Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an interactive Museum or Forest Quest with your choice of Exploratory Field Study program! An additional $8/student Combining programs will extend your visit to four hours. See page 1 for more information.

Museum Quest
Guided cross-curricular rotations in the following stations for grades K – 12.

September 22, 2018 – January 2, 2019*

Roots of Wisdom
Native Knowledge. Shared Science
Dig into the ways traditional Native American knowledge and cutting-edge science are combined to provide solutions to today’s ecological and health challenges. Through the voices of elders and youth, hands-on activities, and clever video games, visitors gather resources, examine data, and take part in sustainability and reclamation of age-old practices!
The exhibit was produced and is toured by the Oregon Museum of Science and Industry (OMSI) and made possible with funds provided by the National Science Foundation.*For field studies scheduled outside of the traveling exhibit dates, another activity/rotation will be delivered.

Water Ways
Explore how humankind interacted with the environment throughout history. Discover how the land and water shaped Georgia’s earliest inhabitants – the Cherokee, Creek, and early settlers and explore how our environment and natural resources impact us today.

Discover H2O
A hands-on exploration of water science, water cycle, states of matter, potential and kinetic energy, water treatment processes, topographic maps, watersheds and more.

Chesser-Williams House
Discover the art and science of historic preservation, restoration, and conservation. Enjoy an interpretation of daily life on a mid to late 1800s Georgia farmstead.

Green Building
Discover this unique, environmentally built museum. Get an up close look at Gwinnett’s first LEED certified building featuring current technology and innovative engineering concepts.

Outdoor Interpretive Hike
Enjoy a guided walk along the trails and uncover the dynamic environment that many plants and animals call home.

Blue Planet
Get immersed in this multi-sensory presentation as you discover the wonders of water! See and feel the power and fragility of our ecosystem and understand our most precious natural resource.

Discover the many S.T.E.A.M. concepts throughout the Environmental & Heritage Center! We’re engaging students in two hour, guided rotations packed with hands-on activities from exhibits to ecosystems! We uniquely design your school’s cross-curricular experience; it’s customized to cater to all grade levels! Quests typically involve indoor and outdoor (weather permitting) activities, but are subject to change.

Get a discount on Discovery Dome Outreach!
Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.
Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an interactive Museum or Forest Quest with your choice of Exploratory Field Study program! An additional $8/student Combining programs will extend your visit to four hours. See page 1 for more information.

Museum Quest
Guided cross-curricular rotations in the following stations for grades K – 12.

September 22, 2018 – January 2, 2019*

Roots of Wisdom
Native Knowledge. Shared Science
Dig into the ways traditional Native American knowledge and cutting-edge science are combined to provide solutions to today’s ecological and health challenges. Through the voices of elders and youth, hands-on activities, and clever video games, visitors gather resources, examine data, and take part in sustainability and reclamation of age-old practices!
The exhibit was produced and is toured by the Oregon Museum of Science and Industry (OMSI) and made possible with funds provided by the National Science Foundation.*For field studies scheduled outside of the traveling exhibit dates, another activity/rotation will be delivered.

Water Ways
Explore how humankind interacted with the environment throughout history. Discover how the land and water shaped Georgia’s earliest inhabitants – the Cherokee, Creek, and early settlers and explore how our environment and natural resources impact us today.

Discover H2O
A hands-on exploration of water science, water cycle, states of matter, potential and kinetic energy, water treatment processes, topographic maps, watersheds and more.

Chesser-Williams House
Discover the art and science of historic preservation, restoration, and conservation. Enjoy an interpretation of daily life on a mid to late 1800s Georgia farmstead.

Green Building
Discover this unique, environmentally built museum. Get an up close look at Gwinnett’s first LEED certified building featuring current technology and innovative engineering concepts.

Outdoor Interpretive Hike
Enjoy a guided walk along the trails and uncover the dynamic environment that many plants and animals call home.

Blue Planet
Get immersed in this multi-sensory presentation as you discover the wonders of water! See and feel the power and fragility of our ecosystem and understand our most precious natural resource.
Each exciting, two-hour guided program provides grade-specific curriculum and an in-depth look at a particular unit of study. Our engaging educators make science and social studies come alive in both indoor and outdoor (weather permitting) settings.

**Exploratory Field Study**

**Tree Detectives**
Explore the trees of our forest ecosystem! Investigate what creatures live among the branches and how they depend on the trees for their survival. Dig for clues with a mud exploration in this (mostly) outdoor program.

