Student Programs

2015-2016 Impact Data

RPSEC Student Programs for K-12 students had 32,502 program visits during the 2015-2016 school year. Of that total, 26,800 were K-12 students from 73 schools encompassing 15 public school districts in South Carolina and Georgia, as well as numerous private and home school groups. In addition, 604 teachers and 5,098 adult chaperones accompanied the students during this year’s programs. This year’s most popular programs included Circuit City (1,871 student visits), Magnets and Motions (1,724 student visits), Animals with Backbones (1,679 student visits), Under the Sea (1,343 student visits), Push Me, Pull Me (1,212 student visits), and In My Backyard (1,177 student visits).

K-12 Student Programs 2016-2017

The deadline has passed for reservation requests for the 2016-2017 school year. Once again, we received many more requests than we will be able to serve, and our schedule is now full. We are unable to schedule additional programs at this time, but will be happy to place your request on a waiting list in the event of a cancellation. To download a reservation request form, please go to: http://rpsec.usca.edu/student/.

The RPSEC currently offers over 50 hands-on, inquiry-based programs for K-12 students. All of our programs are aligned with South Carolina and Georgia academic standards, and many of our programs are interdisciplinary.

Our Student Programs website includes program descriptions, standards correlations, and related Traveling Science and Mathematics Kits that support and extend each lesson. These kits contain excellent post-visit activities and are available, free of charge, for checkout. To reserve a kit, go to http://rpsec.usca.edu/travelingscience/ or call (803) 641-3683.
RPSEC Program Updates for 2016-2017

The Ruth Patrick Science Education Center is continuously working to update current Discovery and Planetarium Programs along with developing new offerings to best serve our students and teachers. Check out our updates for the 2016-2017 school year!

Updated & Returning Programs

Kid Pix: (Grades 1 & 3 • 60 minutes) Get your creative juices flowing as we explore “KidPix” in our MAC computer lab classroom. Students will make art, math and science connections as they use the KidPix toolbox to draw lines, shapes, colors, and patterns as well as dipping into the paint bucket, paintbrush, stamps and eraser tools.

We All Live Downstream: (Grade 5 • 60 minutes) Students will discover the amount and importance of available water on Earth through a series of hands-on activities. They will also work together to develop a piece of “riverfront” property exploring how watersheds affect not only our water source but also populations downstream.

New Programs

Sun & Shadows (Grade 1 • 60 minutes) Students will conduct investigations that help them discover how the Sun appears to move, how shadows change over time, and how the angle at which light shines changes the brightness and spread of the light.

Recycling Resources: (Grades 1 & 3 • 60 minutes) Students will investigate ways to help reduce, reuse and recycle our waste. They will work together to deconstruct a landfill, collect data and build graphs to analyze the effects of our trash in the environment!

Summer Library Programs 2016

The RPSEC was excited to continue to provide outreach programs to the ABBE Regional Library System this summer. RPSEC staff traveled to Blackville, Williston, Edgefield, Johnston, Bamberg, Denmark and Wagener. Each library participated in our Animals with Backbones program where children interacted with frogs, toads, salamanders, turtles, owls, a lizard and an alligator. Children learned about native South Carolina species and were encouraged to check out local library books to learn more about the animals housed at the RPSEC. There were a total of 301 participants for this summer series.

Summer Student Programs at the RPSEC

During the summer, the DuPont Planetarium and the RPSEC offers programs to daycare centers, church groups, summer camps, and civic organizations. Summer discovery programs offered this year included Brilliant Butterflies, Roly Poly Palooza, Grossology, The Mad Scientist, Catapult Creations, Rev Up Recycling. Summer planetarium programs offered this year included Mission to Mars, Digistar Virtual Journey, In My Backyard, Solar System Adventure Tour, Digistar Laser Fantasy, and Two Small Pieces of Glass. Currently the RPSEC has served a total of 1,327 student visits and 204 adult visits for summer student programs with more to come as summer comes to an end!
From January through May 2016, the RPSEC offered a series of monthly programs for home school students. Over the course of the spring semester, each child attended a total of 10 programs. Home School Mondays 2016 had a total of 912 student visits with 160 adult chaperones.

