EMERALD COAST SCIENCE CENTER

EDUCATION PROGRAM GUIDE 2021-2022

SSA Enrichment | Field Trips | Family Science Night
Planetarium | Virtual Science Lab

Plan an educational experience that leaves your students inspired with one of our many in-house or outreach programs.

SSA Science Enrichment

The SSA Enrichment Program is designed for elementary and middle school grades with customized schedules upon request. This program consists of a range of hands-on lessons specifically designed to help students grasp state standards while fostering a love across STEM disciplines. Lessons may be booked at any interval to meet the needs of your class and curriculum. Multiple lessons are recommended to provide the most beneficial programming for your students.

Standards-Based Lessons

Squishy Circuits
Delve into the shocking science behind electricity by examining circuits. Students will discover how playdough can be used to create circuits and create a circuit to take home.

Energy is Everywhere
Students discover the various forms of energy and how to distinguish them from one another as well as where they can be found in the environment. They will also learn how to create different types of energy using scientific and household tools.

What is Blood?
Explore the parts that make up our blood , how it flows in our body, and how it gives us life. Compare and contrast blood in humans and animals. Students can explore the parts that make up our blood, how it flows in our body, and how it gives us life. They will also compare and contrast blood in humans and animals.

What do you seed?
Compare, contrast, and identify different types of seeds as well as identify why the seeds are important and what they do to make a whole plant.

The Great Fossil Find
Students will Embark on an adventure as a paleontologist working in the field. Students will use "fair test" Criteria to determine "best solutions" as they piece together parts of a mystery fossil to infer its traits and habitat. Students will analyze how scientists work to acquire knowledge while learning what paleontologists do in, and out of the field.

Merge Cube- Solar System Exploration
Students will become astronomers and explore space using our Merge cubes as a "handheld planetarium."

Reduce, Reuse, Robots
Students will learn how recycling can positively impact our world by engineering arms to attach to their Ozobot and then coding it to pick up the recycling.

Field Trips at the Center

We provide exceptional interdisciplinary learning opportunities for students of all grade levels. Standard field trips provide students with an animal presentation, immersive lesson, SMALLab experience, and museum exploration. Custom lessons are available for any grade level upon request for an additional $25 and must be planned in advance.

Lessons for Grades K-2

Science of Senses
The senses of the body are the brain's link to the world that we live in. This lesson will encourage students to use their senses to explore the world around them.

Reduce, Reuse, Robots:
Students will learn how recycling can positively impact our world by engineering arms to attach to their Ozobot and then coding it to pick up the recycling.

Weather Station Exploration:
What's the weather like? Through careful observation and studying the condition of the atmosphere, students can report and predict the weather, just like the weatherman on TV! This lesson will allow students to explore many different types of weather that are experienced all over the world, and explore how each are different.

Lessons for Grades 3-5

Science of Perception:
Students will learn how the brain works by exploring the conditions under which certain visual and auditory illusions occur. Be prepared to have your reality distorted!

Energy is Everywhere:
Students will discover the various forms of energy and how to distinguish them from one another as well as where they can be found in the environment. They will also learn how to create different types of energy using scientific and household tools.

Rocketship Rumble:
Imagine a scientific mission to space! Students will draw inspiration from existing spacecraft, design and build their own simple model, and then complete a series of tests to ensure that they are ready for launch. Did they include the necessary tools? Can the spacecraft withstand the vibration of launch, or the spin of navigating through space? Test your Rocket and get ready to Rumble!

Family Science Night

Hands-on science brought into your school

We provide 15 hands-on science experiments, and you provide the adult volunteers to man them! Our two facilitators will show up an hour before the event to teach your volunteers how their experiment works and how to teach it to kids and parents.

2021-22: Adaptation Celebration

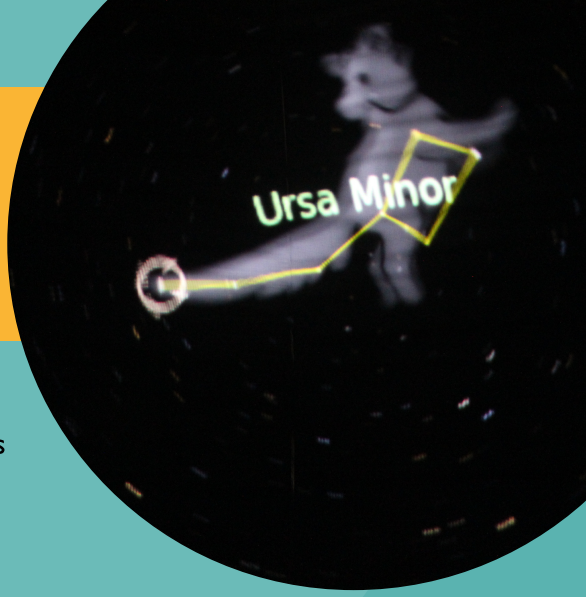
15 Different Adaptation Celebration kits all offer various hands-on activities for children and families to enjoy together while they learn about animal biology and behavior. Kits include:

- Bird Beaks
- Bone Detective
- Ecosystems
- Bug Eyes
- Sticky Tongues
- Invasive Species
- Life Cycles
- Animal Imitation
- Rule of Thumb
- Tooth Sleuth
- Webbed Feet
- Designer Ears
- Penguin Parade
- The Perfect Animal

Meets NGSSS:
SC.4.L.17.2, SC.5.L.17.1, SC.4.L.17.2, SC.4.L.17.4, SC.1.L.16.1, SC.1.L.17.1, SC.2.L.16.1, SC.4.L.17.1, & SC.5.L.15.1

Full kit descriptions for Animal Safari available upon request. Book your Family Science Night now! Email lisa@ecscience.org or call 850-664-1261.

Mobile & Virtual Planetarium



Our planetarium is an excellent resource for all grades and ages to discover just what makes up the night sky. Shows typically run either 25 minutes or 45-50 minutes in length depending on your needs and class schedules. The planetarium is an inflatable mobile dome that can house 25-30 students at a time depending on the grade level. We can also provide virtual planetarium shows for up to 100 devices that include live Q&A time with our educators after the show.

Custom Lessons (K-12)
Available for any grade level upon request for an additional fee and must be planned at least 4 weeks in advance.

Our Planetarium is Powered by

Gulf Power

Standards-Based Lessons

Mobile Planetarium Lesson Grades K-5

DISCIPLINE: Space

Students have the opportunity to travel through space and learn all about our solar system. They will discover the planets, moons, dwarf planets, and constellations that call the Milky Way Galaxy home.
Meets NGSSS:
SC.K.E.5.2, SC.K.E.5.3, SC.K.E.5.4, SC.K.E.5.6, SC.1.E.5.1, SC.1.E.5.3, SC.2.E.6.1, SC.2.E.7.2, SC.3.E.5.1, SC.3.E.5.2, SC.3.E.5.3, SC.3.E.5.5, SC.3.E.6.1, SC.4.E.5.1, SC.4.E.5.2, SC.4.E.5.3, SC.4.E.5.4, SC.5.E.5.1, SC.5.E.5.2, & SC.5.E.5.3

Mobile Planetarium Lesson Grades 6-8

DISCIPLINE: Space

In this introduction to space standards involving distances between objects, galaxies, and stars, students can expect to learn in-depth information about the solar system.
Meets NGSSS:
SC.8.E.5.1 & SC.8.E.5.2

To book your Mobile or Virtual Planetarium:
Email lisa@ecscience.org or call 850-664-1261 with your preferred date and two alternate dates.

Virtual Science Lab

With our Virtual Science Lab, students in grades 4-8 can explore a different subject every month. Our standards-based lessons include four weeks of programming.

During week one, a prerecorded video lesson and a brief Science Snap will be sent via email. The video focuses on introducing the topic for that month and provides a hands-on activity to complete at home, and the Science Snap is an additional brief 6-8 minute video lesson. In week two, we'll send out the second Science Snap, a subject-based experiment to carry out at home or in the classroom. During week three, we'll email a Science Snap that dives into exploring different career fields related to the subject; the final week, our Science Snap will allow an expert in one of these career fields to answer questions related to their job and the science behind it.

During weeks 1-3, we welcome students to send in any and all questions they have about the subject, experiments, and what they'd like to know from our expert.

Subjects:

Each month will provide in-depth exploration about a different field of science. This includes lessons, activities, studying career pathways, and the chance to ask an expert in the field questions about their work.

August: Marine Biology
September: Chemistry
October: Paleontology
November: Zoology
December: Mechanical Engineering
January: Robotic Engineering
February: Microbiology
March: Space/Astronomy
April: Geology
May: Acoustic Technology/Sound Engineering

Book your Virtual Science Lab now! Email lisa@ecscience.org or call 850-664-1261.