**Wild About Weather**
Your junior meteorologists go on a weather adventure to explore clouds, storms, and sunny days! We’ll go on a cloud hike, enjoy educational play, and create a take-home craft. Plus, they’ll create clouds and have interactive water cycle fun in the Discover H₂O exhibit.

**Georgia Animals In My Backyard**
Touch and feel skins and skulls and learn how to protect our local animal friends. Students discover the differences between local forest animals, enjoy interactive games, and have a playful visit with our resident turtles!

**Exhibit Explorers**
Little explorers are guided through the exhibits to discover hidden wonders and adventures into the past. They’ll venture outdoors to learn about native plants, animals, and insects. This program may include Discover H₂O, Blue Planet, or the temporary exhibit.

**Get a discount on Discovery Dome Outreach!**
Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.

Both programs must be scheduled in the same academic year. For additional hours, fees apply.

**Pre-K**
Aligned with the Georgia standards for early childhood education. Outdoor experiences are an integral part of each program.

**Kindergarten**

**Exploring Plants and Animals In Wild and Wonderful Georgia**
A hands-in-dirt investigation reveals the forest is full of life! Interactive animal grouping games, hands-on exploration with a vast skins collection, and a difference/similarity discovery walk on the trails gives the opportunity to observe and ask questions about plant and animal life in our forest.

**Exploring Centuries of Childhood: Then and Now**
Discover an authentic 1800s homestead to compare and contrast a child’s life in the past to current day. Students sort and classify objects found throughout the centuries, enjoy hands-on activities, and play games highlighting clothing, toys, houses, chores, and school in the 1800s and today.

**Beneath Our Feet: Exploring Rocks and Soil**
Dig into the rocks and soil of the forest! Interactive games and exploration have those small kindergarten hands in the soil (and mud) as we observe, touch, and weigh nature’s wonders beneath our feet.

**P**

Get a discount on Discovery Dome Outreach!

Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.

Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an Exploratory Field Study with your choice of an interactive Museum or Forest Quest program:

An additional $8/student

Combining programs will extend your visit to four hours. See page 1 for more information.

**Aligned with the Georgia standards for early childhood education. Outdoor experiences are an integral part of each program.**

**Outdoor experiences are an integral part of each program.**

**Combining programs will extend your visit to four hours.**

See page 1 for more information.

**An additional $8/student**

Combining programs will extend your visit to four hours. See page 1 for more information.

**K**

Get a discount on Discovery Dome Outreach!

Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.

Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an Exploratory Field Study with your choice of an interactive Museum or Forest Quest program:

An additional $8/student

Combining programs will extend your visit to four hours. See page 1 for more information.

**Pre-K**
Aligned with the Georgia standards for early childhood education. Outdoor experiences are an integral part of each program.

**Kindergarten**

**Exploring Plants and Animals In Wild and Wonderful Georgia**
A hands-in-dirt investigation reveals the forest is full of life! Interactive animal grouping games, hands-on exploration with a vast skins collection, and a difference/similarity discovery walk on the trails gives the opportunity to observe and ask questions about plant and animal life in our forest.

**Exploring Centuries of Childhood: Then and Now**
Discover an authentic 1800s homestead to compare and contrast a child’s life in the past to current day. Students sort and classify objects found throughout the centuries, enjoy hands-on activities, and play games highlighting clothing, toys, houses, chores, and school in the 1800s and today.

**Beneath Our Feet: Exploring Rocks and Soil**
Dig into the rocks and soil of the forest! Interactive games and exploration have those small kindergarten hands in the soil (and mud) as we observe, touch, and weigh nature’s wonders beneath our feet.

**P**

Get a discount on Discovery Dome Outreach!

Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.

Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an Exploratory Field Study with your choice of an interactive Museum or Forest Quest program:

An additional $8/student

Combining programs will extend your visit to four hours. See page 1 for more information.

**Pre-K**
Aligned with the Georgia standards for early childhood education. Outdoor experiences are an integral part of each program.

**Kindergarten**

**Exploring Plants and Animals In Wild and Wonderful Georgia**
A hands-in-dirt investigation reveals the forest is full of life! Interactive animal grouping games, hands-on exploration with a vast skins collection, and a difference/similarity discovery walk on the trails gives the opportunity to observe and ask questions about plant and animal life in our forest.

**Exploring Centuries of Childhood: Then and Now**
Discover an authentic 1800s homestead to compare and contrast a child’s life in the past to current day. Students sort and classify objects found throughout the centuries, enjoy hands-on activities, and play games highlighting clothing, toys, houses, chores, and school in the 1800s and today.