The RPSEC is again offering a series of monthly programs for home school students. The programs will be held on Monday afternoons from January through May. One Monday per month, participants will attend (2) one-hour, back-to-back science or math programs. The two programs for the “Younger” students (Grades 5K-3) will be held at the same time as the two programs for the “Older” students (Grades 4-8). Over the course of the spring semester, each child will attend a total of 10 programs. Different programs will be offered each year with a 3-year rotation cycle.

Our Home School Mondays 2017 offerings are currently posted online and you may access these offerings by going to the RPSEC website. The deadline to submit reservation request forms with payment is Thursday, December 1, 2016. The children will be assigned to one of eight groups provided we have the enrollment numbers to merit having more than one Monday session. Four of the groups will meet as part of the “First Monday” group (January 23, February 6, March 6, April 10, and May 1, 2017). The other four groups will meet as a part of the “Second Monday” (January 30, February 13, March 13, April 17, and May 8, 2017). A final schedule with dates and participant lists will be e-mailed to parents and posted on our website by December 16, 2016. Please check these group lists to be sure that your child has been assigned to the right group, especially if you had a special request. Please let us know as soon as possible if you see any conflicts.

The cost is $45 per student for the series and must be prepaid in full by the December 1, 2016 deadline. Reservations are first come, first serve, and we may fill up before the deadline. There is a $15 per student surcharge for late requests, and we cannot guarantee that late requests can be served. You may mail or deliver the reservation request form to the RPSEC, USC Aiken, 471 University Parkway, Box 3, Aiken, South Carolina 29801. Please make checks payable to USCA.

The students should arrive at 1:00 PM on their assigned days. Programs begin at 1:15 and end at 3:30 PM. Parents will need to sign the child in and out. If someone other than the parent has permission to pick up and sign out your child, please notify us in advance. It would be helpful to have at least one adult accompany each group. Parent volunteers are free and welcome. Children under the age of 4 are not permitted to attend planetarium programs at the RPSEC.

Questions? E-mail us at RPSEC@usca.edu or call us at (803) 641-3313. For more information, please visit our website at http://rpsec.usca.edu/student/HomeSchool/HomeSchoolMondaysCurrent.html

We look forward to seeing you soon!
Infusing the Love of Science, Technology, Engineering, and Mathematics!

New STEP Field Studies Piloted at Savannah River Site for 2016-2017

This Fall 2016, sixth graders and seventh graders from Jackson Middle School, an Aiken County Public STEM School, will help pilot a Project Based Learning field study at the SRS STEP site. Sixth graders will participate in two days of field studies at SRS to assess the health of the forest for habitat suitable for the Red Cockaded Woodpecker and the Bachman’s Sparrow, both birds of concern. On the third day of this PBL-6 field study, STEP instructors will meet with the students at Jackson Middle School to compile their data and prepare a presentation based on their findings. The seventh graders will also participate by assessing biotic and abiotic factors through a PBL-7 field study, which will include determining the health of an aquatic ecosystem and the quality of soil at the SRS STEP site. The seventh graders’ two-day field study will also conclude at Jackson Middle School with instructors from STEP as the students compile their data and prepare a presentation based on their findings.

New Silver Bluff Audubon STEP Field Study

The STEP outdoor field study Eco-Venture for elementary students just got more exciting for this coming year. Schools have signed up for an extended eco-hike adventure leading them beside the Savannah River at the Silver Bluff Landing. This standards-based STEAM field study will have students making careful observations of their environment looking for critters hidden in plain sight, discovering the wonders of wetlands, and using wild words to describe their surroundings.
We are pleased to announce two new grant projects that will provide scholarships for student program visits during the 2016-2017 school year.

Research shows that students in early elementary grades have strong interest in and curiosity about science, technology, engineering, and math (STEM), but by the time these same students reach middle and high school, they often become disinterested and apathetic toward STEM disciplines. The Ruth Patrick Science Education Center seeks to engage students of all ages and infuse a love for learning. Our hands-on approach to teaching is designed to help people experience the beauty, the order and the power of science and mathematics, as well as the interest and fun of discovery. We are grateful for the support of the Border Bash Foundation and the Wells Fargo Foundation this year.

