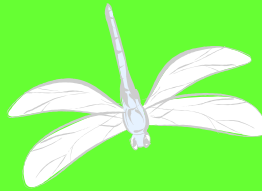


# *Emerald Coast Science Center 2009 Summer Science Camp*



139 Brooks Street  
Fort Walton Beach , FL 32548  
(850)-664-1261 [www.ecscience.org](http://www.ecscience.org)

The Emerald Coast Science Center is proud to offer its 2009 *Summer Science Camp*. We have loaded the summer with a catalog of brand new and exciting courses. Our award winning programs are filled with experiments, demonstrations, hands-on projects and good old-fashioned fun!

Please note: Pre-registration is required for enrollment in all of our Summer Science Programs

## Program Descriptions

*Ages 6-8*

*Class Maximum 20 Students—Minimum 10 Students*

**\$ 75 ECSC Members    \$85 Non-Members**

***Bugs, Worms and Butterflies    June 8-11    9AM-11:30 AM***

Discover the mysteries of the insect world. See how bristly caterpillars change into beautiful butterflies. You will learn about the amazing secrets of the ant hives, where millions of workers toil day and night. Find out how bees make honey. Under the microscope you will see the endless number of bugs and insects that your eyes would never know existed right under your feet. This class combines hands-on experience with microscopes and models with audio-visual material showing the hidden worlds of the billions and billions of insects sharing this world with us.



***Digging Up Dinosaurs June 15-18    9AM-11:30 AM***

Why do some stones look like bones? Because they were bones, long, long ago. Find out how buried bones can turn into stones called fossils. Learn about all the amazing creatures that lived on Earth way before humans by looking at fossils. See how we can discover what those animals look like. This course gives you opportunity to learn what fossils belonged to what animal by handling them. You will be amazed when you see how scientists can show us what a huge dinosaur looked like, just from looking at their fossil remains.

***Fossils,, Rocks and Space    June 22-25    9AM-11:30 AM***



Did you ever wonder why there are so many different rocks? Now you can find out. Learn about the many different stones and crystals and where they come from. Touch and feel material that was made by sand over a mile deep under the Ocean. See what our planet looks like on the inside and how a volcano works. Touch stones that traveled through endless Space. Learn how to identify different rocks and crystals.

***Junior Naturalists June 29—July 2 9AM-11:30 AM***

How does a tree work? What makes a frog different from a squid on the inside? There are so many wonders out in nature and now you can get answers to questions just like these. Discover the many miracles of life, of strange plants, and even stranger animals. You will learn how to use a microscope to look at the tiny life forms that our eyes can't see. This class will allow you to look inside different animals to discover how they work. This course combines audio-visual materials with hands-on class work to show students the wonders of nature.

***Jolts and Volts July 6-9 9AM-11:30 AM***



You'll have fun making your hair stand up with static electricity using a Van De Graff Generator. Then you'll explore what makes magnets attract , metal objects. And finally you learn how electricity is created using electromagnets, inductors, voltmeters and model generators.

***LEGO Engineering for Beginners July 13—16 9AM-11:30 AM***

This class will teach you the basics in engineering and building using LEGOS. Learn about simple machines and how placing LEGO bricks in certain patterns make your structures stronger. We will also explore gears and how they can make machines move.

***Mysteries of Outer Space July 20-23 9AM-11:30 AM***

Explore the solar system and discover the planets, from tiny Mercury to gigantic Jupiter. Then jump into a spaceship and travel at light speed to the stars and see what creates a star in deep clouds of space gas. To wrap things up, you will closely examine different kinds of telescopes that astronomers use, from refractors to reflectors.

***Sea Science Adventures July 27-30 9AM-11:30 AM***

You will examine the ocean world and all its wonders in both classroom and outdoor activities to gain first-hand experience with the marine environment. Activities include collection of live animals using nets, beachcombing, touching a preserved octopus, sharks and other marine life, use of microscopes, as well as many other fun ocean-related games and crafts.



## Program Descriptions

*Ages 9-12*

*Class Maximum 20 Students—Minimum 10 Students*

Per 1/2 Day Course \$ 75 ECSC Members \$85 Non-Members

Per All Day, 2 Courses \$ 140 ECSC Members \$ 150 Non- Members

For All-Day Students Its Bag Lunches and Playtime on the Landing from 11:30—12:30

### *Wild and Crazy Physics June 8-11 9:00 AM—11:30AM*

You will explore the basic ideas behind your best skateboard, your family's motor boat and the fizz on your favorite soft drink – but with a lot more fun. You will see firsthand how mechanics can lift a car engine with one hand, how light can actually turn a wheel and how a lever long enough can lift our planet.