**Beneath Our Feet: Exploring Rocks and Soil**
Dig into the rocks and soil of the forest! Interactive games and exploration have those small kindergarten hands in the soil (and mud) as we observe, touch, and weigh nature’s wonders beneath our feet.

**P**

Get a discount on Discovery Dome Outreach!

Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours.

Both programs must be scheduled in the same academic year. For additional hours, fees apply.

Combine an Exploratory Field Study with your choice of an interactive Museum or Forest Quest program:

An additional $8/student

Combining programs will extend your visit to four hours. See page 1 for more information.
First Grade

Light, Sound and Living Things
It's an exciting day of discovery with hands-on activities and a guided walk in the forest. Students investigate, and evaluate the many ways Georgia animals and plants use light and sound to meet basic survival needs.

Environmental Heroes: Teddy Roosevelt and George Washington Carver
Discover their legacy! Fun, hands-on activities in our heritage garden to explore Carver’s contributions to agriculture and scientific research. Discover how he used farming techniques like crop rotation, cover crops, and composting for healthy soil. Hike the trails to become a conservationist like Roosevelt and understand the importance of native plants and trees. Hear stories of the famous “Teddy Bear” and learn about Georgia’s bears.

Everything Needs Water
Through hands-in-dirt adventures and team activities, discover the basic needs of plants and animals thriving in Georgia forests. Take a water walk to help hydrate one of the many living things that depend on this precious natural resource for survival. Participate in a “What Belongs In Our Stream” activity to drive home the importance of protecting and preserving streams!

Early American Heroes: Franklin and Jefferson
Get immersed in the everyday lives of American heroes that had a passion for science and the environment. Educators in period attire demonstrate some of Franklin’s inventions and students dig in our heritage garden like Jefferson did at his family home. Strike out on a “respect the environment” hike and use artifacts and replicas to understand the differences/similarities of everyday life during Franklin and Jefferson’s day to now.

Weather and Climate
Identify different forms of precipitation, investigate cloud identification, and explore how native Georgia animals react and adapt to different weather situations. Experiment with several weather instruments, visit Discover H₂O and identify current weather conditions on an interpretive hike.

Magnetism Matters
It’s magnetic! Through interactive games and activities, investigate the strengths and everyday uses of magnets, learn why iron is important in daily diets, discover how magnets are used for navigation, and view the earth’s magnetic field through the eyes of a bird.

Second Grade

Exploring Environmental Changes
Investigate how to protect local ecosystems and the impact weather, air, land, and water pollution has on the environment. View the Blue Planet show, demonstrating the importance of clean water in our world. Discover the necessity of community involvement in protecting ecosystems through a forest and river clean-up simulation!

A Pollinator’s Life: Bees, Bats, and Birds
Investigate life cycles and diversity of life through the honeybee, bat, and hummingbird, which are important pollinators that support agricultural and natural systems. Through exploration centers, learning activities, and a guided walk in the forest, discover the benefits of these animals and the impact of environmental changes.

Georgia’s Native People
Discover the heritage of the Cherokee and Creek people by understanding how they adapted to and were influenced by the environment. Compare and contrast their way of life to today. Explore the science behind the Three Sisters Garden. Understand the contributions of Sequoya and learn how tools of the day were used to print the first Native American newspaper. Create a model of a Native American home using local and natural resources!

Matter Matters
Explore the three states of matter, compare and contrast the different properties of matter, and have fun discovering how solids, liquids, and gases really do “matter” in nature. Program includes an exploratory hike and a visit to Discover H₂O.

Check Out www.gwinnettEHC.com for great family fun events and activities!
Fourth Grade

S T E A M Exploration:
Simple Machines, Physical Geography, and the American Revolution
S.T.E.A.M. concepts were crucial factors leading to the United States’ victory in the Revolution. Explore on-site terrain to discover the impact of physical geography, math, and engineering on key battles. Emphasizing simple machines and period technology, hands-on experiences replicate the activities that groups like the Daughters of Liberty and tradespeople adopted to support the call for independence. Meet Button Gwinnett, a Georgia signer of the Declaration, and hear accounts of the civic contributions of John Adams, Thomas Jefferson, and Benjamin Franklin. Explore how period scientific concepts influenced the drive for independence and participate in a lively debate.