### Border Bash Foundation

The Border Bash Foundation Discovery 360 project will provide scholarships for economically disadvantaged 6th grade students at Glenn Hills Middle School, a Title I school from Richmond County, to visit the Ruth Patrick Science Education Center at USC Aiken for a series of programs, free of charge, during the 2016-2017 school year. The students will visit the DuPont planetarium and participate in discovery programs that are designed to actively engage students in hands-on, inquiry-based learning. The project provides funding for transportation costs and program fees. The programs include Dark Shadows, Kinesthetic Astronomy, and Under the Sea. We are so grateful for the support of the Border Bash Foundation!

### Wells Fargo Foundation

The Wells Fargo STEM Success project is designed to provide access to, and increase middle school students’ interest in, science technology, engineering, and mathematics (STEM). This grant will enable all 6th and 8th grade students at New Ellenton Middle School to attend a series of field trip experiences at the Ruth Patrick Science Education Center (RPSEC) at the University of South Carolina Aiken during the 2016-2017 school year. The project provides funding for transportation costs and scholarships for program fees. The students will visit the DuPont planetarium and participate in discovery programs that are aligned with academic standards, infused with exploration and hands-on, inquiry based learning. The programs include Engineering the ISS, Polygon Puzzle and Animal Adaptation Stations for grade 6. Students in grade 8 will attend Dark Shadows, Kinesthetic Astronomy and Lunar Design Challenge. We are so grateful for the support of the Wells Fargo Foundation!

Second graders from East Aiken School of the Arts participated in a STEAM program at Bridgestone’s Off Road/Radial plant in Graniteville this past Spring, integrating the Arts with traditional STEM subjects. Students used iPads to read QR codes with information about native trees, collected data and measured each tree and then they made bark rubbings of the trees. An eco-hike beside the creek had students amazed at the beautiful blooming kalmia and jungle-like vegetation.
The Ruth Patrick Science Education Center is looking for sponsors to help support the cost of feeding and caring for the animals used in our K-12 educational programs. An animal may be adopted by an individual, a business, or a group such as an elementary school class or a scout troop. The sponsors’ names will be displayed on donor recognition kiosks at RPSEC, and they will be recognized in the Center’s publications and website as Friends of the RPSEC. Donations are tax deductible; sponsorship opportunities January through December 2016 are listed below.

For more information, please contact Elizabeth Green at ElizabethG@usca.edu or (803) 641-3631.