### *Astronomy 4 Kids June 8-11 12:30PM—3:00 PM*

Discover the universe around us by learning what really is up in our night sky. You will learn the star groups we call constellations and learn how to predict their appearance at all times of the year. Students will learn and discover the mysteries of deep space which include star clusters, gigantic gas clouds called nebulae and even other galaxies like our own Milky Way. The program wraps up by learning about the various telescopes astronomers use today.



### *Lego Construction June 15-18 9AM-11:30 AM*

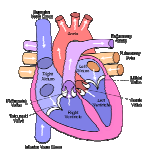
Create structures and learn about engineering in a fun and hands on way. This class will teach you about simple machines and the basics of engineering. Using LEGOS you will plan and build different types of structures and learn the engineering principles behind how to make them structurally sound. Part of our building experience will be creating an obstacle course for the LEGO robot to navigate.

### *LEGO Robotics June 15-18 12:30PM—3:00 PM*



Let's get those LEGOS moving. Come learn how to build a LEGO Mindstorm robot and learn how to program it. In this fun filled class working in teams you will design a Mindstorm robot and program it to navigate an obstacle course. In the end you will compete with the other teams to see whose robot reigns.

***Inside Our Bodies June 22-25 9AM-11:30 AM***



Learn all about what's really inside your human body and how it works using everything from electric microscopes to analyze and compare cells to Magnetic Imaging Machines and X-Rays. Have a fascinating hands-on time learning about how our lungs actually work using models to how the circulatory system moves life-giving blood around our bodies. If you ever thought about being a doctor, nurse or veterinarian this program is for you because, you'll head "straight to the heart" of the matter by actually dissecting other animals.

***Flight and Aeronautics June 22-25 12:30PM—3:00 PM***

5-4-3-2-1 ***Blast off!*** This camp is sure to get you off the ground. We'll make all kinds of flying machines from paper airplanes to kites to hot air balloons and finally rockets. You'll be flying high after this camp.



***Crime Scene Detectives June 29—July 2 9AM-11:30 AM***



Have fun solving crimes with the science of forensics investigations. Take clues from crimes scenes, then make forensics tests using fingerprint analysis, shoe print identification, chromatography as well as powder and hair comparisons. Parents, this course is for the serious student who wants to go beyond television and find out how police investigators REALLY solve crimes using science.

***Chess Masters Academy June 29—July 2 12:30PM—3:00 PM***

Do you know what [Qh5xf7#](#) means? We guarantee that you will by the end of this class. Whether you are a beginning chess player or someone with a little experience, you will be the King of your domain when this class is over.



***Advanced Lego Construction July 6-9 9AM-11:30 AM***

Using engineering knowledge and knowledge of simple and complex machines you will create LEGO structures. In this course you will plan and build an obstacle course with your structures that will put a LEGO robot through its paces.

***Advanced Lego Robotics July 6-9 12:30PM—3:00 PM***



In this advanced class you will learn even more about programming and robotics using LEGO Mindstorm technology. Using the constructed obstacle course from the construction course you will program and compete to see whose robot can navigate the best.

***Arcs and Sparks July 13-16 9AM-11:30 AM***

Stand back as we break out the electricity and magnets. You'll make batteries, circuits, experiment with electromagnets and that's just the beginning. You make electrons move through wires using magnetic fields and then actually measure the current with Voltmeters.



***Harry Potter Science and Wizardry July 13-16 12:30PM—3:00 PM***



You'll see how Harry Potter works his spells and magic potions using science and mathematics. Have fun unraveling the mysteries of the strange world around Hogwarts by using GPS units and using secret inks and dyes. You'll make magic slime creatures using nothing more than soap and glue, and much, much more.

***Marine Science Investigations July 20-23 9AM-11:30 AM***

Have you ever wondered: *Why is the ocean salty? Where does a snail get its shell? Do fish sleep?* Get your feet wet and discover the answers to these and many other questions as you explore all the marine world has to offer. You will learn about a variety of marine organisms from the tiniest plankton to the big blue whale. Sample the sound for fish, crabs and shrimp, dig for burrowing organisms and learn all about the residents of our local waters. Activities include seining, dissection, ocean critter crafts and more!