What’s Eating You?
Ecosystems, Food Chains and Food Webs
A guided forest walk allows exploration of diverse plant and animal ecosystems and discovery of the flow of energy that’s required to keep the systems balanced. Through teamwork, students discover the interconnected roles of producers, consumers, and decomposers. Explore the nearby creek critters, collect evidence of the aquatic food chain, and discover how non-point source pollution can disrupt this delicate system.

*For an additional charge, students may dissect owl pellets to reveal the organisms in the owl’s food web to help illustrate this predator’s role in the ecosystem.

Extreme Weather
The field of meteorology is better understood after experiencing the fury of nature with the Force Five weather program in the Discovery Dome Theater. Using various scientific instruments, students collect data to predict tomorrow’s weather, explore the role of the water cycle, differentiate between weather and climate, and have exploratory time with clouds, rain, and maybe even some snow!

Adapting to Georgia’s Habitats and Regions
Through hands-on outdoor adventures, investigate and differentiate a wide variety of plants, animals, and habitats that are unique to each region of Georgia. Research the physical features of some important Georgia animals and uncover how these adaptations allow them to survive and thrive. A hands-in-mud activity provides evidence of how animals depend on their adaptations, and an exploratory forest hike gives the opportunity to discover unique plants found in the Piedmont.

Native Knowledge and Colonial Impact
Compare and contrast how American Indian cultures and early colonists interacted with different environments to produce food, clothing, and shelter. Explore an early Native American rock shelter and investigate soils collected from locations important to early Georgia. An in-depth discovery of the Chesser–Williams House and its heritage garden highlight the importance of climate and geography to Native Americans and early settlers. Use reproduction tools and technology to examine everyday life and survival resources.

Pollution and Solutions
Hands-on investigations, activities, and a walk through the forest to the stream, allowing students to explore different forms of pollution, determine what is causing these strains on our planet, and formulate solutions to pollution! View the acclaimed Blue Planet video to learn ways to protect one of our most precious natural resources.

Mineral Mania
What’s the difference between rocks and minerals? How are minerals transformed by water and wind? How do soil and mineral properties shape daily life? Many questions are answered as students get their hands on marvelous minerals, investigate the physical attributes of rocks, soil, and minerals, go on an exploratory trail hike, and map the mineral resources of our state.

Third Grade

Pollution and Solutions
Hands-on investigations, activities, and a walk through the forest to the stream, allowing students to explore different forms of pollution, determine what is causing these strains on our planet, and formulate solutions to pollution! View the acclaimed Blue Planet video to learn ways to protect one of our most precious natural resources.

Mineral Mania
What’s the difference between rocks and minerals? How are minerals transformed by water and wind? How do soil and mineral properties shape daily life? Many questions are answered as students get their hands on marvelous minerals, investigate the physical attributes of rocks, soil, and minerals, go on an exploratory trail hike, and map the mineral resources of our state.

Native Knowledge and Colonial Impact
Compare and contrast how American Indian cultures and early colonists interacted with different environments to produce food, clothing, and shelter. Explore an early Native American rock shelter and investigate soils collected from locations important to early Georgia. An in-depth discovery of the Chesser–Williams House and its heritage garden highlight the importance of climate and geography to Native Americans and early settlers. Use reproduction tools and technology to examine everyday life and survival resources.

Adapting to Georgia’s Habitats and Regions
Through hands-on outdoor adventures, investigate and differentiate a wide variety of plants, animals, and habitats that are unique to each region of Georgia. Research the physical features of some important Georgia animals and uncover how these adaptations allow them to survive and thrive. A hands-in-mud activity provides evidence of how animals depend on their adaptations, and an exploratory forest hike gives the opportunity to discover unique plants found in the Piedmont.
Soil Rocks!
Discover how soil supports our trees, agricultural systems and houses. Collect and analyze soil samples using scientific instruments and explore soil formation in Gwinnett. A soil hike provides a hands-in-dirt discovery of the diversity found in Georgia. Gain an understanding of the life within soil layers, the importance of soil conservation, the soil ingredients necessary for rich plant growth, and the importance of water in earth processes, including soil formation.

Meteorology and Hydrology
Student meteorologists collect data using a variety of scientific instruments to predict tomorrow’s weather. Build a hurricane and experience the thrill of being inside one while viewing Force Five in the Discovery Dome. Hands-on exploration in Discover H2O and a guided trail hike provide an up close experience on how water shapes the landscape and how climate change dramatically affects wildlife.