<table>
<thead>
<tr>
<th>BIRDS</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, Barred Owl (Strix varia) Non-releasable male</td>
<td>Mr. Jack &amp; Mrs. Ava Hammonds</td>
</tr>
<tr>
<td>Lina, Eastern Screech Owl, brown phase (Megascopsasio) Non-releasable female</td>
<td>Dr. Rose O. Hayes</td>
</tr>
<tr>
<td>Charlotte, Eastern Screech Owl, brown phase (Megascopsasio) Non-releasable female</td>
<td>Ms. Barbara S. Fenstermacher</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPTILES: CROCODILIANS</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al, American Alligator (Alligator mississippiensis) male, hatched 2012</td>
<td>Mr. John Hutchens</td>
</tr>
<tr>
<td>Holden, American Alligator (Alligator mississippiensis) male, hatched 2014</td>
<td>Dr. Rose O. Hayes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPTILES: SNAKES</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>George, Eastern Kingsnake (Lampropeltis getula getula)</td>
<td>Mrs. Darya McMurtrie</td>
</tr>
<tr>
<td>Betsy, Grey Rat Snake (Elaphe obsoleta spiloiodes)</td>
<td>$100</td>
</tr>
<tr>
<td>Corny, Corn Snake (Elaphe guttata) male</td>
<td>Ms. Kim McKenzie Howell</td>
</tr>
<tr>
<td>Casper, Albino Corn Snake (Elaphe guttata)</td>
<td>Tristan Davis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPTILES: TURTLES</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romeo, Box Turtle (Terrapene carolina Carolina) male</td>
<td>Mr. Robert &amp; Mrs. Carolyn Moore</td>
</tr>
<tr>
<td>Fatty, Box Turtle (Terrapene carolina Carolina) female</td>
<td>Dr. Joette G. Sonnenberg</td>
</tr>
<tr>
<td>Shelly, Box Turtle (Terrapene carolina Carolina) juvenile</td>
<td>$75</td>
</tr>
<tr>
<td>Durtle, Snapping Turtle (Chelydra serpentina) male</td>
<td>$75</td>
</tr>
<tr>
<td>Slim Jim, Red-Eared Slider Turtle (Trachemys scripta elegans) male</td>
<td>$75</td>
</tr>
<tr>
<td>Strut, Chicken Turtle (Trachemys scripta scripta)</td>
<td>Mr. Robert &amp; Mrs. Carolyn Moore</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REPTILES: LIZARD</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lizzy, Eastern Fence Lizard (Sceloporus undulates)</td>
<td>Mrs. Beth Eberhard</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AMPHIBIANS: FROGS and TOADS</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerald, Barking Tree Frog (Hyla gratiosa)</td>
<td>Dr. Carol &amp; Dr. Robert Botsch</td>
</tr>
<tr>
<td>Striker, Squirrel Tree Frog (Hyla squirella)</td>
<td>Dr. Carol &amp; Dr. Robert Botsch</td>
</tr>
<tr>
<td>Kermit, Green Tree Frog (Hyla cinerea)</td>
<td>Allie Tedrick</td>
</tr>
<tr>
<td>Buddha, Southern Toad (Bufo terrestris)</td>
<td>$50</td>
</tr>
<tr>
<td>Jumper, Southern Toad (Bufo terrestris)</td>
<td>$50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AMPHIBIANS: SALAMANDERS</th>
<th>Adoption Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dottie, Spotted Salamander (Ambystoma maculatum)</td>
<td>Mrs. Darya McMurtrie</td>
</tr>
<tr>
<td>Louie, Tiger Salamander (Ambystoma tigrinum)</td>
<td>$50</td>
</tr>
<tr>
<td>Fireball, Red Salamander (Pseudotriton ruber)</td>
<td>$50</td>
</tr>
<tr>
<td>Marley, Marbled Salamander (Ambystoma opacum)</td>
<td>$50</td>
</tr>
</tbody>
</table>
In partnership with Invent Now, the Ruth Patrick Science Education Center was again pleased to offer the nationally-acclaimed Camp Invention program to 110 children entering grades one through six this summer.

We were thrilled to offer Camp Invention to CSRA students for the 12th year. The hands-on curriculum helps to further insert curiosity into a child’s everyday lifestyle. As the need for skilled STEM professionals increases, we believe we are setting our students up for success by offering programs like Camp Invention.

This year’s Camp Invention curriculum was called Epic™, inspired by some of our nation’s most brilliant minds including experienced educators, Inductees of the National Inventors Hall of Fame and developed in partnership with the United States Patent and Trademark Office. Epic™ featured hands-on modules like CrickoBot™, where Campers constructed and personalized a DIY solar-powered cricket and a unique habitat; Epic Park ™, where Campers worked in teams to design an eco-adventure park; I Can Invent: Maker Studio™, where Campers brainstormed product ideas and built original prototypes using real tools and components found in everyday devices; and The Lab: Where Pigs Fly™, where children discovered the science of slime, demolition, electronic sound, giant squid and coding.

Camp Invention provides an opportunity for inventive young minds to exercise their creativity and use their imagination in ways they don’t normally get to in the classroom. Program participants do not realize they are learning and developing new skills as they build prototypes, take things apart, explore different types of technology and so much more.

Parents tell us Camp Invention improves their child’s outlook on learning and increases their child’s interest in using science to solve problems.

Local educators facilitated the program modules, and enthusiastic high school and college students served as Leadership Interns, ensuring that one staff member was in place for every five children.

Camp ENGage was held July 18-21, 2016. Camp ENGage was all about empowering the next generation of engineers. This camp was an immersion into engineering and design-based thinking for rising 7th graders from the CSRA. More than a science camp, more than summer fun, Camp ENGage gave students unprecedented access to educators and engineering professionals. They were ENGaged in hands-on projects that encouraged further study in engineering.