***Aquatic Adventures July 20-23 12:30PM—3:00 PM***

Explore all the wonders of our coastal habitats from the rivers to the Gulf. Learn about the watersheds, estuaries, sea grass communities and the Gulf of Mexico. Discover where your seafood comes from and learn about other residents of our local waters including plankton, crabs, fish, and dolphins. Emphasis is placed on human impact, conservation, water quality and pollution. Activities include seining, a watershed model activity, beachcombing and more!

***Crime Scene Detectives July 27-30 9AM-11:30 AM***

Have fun solving crimes with the science of forensics investigations. Take clues from crime scenes, then make forensics tests using fingerprint analysis, shoe print identification, chromatography as well as powder and hair comparisons. Parents, this course is for the serious student who wants to go beyond television and find out how police investigators REALLY solve crimes using science.

***Stained Glass Creations July 27-30 12:30PM—3:00 PM***

Art and science come together in this class as you create stained glass mosaic creatures. Whoever said scientists weren't creative didn't know about the Emerald Coast Science Center.

## **HOW TO REGISTER**

Please complete a separate registration form for each student. Registration forms can be printed from our website at [www.ecscience.org](http://www.ecscience.org). Registration may be done in person or you may mail completed registration form (s) to the Emerald Coast Science Center. Registration form (s) may be faxed with credit card information. Summer enrollment is on a first-come, first serve basis. Payment is due in full at time of registration. We accept Visa, Master Card, check, cash or money orders. Please make checks payable to the Emerald Coast Science Center. Mail, hand deliver or fax completed form with full payment to:

Emerald Coast Science Center  
139 Brooks Street, Fort Walton Beach, Fl. 32548  
Fax 850-664-6862

## **REGISTRATION DEADLINE**

The ECSC must receive a completed registration form and full payment by 4:00 PM on the Friday before the class.

## **CONFIRMATION**

All applications will receive a confirmation letter upon receipt of completed registration form and payment.

## **CANCELLATIONS AND REFUNDS**

The Emerald Coast Science Center reserves the right to combine and cancel classes. Each class has a minimum and maximum enrollment. In the event of a museum cancellation, program fees will be returned in full. In the event of a participant cancellation, each program is held to a 25% cancellation fee. Cancellations **MUST** be made in writing (e-mail, fax okay). Registrations are non-transferable.

## **DROP OFF AND PICK UP**

No children are to be left unattended at the museum. Children may be dropped off **NO MORE THAN 15 MINUTES PRIOR TO THE START OF THE PROGRAM AND MUST BE PICKED UP WITHIN 15 MINUTES OF THE END OF THE PROGRAM.**

## **GENERAL INFORMATION**

If you have any questions, please call 850-664-1261.

**SUPER SUMMER SCIENCE ACADEMY**  
**REGISTRATION FORM**

Name of Participant \_\_\_\_\_

Boy \_\_\_\_ Girl \_\_\_\_ Grade (Fall 2009) \_\_\_\_\_ Age \_\_\_\_\_

Enrollment Information: Are you an ECSC Member? Yes \_\_\_ # \_\_\_\_\_

**Program (s) attending:**

Title and Dates \_\_\_\_\_

Title and Dates \_\_\_\_\_

Title and Dates \_\_\_\_\_

Title and Dates \_\_\_\_\_

Cost: \_\_\_\_ # of programs x \_\_\_\_ cost per program = \_\_\_\_\_

**Payment Method:** Cash    Check    Credit Card: Visa / MasterCard

Card Number \_\_\_\_\_ Exp \_\_\_\_\_

Total Enclosed/ to charge : \$ \_\_\_\_\_

**General Information**

Mother/Guardian \_\_\_\_\_ Phone Number \_\_\_\_\_

Father/Guardian \_\_\_\_\_ Phone Number \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_ Zip \_\_\_\_\_

Emergency contact \_\_\_\_\_ Phone Number \_\_\_\_\_

**PICK UP LIST** The ECSC staff will not permit students to leave with individuals not on their list.

Name \_\_\_\_\_ Relationship \_\_\_\_\_

Name \_\_\_\_\_ Relationship \_\_\_\_\_

**PLEASE PROVIDE PERTINENT MEDICAL INFORMATION**

List any medications, when they are taken and for what condition:

\_\_\_\_\_

List all allergies to food, insects or medications and the severity:

\_\_\_\_\_