Everyday Ecology
Dig into the interactions that make earth so dynamic! Model the defining factors of global biomes and track carbon through an ecosystem. Venture into our temperate deciduous forest to reveal local food webs and symbioses and discover the unique adaptations of aquatic macro-invertebrates in our streams and how they respond to human activity.

Classification and Evolution
Through a guided forest walk, explore the taxonomy and reproductive strategies of local flora and fauna. Sharpen classification skills by identifying skulls and leaves of Georgia species using dichotomous keys. Interactive games and a study of freshwater organisms under the microscope illuminate concepts of natural selection, adaptation, and evolution.

Waste Water Adventure*:
In With The Dirty, Out With The Clean
A guided walking tour of the F. Wayne Hill Water Resource Center reveals the mechanics of water treatment including how gravity is used as a physical force to clean water. Experience the transformations of matter and energy throughout the treatment process and understand that energy and nutrients are recovered from what is flushed down the drain!

Green Physics
In this “energy filled” experience, study the physics of an obstacle course, discover the physics within our green building, explore natural forces at work in the forest, and actively engage in the physics found within many childhood games.
Green Building Quest: Understanding Historic and Sustainable Architecture
Take an in-depth look at the characteristics of historic and modern green building techniques. Discover how these thoughts and ideas changed over time. Examine first hand examples of nineteenth century architecture and explore the unique features of Gwinnett’s first green building. Learn how historic buildings and landscapes examine themes of daily life – transportation, communication, economics, food-ways, conflict, shelter, recreation, art and more. Discover the latest technologies and future career opportunities in these fields.

GSE/AKS – Cross-curricular standards

Biology Labs
Advanced Placement
Gwinnett County Public Schools only. Labs require additional time.
GSE/AKS – AP Biology, Biology, AP Environmental Science, and Environmental Science

Big Idea 1
Population Genetics & Evolution Investigation*
Origin of Life Investigation

Big Idea 2
Photosynthesis Leaf Disc Assay Investigation*
Diffusion & Osmosis Investigation*
Cell Respiration Investigation

Big Idea 3
Gel Electrophoresis & Simulated Genetic Screening*
Transformation in Bacteria: Green Florescent Protein

Big Idea 4
Enzyme Activity Investigation*
Animal Behavior Investigation*
Transpiration in Plants Investigation

GEHC’s Treetop Quest
Schools may choose to have students explore the forest’s canopy through the GEHC’s Treetop Quest Adventure Course.

Forest Adventure
Gather data from the trails to identify and discuss local plant diversity. Observe the stages of succession throughout the forest and learn how land development impacts these stages. An investigation into plant and animal interdependence creates a lasting impression of how forest change affects the delicate balance of nature. Explore the environmental impact of non-native species and take a hands-on approach to restore balance in our Georgia habitat. Students make connections with the natural world and get their hands dirty by experiencing the science in the forest!

Green Physics
In this “energy filled” experience, analyze the physics of an obstacle course, discover the physics within our green building, explore natural forces at work in the forest, and actively engage in the physics found within many childhood games.

Stream Adventure
Investigate the health of a stream by performing various water quality tests including temperature, dissolved oxygen, and pH. Explore and identify macro invertebrates collected from the stream, getting a snapshot of the stream’s health and an understanding of the relationship between water quality and a thriving forest. Team up to identify six different non-point source pollutants, brainstorm how they entered the stream, and theorize what impact pollutants have on that ecosystem.

Wastewater Adventure*: In With The Dirty—Out With The Clean
*Transportation is needed from the GEHC to the F. Wayne Hill Water Resource Center.

A guided walking tour of the F. Wayne Hill Water Resource Center reveals the many processes wastewater travels through as it is cleaned. Investigate the physical, chemical, and biological methods of treatment at this state-of-the-art facility and understand that energy and nutrients are recovered from what is flushed!

Stream Adventure and Wastewater Adventure can be combined for an additional charge.
Outreach

Our educators bring the activities to you!

Our science and social studies programs provide students with high-quality, high-interest instruction while providing teachers with the convenience of a unique field study in their own classroom. Visits can be customized to fit your schools needs.