- Students were engaged in a problem-based curriculum where they applied principles of engineering design to solve challenges.
- Students made site visits to Bridgestone and the Strom Thurmond Dam and learned first hand how engineering is a critical component of their everyday lives.

Camp ENGage was made possible by a generous donation from Savannah River Nuclear Solutions
Future City is a national, project-based learning program where students in 6th, 7th, and 8th grades imagine, research, design, and build cities of the future. Keeping the engineering design process and project management front and center, students work in teams to ask and answer an authentic, real-world question: How can we make the world a better place?

Students involved in the Future City Competition spend approximately four months creating cities that exist at least 100 years in the future. Each city must incorporate a solution to a citywide challenge that changes each year. This year’s challenge—Waste Not, Want Not—asks students to design an innovative citywide solid waste management system. In January, students present their cities before a panel of judges at the Regional Competition. The team that wins the regional competition receive airfare and hotel accommodations for five members of their team to attend the National Competition held in Washington, DC, in February.

**NEW! Program Framework**

NEW this year, Future City has been redesigned and uses the engineering design process as a framework to guide students through the creation of their cities. Within this framework, students apply specific project management methods to plan and complete their competition deliverables. Both processes work together, helping students to design, research, build, and deliver their city of the future.

The Future City handbook and website have been updated to walk your team through the engineering design process and project management stages. As they create their city, students also use their Project Plan (a project management tool used by engineers and other professionals) to record their goals, make schedules, check in on project progress, and reflect on their final product.

Educators from across the country pilot tested the new framework last year. They found it easy to use and helpful in guiding their students through the competition. They also reported it was an effective way to teach about engineering and project management.

**Want more information?**

Plan to attend one of our TEACHER / MENTOR INFORMATION WORKSHOPS
August 25th and September 13th 4:00-6:30PM - RPSEC

Call John Hutchens 803.641.3474 to register for the workshop.

2016 Regional Winners - Paul Knox Middle School
### Become a Galactic Guardian for 2016

How would you like to adopt a celestial object and be its Galactic Guardian for a year? There are a number of celestial objects that need a caring person, family or group to look out for their best interests over the next year. Additionally, you will have the opportunity to support programming at the Ruth Patrick Science Education Center with your tax-deductible donation. For more information, please call the main office at 803-641-3313 or email RPSEC@usca.edu.