There are two types of Outreach programs from which to choose:

**One Hour, Instructor-Led Outreach**, pages 17 – 19

**Discovery Dome Outreach**, pages 20 – 21

Instructor-Led Outreach

<table>
<thead>
<tr>
<th># of Students</th>
<th>Fees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 29</td>
<td>$270</td>
</tr>
<tr>
<td>up to 89</td>
<td>$9/student</td>
</tr>
<tr>
<td>90 or more</td>
<td>$6/student</td>
</tr>
</tbody>
</table>

* A $20 per group, per day non-Gwinnett fee will apply. Travel fees outside Gwinnett County:
  - 40 mile travel maximum
  - $20/first ten miles • $10/additional ten miles

**PRE-K**
Aligned with the Georgia standards for early childhood education

**Bees, Bears and Breakfast**
Black bear, black bear where can he be? Our educators share stories, songs, games, and fun bear facts with your students. It’s an exciting adventure as you get to know North America’s smallest bear!

**Georgia Animals In My Backyard**
Through hands-on investigation with our skins and skulls collection, uncover how Georgia’s forest friends look and behave differently. Interactive games, a take-home craft, and a playful visit with our resident turtle show animals’ needs and help students appreciate the role they play in protecting our wildlife.

Hear what other teachers are saying!

“I was very impressed with the quality of the program and the fact that the staff went above and beyond to ensure that they taught our students exactly what they needed to know for their PBL.”

“This was so closely aligned with our studies in science. It was wonderful!”

“This was the easiest and least stressful field trip I have ever coordinated. Absolutely the best field trip!”

“As an educator, it was wonderful to feel less stressed on a field trip. You took care of everything! GEHC is a perfect place with so many opportunities for learning. Directly coordinated with Georgia standards.”

“We were beyond impressed with the efficiency, attention to detail, preparedness, knowledge, and enthusiasm that contributed to a wonderful morning of learning. Our students remained completely engaged and loved all of the activities.”

“This was an amazing field trip. Thank you so much for focusing on standards that are difficult to explain in the classroom at times!”

Instructor-Led Outreach

Our educators bring the activities to you!

Our science and social studies programs provide students with high-quality, high-interest instruction while providing teachers with the convenience of a unique field study in their own classroom. Visits can be customized to fit your schools needs.

There are two types of Outreach programs from which to choose:

**One Hour, Instructor-Led Outreach**, pages 17 – 19

**Discovery Dome Outreach**, pages 20 – 21

Instructor-Led Outreach

<table>
<thead>
<tr>
<th># of Students</th>
<th>Fees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 29</td>
<td>$270</td>
</tr>
<tr>
<td>up to 89</td>
<td>$9/student</td>
</tr>
<tr>
<td>90 or more</td>
<td>$6/student</td>
</tr>
</tbody>
</table>

* A $20 per group, per day non-Gwinnett fee will apply. Travel fees outside Gwinnett County:
  - 40 mile travel maximum
  - $20/first ten miles • $10/additional ten miles

**PRE-K**
Aligned with the Georgia standards for early childhood education

**Bees, Bears and Breakfast**
Black bear, black bear where can he be? Our educators share stories, songs, games, and fun bear facts with your students. It’s an exciting adventure as you get to know North America’s smallest bear!

**Georgia Animals In My Backyard**
Through hands-on investigation with our skins and skulls collection, uncover how Georgia’s forest friends look and behave differently. Interactive games, a take-home craft, and a playful visit with our resident turtle show animals’ needs and help students appreciate the role they play in protecting our wildlife.

Hear what other teachers are saying!

“I was very impressed with the quality of the program and the fact that the staff went above and beyond to ensure that they taught our students exactly what they needed to know for their PBL.”

“This was so closely aligned with our studies in science. It was wonderful!”

“This was the easiest and least stressful field trip I have ever coordinated. Absolutely the best field trip!”

“As an educator, it was wonderful to feel less stressed on a field trip. You took care of everything! GEHC is a perfect place with so many opportunities for learning. Directly coordinated with Georgia standards.”

“We were beyond impressed with the efficiency, attention to detail, preparedness, knowledge, and enthusiasm that contributed to a wonderful morning of learning. Our students remained completely engaged and loved all of the activities.”

“This was an amazing field trip. Thank you so much for focusing on standards that are difficult to explain in the classroom at times!”
Fourth Grade

Extreme Weather
Through the Discovery Dome film Force Five, learn how meteorologists and hydrologists work together to predict tornadoes and hurricanes and how they prepare communities for these natural disasters. Use various scientific instruments to collect data and make predictions for future weather patterns.

S.T.E.A.M. Exploration: Simple Machines and the American Revolution
S.T.E.A.M. concepts were crucial factors leading to America’s victory in the Revolution. Educators in period attire demonstrate simple machines and period technology. Hands-on experiences replicate activities groups like the Daughters of Liberty and tradespeople adopted to support the call for independence.

Fifth Grade

World War I Impacts Georgia: Trenches, Tactics and Technology
Explore the causes and impact of World War I on Georgia through technology and food preservation. Educators in period attire introduce students to Sphero robots as they understand and map the European conflict. Analyze various harmful and beneficial microbes that impacted soldiers and those at home and discover new technologies that emerged from the conflict.

Classification Station!
Through hands-on discovery and teamwork, develop a model that illustrates how plants and animals are sorted into nine classification groups, use scientific tools to investigate the physical characteristics of each group, and role play scenarios that demonstrate the differences between inherited versus acquired traits.

Sixth Grade

Soil Rocks!
Through lab experiments and soil-building activities, dig into the ingredients and importance of the living earth beneath our feet.

Meteorology and Hydrology
Through the Discovery Dome film Force Five, learn how meteorologists and hydrologists work together to predict tornadoes and hurricanes and how they prepare communities for these natural disasters. Using various scientific instruments, collect data and make predictions for future weather patterns.

First Grade

Everything Needs Water
Through hands-in-dirt adventures and team activities, discover the basic needs of plants and animals in Georgia forests. Participate in a ‘what belongs in our stream’ activity to drive home the importance of protecting and preserving our streams!

Early American Heroes
Get immersed in the everyday lives of Benjamin Franklin and Thomas Jefferson, who had a passion for science and the environment. Educators in period attire demonstrate several of Franklin’s inventions and highlight gardening practices conducted at Jefferson’s family home. Use artifacts and replicas to understand the differences and similarities of everyday life between then and now.

Second Grade

Native American Knowledge and Know How
Discover the tools and technology the Cherokee and Creek utilized in their daily lives. Hear stories that explore Native American understanding of the environment and explore their cultural impact and contributions.

A Pollinator’s Life: Bees, Bats, and Birds
Investigate life cycles and the diversity of life through the honeybee, bat, and hummingbird; our most important pollinators that support agricultural and natural systems. Through exploration centers and learning activities, discover the benefits of these animals and how environmental changes impact life cycles.

Third Grade

Ecosystems and Animal Adaptations
Discover the importance of animal adaptations for survival during this non-stop adventure including a migration survival flight and an interactive experience with skins, skulls, and scat discovery tables!

Native American Knowledge and Know How
Explore Native American understanding of the environment through stories. Understand their cultural impact and contributions to Georgia and the United States. Discover the tools and technology various Native American groups utilized in their daily lives.

Kindergarten

Exploring Plants, Animals, Rocks and Soil
Through investigative plant and animal activities, hands-on exploration of animal skins, and a take-home nature craft, explore the relationship between plants, animals, rocks, and soil.

Everything Needs Water
Through hands-in-dirt adventures and team activities, discover the basic needs of plants and animals in Georgia forests. Participate in a ‘what belongs in our stream’ activity to drive home the importance of protecting and preserving our streams!

Early American Heroes
Get immersed in the everyday lives of Benjamin Franklin and Thomas Jefferson, who had a passion for science and the environment. Educators in period attire demonstrate several of Franklin’s inventions and highlight gardening practices conducted at Jefferson’s family home. Use artifacts and replicas to understand the differences and similarities of everyday life between then and now.

Native American Knowledge and Know How
Discover the tools and technology the Cherokee and Creek utilized in their daily lives. Hear stories that explore Native American understanding of the environment and explore their cultural impact and contributions.

Native American Knowledge and Know How
Explore Native American understanding of the environment through stories. Understand their cultural impact and contributions to Georgia and the United States. Discover the tools and technology various Native American groups utilized in their daily lives.
Explore the galaxy and the stars! Our educator will bring the Discovery Dome portable planetarium to your site and set it up for multiple, short viewings with your choice of exceptional audio and visual presentations. Students and families will enjoy this unique perspective of outer space with for Science Nights, Fall Festivals, Scout programs, and more!

You have the flexibility to choose either:

**Per Hour Pricing**
(Great for Science Nights, Fall Festivals, Scout Programs and more.)

<table>
<thead>
<tr>
<th>Length of Program</th>
<th>Fees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 2 Hours</td>
<td>$450</td>
</tr>
<tr>
<td>Additional 30 Minutes</td>
<td>$75</td>
</tr>
</tbody>
</table>

**Per Student Pricing**
(Ideal for grade level curriculum enhancement or incentive.)

<table>
<thead>
<tr>
<th># of Students</th>
<th>Fees*</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 29</td>
<td>$270</td>
</tr>
<tr>
<td>up to 89</td>
<td>$9/student</td>
</tr>
<tr>
<td>90 or more</td>
<td>$6/student</td>
</tr>
</tbody>
</table>

Get a discount on Discovery Dome Outreach!
Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours. Both programs must be scheduled in the same academic year. For additional hours, fees apply.