---

### 2016-2017 Public Shows

#### Dupont Planetarium Schedule

<table>
<thead>
<tr>
<th>DATES</th>
<th>SHOW NAMES</th>
<th>SHOW TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 August 6,13, 20, 27</td>
<td>Two Small Pieces of Glass</td>
<td>8:00 pm</td>
</tr>
<tr>
<td></td>
<td>Digistar Virtual Journey</td>
<td>9:00 pm</td>
</tr>
<tr>
<td>2016 September 3, 10, 17, 24</td>
<td>Dark Shadows</td>
<td>7:00 pm</td>
</tr>
<tr>
<td>9/10 Observe the Moon Night</td>
<td>To the Moon and Beyond</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2016 October 1</td>
<td>Digistar Virtual Journey</td>
<td>10:00, 11:00, 12:00, 1:00, 2:00</td>
</tr>
<tr>
<td>S.E.E.D.</td>
<td>I Spy the Sky</td>
<td>10:30, 11:30, 12:30, 1:30, 2:30</td>
</tr>
<tr>
<td>2016 October 8, 15, 22, 29</td>
<td>Mission to Mars</td>
<td>7:00 pm</td>
</tr>
<tr>
<td></td>
<td>Blown Away: Wild World of Weather</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2016 November 5, 12, 19, 26</td>
<td>In My Backyard</td>
<td>7:00 pm</td>
</tr>
<tr>
<td></td>
<td>Engineering the International Space Station</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2016 December 3, 10, 17</td>
<td>Season of Light</td>
<td>7:00 and 8:00 pm</td>
</tr>
<tr>
<td>2016 December 19, 22, 29</td>
<td>Season of Light</td>
<td>6:00, 7:00 and 8:00 pm</td>
</tr>
<tr>
<td>2017 January 7, 14, 21, 28</td>
<td>Dark Shadows</td>
<td>7:00 pm</td>
</tr>
<tr>
<td></td>
<td>To the Moon and Beyond</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2017 February 4, 11, 18, 25</td>
<td>Follow the Drinking Gourd</td>
<td>7:00 pm</td>
</tr>
<tr>
<td></td>
<td>Explorers of Mauna Kea</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2017 March 4, 11, 18, 25</td>
<td>Mission to Mars</td>
<td>7:00 pm</td>
</tr>
<tr>
<td></td>
<td>Blown Away: Wild World of Weather</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2017 April 1, 8, 15, 22</td>
<td>In My Backyard</td>
<td>7:00 pm</td>
</tr>
<tr>
<td></td>
<td>More than Meets the Eye</td>
<td>8:00 pm</td>
</tr>
<tr>
<td>2017 April 29</td>
<td>Dark Shadows</td>
<td>7:00, 8:00 and 9:00 pm</td>
</tr>
<tr>
<td>Earth &amp; Sky Night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017 May 6, 13, 20, 27</td>
<td>Engineering the International Space Station</td>
<td>8:00 and 9:00 pm</td>
</tr>
<tr>
<td>2017 June 3, 10, 17, 24</td>
<td>Ancient Sky Lore</td>
<td>8:00 pm</td>
</tr>
<tr>
<td></td>
<td>Digistar Virtual Journey</td>
<td>9:00 pm</td>
</tr>
<tr>
<td>2017 July 1, 8, 15, 22, 29</td>
<td>Dark Shadows</td>
<td>8:00 pm</td>
</tr>
<tr>
<td></td>
<td>Digistar Laser Fantasy</td>
<td>9:00 pm</td>
</tr>
<tr>
<td>2017 August 5, 12, 19, 26</td>
<td>Dark Shadows</td>
<td>8:00 and 9:00 pm</td>
</tr>
<tr>
<td>8/21 Total Solar Eclipse!!!</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All shows last one hour unless otherwise noted. Most shows include a live “sky tonight” portion.

#### Special Events

- **Observe the Moon Night:** September 10, 2016
- **SEED: Science Education Enrichment Day:** October 1, 2016: 10 a.m. - 3 p.m.
- **Family Earth & Sky Night and National Astronomy Day:** April 29, 2017

#### Special Celestial Event: TOTAL SOLAR ECLIPSE: AUGUST 21, 2017

Information on when, where and how to view this eclipse will be shared throughout the year at the DuPont Planetarium, especially during Dark Shadows, which explains why we have eclipses.
Masters Degree in Educational Technology
Earn Your USCA Degree Online

Are you interested in integrating technology into your instruction? Would you like the flexibility of a high-quality, online program? If so, you should consider applying to the program for the M. Ed. in Educational Technology. The program is a joint program offered by USC Columbia and USC Aiken and it is entirely web-based (online). You can find out more about the program (which is a total of 36 hours) and courses by visiting the web site at: http://edtech.usca.edu

Students in the program are from all over the state of South Carolina and the region. Many are educators from K-12 and higher education, and others work in industry as instructional designers or related fields.

You may enroll in one or two courses prior to applying to the program if you wish to try them out. Also, by taking four specific courses, you can become qualified to teach in the SC Virtual School Program.

Application via Aiken campus is available at http://web.usca.edu/graduate-admissions/application/

Those students who enter the program through Aiken campus receive a laptop computer for use while in the program!

If you are interested in enrolling in the program or just wish for more information, contact Dr. Tom Smyth (smyth@usca.edu).