### FILMS

- **Astronaut**
  Discover how the exploration of space is the greatest endeavor that humankind has ever undertaken.
  Length: 23 minutes  Suggested audience: Ages 5 and up

- **Saturn - The Ring World**
  See Saturn up close and all around you inside our dome theater.
  Length: 23 minutes  Suggested audience: Ages 5 and up

- **Force Five**
  Extreme weather takes center stage in this full dome animated show revealing images not seen by the naked eye due to their life threatening nature.
  Length: 20 minutes  Suggested audience: Ages 9 and up

- **Two Small Pieces Of Glass: The Amazing Telescope**
  Learn how telescopes work and how the largest observatories in the world use these instruments to explore the mysteries of the universe.
  Length: 22 minutes  Suggested audience: Ages 10 and up

- **Heart Of The Sun**
  Go inside the Sun! New space based technologies, along with a new generation of terrestrial instruments, capture both the fine surface detail and the vast eruptions of the corona with unprecedented clarity.
  Length: 22 minutes  Suggested audience: Ages 10 and up

- **Ultimate Universe**
  A joint effort between Evans & Sutherland and the Clark Planetarium, Ultimate Universe is a three dimensional journey from the edge of the universe through space and time to reach our home planet.
  Length: 33 minutes  Suggested audience: Ages 10 and up

- **IBEX - Search For The Edge Of The Solar System**
  Investigate the boundary between our Solar System and the rest of the galaxy by understanding NASA’s Interstellar Boundary Explorer (IBEX).
  Length: 28 minutes  Suggested audience: Ages 12 and up

- **Amazing Astronomers Of Antiquity**
  Over 2,000 years ago ancient astronomers knew the Earth was round, measured its diameter and distance from the sun, created an accurate star map, knew the length of the year to the precision of our modern calendar, and developed a method for predicting eclipses!
  Length: 22 minutes  Suggested audience: Ages 10 and up

---

**EDUCATOR LED PRESENTATION**

- **Night Sky**
  Our educator leads an exploration of the night sky to see some phenomenal objects out in space and learn how ancient people viewed the heavens.
  Length: 23 minutes  Suggested audience: Ages 5 and up

---

* A $20 per group, per day non-Gwinnett fee will apply. Travel fees outside Gwinnett County: 40 mile travel maximum • $20/first ten miles • $10/additional ten miles.

---

** Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours. Both programs must be scheduled in the same academic year. For additional hours, fees apply. **

---

** Get a discount on Discovery Dome Outreach! **

Schools that bring 150 students or more to Museum Quest, Forest Quest, or Field Study get the Discovery Dome Outreach for only $275 for the first two hours. Both programs must be scheduled in the same academic year. For additional hours, fees apply.

---

** Students fees outside Gwinnett County: **

- 40 mile travel maximum • $20/first ten miles • $10/additional ten miles.
Visitors are invited to explore the unique relationship between Western science and native ecological knowledge. From everyday items like duck decoys to surfboards, popcorn to chocolate, guests will learn how native knowledge impacts our daily lives, and recognize the great contributions that indigenous peoples have provided over centuries.

**Students and families will experience and learn:**
- Traditional knowledge of indigenous peoples
- Cutting-edge science are being applied to improve our world
- Stories, real-life examples told through voices of elders and youth
- Hands-on interactive and clever video games

The exhibition is specially designed for students ages 11–14 and has English audio, video, text and language samplings from several different indigenous communities.

ROOTS OF WISDOM: NATIVE KNOWLEDGE. SHARED SCIENCE. was produced and is toured by the Oregon Museum of Science and Industry (OMSI). The exhibit was made possible with funds provided by the National Science Foundation.

**Book your event today!**

Stunning views, a state-of-the-art facility and unique setting for any special occasion.

- Weddings
- Birthdays
- Corporate Functions
- Rehearsal Dinners
- Holiday Parties

770.904.3500
EHCrental@gwinnettc county.com

So that we can give each client undivided attention, please make an appointment.

Visit www.gwinnetteHC.com for family events, camps and exhibits.