<table>
<thead>
<tr>
<th>Foundational Core Courses (6 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDRM 700 – Introduction to Research in Education</td>
</tr>
<tr>
<td>EDET 709 – Applications of Learning Principles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design Courses (15 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDET 603 – Design and Development Tools I</td>
</tr>
<tr>
<td>EDET 703 – Design and Development Tools II</td>
</tr>
<tr>
<td>EDET 722 – Instructional Design and Assessment</td>
</tr>
<tr>
<td>EDET 755 – Design and Evaluation of Information Access and Delivery</td>
</tr>
<tr>
<td>EDET 793 – Advanced Instructional Design and Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology Core Courses (12 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDET 650 – Internship in Educational Technology</td>
</tr>
<tr>
<td>EDET 735 – Technological Applications for Diverse Populations</td>
</tr>
<tr>
<td>EDET 746 – Management of Technology Resources</td>
</tr>
<tr>
<td>EDET 780 – Seminar in Educational Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (3 hours chosen from the following courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDET 652 – Design and Evaluation of Games and Simulations</td>
</tr>
<tr>
<td>EDTE 731 – Integration of Technology and Instruction</td>
</tr>
<tr>
<td>SLIS 706 – Introduction to Information Technologies</td>
</tr>
<tr>
<td>TSTM 790 – Advanced Study in Technology Support/Training Management</td>
</tr>
</tbody>
</table>

Registration Begins August 24th - http://SCscience.org/
How would you like to adopt a celestial object and be its Galactic Guardian for a year? There are a number of celestial objects that need a caring person, family or group to look out for their best interests over the next year. Additionally, you will have the opportunity to support programming at the Ruth Patrick Science Education Center with your tax-deductible donation. For more information, please call the main office at 803-641-3313 or email RPSEC@usca.edu.

**$400 level:**
1. Milky Way
   - Adopted by Ms. Barbara Fenstermacher
2. Sun
   - Adopted by Mr. Jack & Mrs. Ava Hammond
3. Moon

**Planets:**
4. Mercury
5. Venus
6. Earth
7. Mars
8. Jupiter
9. Saturn
10. Uranus
11. Neptune
12. Pluto (Dwarf $399.99)

**$150 level:**
13. Virgo
14. Libra
15. Scorpius
16. Ophiuchus
   - Adopted by Dr. Gary J. & Mrs. Senn
17. Sagittarius
18. Capricornus
19. Aquarius
20. Pisces
21. Aries
22. Taurus
23. Gemini
24. Cancer
25. Leo

**$100 level:**
26. Andromeda the Princess
27. Aquila the Eagle
   - Adopted by Mr. William R. & Mrs. Karen S. Cue
28. Auriga the Charioteer
29. Bootes the Herdsman
30. Canis Major the Big Dog
31. Canis Minor the Little Dog
32. Cassiopeia the Queen
33. Cepheus the King
34. Crux the Southern Cross
35. Cygnus the Swan, Northern Cross
36. Draco the Dragon
37. Hercules
38. Lyra the Harp
39. Orion the Hunter
40. Pegasus the Flying Horse
   - Adopted by Mr. Levi & Mrs. Brittany Parker
41. Perseus the Hero
42. Ursa Major, Big Dipper
43. Ursa Minor, Little Dipper
44. Cat's Eye Nebula, NGC 6543
45. Cat's Paw, NGC 6914
46. Crab Nebula, M1
47. Dumbbell Nebula, M27
48. Flame Nebula, NGC 2024
49. Helix Nebula, NGC 7293
50. Horsehead Nebula B33, IC434
51. Horseshoe Nebula, M17
52. Lagoon Nebula, M8
53. Orion Nebula, M42
54. Owl Nebula, M97
   - Adopted by Mr. John & Dr. Deborah McMurtrie
55. Pillars of Creation (M16)
56. Ring Nebula, M57
57. Rosette Nebula, NGC 2237
58. Seagull Nebula, IC2177
59. Stellar Spire (M16)
60. Tarantula Nebula, NGC 2070
61. Trifid Nebula, M20
62. Andromeda Galaxy, M31
63. Black Eye Galaxy, M64
64. “Cigar” Galaxy, M82
65. Pinwheel Galaxy, M101
66. Sombrero Galaxy, M104
67. Sunflower Galaxy, M63
68. Tadpole Galaxy, UGC 10214
69. Whirlpool Galaxy, M51

**$75 level:**

**$50 level:**
70. Centaurus
   - Adopted by Dr. David W. & Mrs. Sue Harden Hayes
71. Cetus the Sea Monster
72. Columba the Dove
73. Corona the Crown
74. Corvus the Crow
75. Delphinus the Dolphin
76. Lepus the Hare
77. Monoceros the Unicorn
78. Sagitta the Arrow
79. Albireo, a double star
   - Adopted by Darlene Smalley
80. Beehive cluster
81. Alcor & Mizor, double stars
82. Hercules globular cluster
83. Pleiades, the Seven Sisters
84. Polaris, the North Star

**Stars and Star Clusters:**
85. Aldebaran
   - Adopted by Dr. Paul and Mrs. Monica Dainer
86. Altair
87. Antares
88. Arcturus
89. Betelgeuse
   - Adopted by Mr. Charles M. Combier
90. Capella
91. Castor
92. Deneb
93. Fomalhaut
94. Pollux
95. Procyon
96. Regulus
97. Rigel
98. Sirius
99. Spica
100. Vega
Visit www.nwinitiative.org for more information on local high-tech training opportunities.

Growing Our Own through Collaboration®
2016 Nuclear Science Week
October 17 – 21, 2016

Nuclear Science Week is a national, broadly observed week-long celebration that focuses on all aspects of nuclear science. Events during this week will provide many learning opportunities about contributions, innovation and careers that can be found by exploring nuclear science.

**Education Days**
Monday, October 17, 2016 - Friday, October 21, 2016
Roth Patrick Science Education Center (RPSEC), University of South Carolina Aiken

Offering programs for middle and high school students with focus on:
- Journey to the Center of the Atom (Exploring the Nucleus and Atoms)
- The Periodic Table
- Chemical Molecules

Teachers can make arrangements for class participation through http://rpssec.suu.edu/

**Site Visit Days**
Tuesday, October 18 - Thursday, October 20, 2016
SCANS - VPI Summer Nuclear Institute, Aiken

Hosting student & teacher tours of the AP-1000 nuclear power plant site.
Space is limited with registration required.
For more information, contact Erica Knight at eknight@scans.com or 803-816-5436

**Education Day**
Wednesday, October 19, 2016
Augusta University – Summerville Campus, Augusta, GA

Offering programs for high school students & teachers with focus on:
- Journey to the Center of the Atom (Exploring the Nucleus and Atoms)
- Fundamentals in Nuclear Fuel

Registration required. For more information, contact Debra C. Goudy, 706-722-2520 or dgoody@aug.edu

**Education Day**
Friday, October 21, 2016
University of South Carolina Salkehatchie, Allendale, SC

Offering programs for middle school students with focus on:
- Journey to the Center of the Atom (Exploring the Nucleus and Atoms)
- Fundamentals in Nuclear Fuel

Registration required. For more information, contact Pati Bozarth at pcbozarth@uscs.edu

**Site Visit Day**
Wednesday, October 19, 2016
Savannah River Site (SRS) - Aiken, SC

For SRS, middle and high school science/tech teachers. Toast is sponsored by science orientation at SRS.
Space is limited with registration required.
For more information, contact Kim Mitchell at 803-926-6780 to register a teacher for the tour.

**STEM Career Connections Day**
Thursday, October 20, 2016
Kane Center

Hosted by SRS Community Resource Organization.
Interactive forum for regional Georgia (Columbus, Richmond) and South Carolina (Aiken, Aiken, North) high school students and teachers considering a career pathway that involves science, technology, engineering and math (STEM) skills.
Space is limited with registration required.
For more information, contact Kim Saxon at ksm@scra.org or Mindy Metz at mindy@scra.org

For updates on these activities and more visit, www.nwinitiative.org
The Ruth Patrick Science Education Center Newsletter is a publication of the RPSEC for our patrons. The RPSEC, housed at the University of South Carolina Aiken, encompasses the Center of Excellence in Educational Technology (CEET), DuPont Planetarium, RPSEC Student Programs, RPSEC Professional Learning, Traveling Science and Mathematics Demonstrations Program (TSMDP), the Science and Technology Enrichment Program (STEP), Center of Excellence in Middle-level Interdisciplinary Strategies for Teaching (CE-MIST), and Bridgestone Environmental Education Program (BEEP). If you have any information that would be beneficial to the audience of this newsletter, or if you would like to be added to the mailing list, please contact John Hutchens, Editor, at 803-641-3474 or via email to johnh@usca.edu. Deadline for submission in the next newsletter is October 1, 2016.