STUDENT PROGRAMS

The Ruth Patrick Science Education Center’s K-12 Student Programs offerings for 2013-2014 will be posted online on April 15, 2013.

Teachers will be able to select from 52 different hands-on, inquiry based classroom programs aligned to state standards. We recommend that teachers combine 2 or 3 programs in one visit.

Teachers may download program descriptions, standards correlations, pre and post visit activities, reservation request forms, and more at http://rpsec.usca.edu/student/. Reservation requests may also be submitted online. Print brochures and request forms will be mailed only to those teachers who have reserved programs in the last three years. Request forms may be mailed to the RPSEC or faxed to (803) 641-3615.

Due to budget cuts, the number of programs from which to select might be reduced next year. We are continuing to look for grants and funding sources.

Teachers may request up to 4 programs for the school year but, pending funding, this number may be reduced—so please prioritize your requests. Last year we received many more requests than we were able to serve. We will schedule teachers’ requests, subject to availability, in the order specified on the reservation request form.

The deadline to submit reservation requests is Friday, June 14, 2013 at 5:00 PM. Due to the volume of anticipated requests, it is highly unlikely that late requests will be filled. Requests received after June 14 will be placed on a waiting list. Thank you for your understanding.
**STEP Reservation Requests for 2013-2014**

The Ruth Patrick Science Education Center’s Science Technology Enrichment Program (STEP) offerings for 2013-2014 will be posted online on April 15, 2013. Teachers will be able to select from nine different hands-on, inquiry based program clusters (2 programs per visit) that are aligned to state standards. A STEP visit includes 3 hours of programming, lunch, and transition times and is typically scheduled for 9:15 AM - 1:15 PM.

The Science and Technology Enrichment Program (STEP) is a cooperative effort between Savannah River Nuclear Solutions, Silver Bluff Audubon Center, and the Ruth Patrick Science Education Center. Two field trip locations for STEP include the Savannah River Site and the Silver Bluff Audubon Center. At each location, STEP students utilize classroom and outdoor laboratories to conduct scientific investigations on topics such as water ecology, soils, wildlife, forestry, archaeology, navigation and more. For program information and a STEP reservation request form, please visit the STEP website at: http://rpsec.usca.edu/student/.

Reservation requests may also be submitted online. The deadline to submit reservation requests is Friday, June 14, 2013 at 5:00 PM. Request forms may be mailed to the RPSEC or faxed to (803) 641-3615.

Please note that all visitors to SRS, including bus drivers, chaperones, students, and teachers, will need to submit paperwork including Social Security numbers at least 2 weeks before your visit to be badged.
HOME SCHOOL MONDAYS 2014

The RPSEC will again offer a series of monthly programs for home school students. The programs will be held on selected Monday afternoons from January through May. Different programs will be offered each year with a 3-year rotation cycle. Reservation request forms will be available online on September 6, 2013, and will also be mailed to families who signed up for Home School Mondays 2013. NOTE: The deadline to return reservation request forms with payment will be Monday, December 2, 2013. Please make checks payable to USCA. Late requests will be placed on a waiting list.

• One Monday per month, each child will attend (2) one-hour, back-to-back science or math programs at the RPSEC.
• Over the course of the spring semester, each child will attend a total of 10 programs.
• The programs will begin at 1:00 and end at 3:30 PM.
• The two programs for the younger students (Grades K-3) will be held at the same time as the two programs for the older students (Grades 4-8).
• The cost is $30 per student for the series and must be prepaid by the December 2, 2013 deadline.
• Please note that children under the age of 4 are not permitted to attend any student programs (planetarium or classroom programs) at the RPSEC.

NEW! High-School Field Ecology Course for Homeschooled Students

The Ruth Patrick Science Education Center (RPSEC) plans to offer a 1-credit Field Ecology course for high-school students during the 2013-2014 school year. This course will count as a lab science. The fall semester will focus on Local Ecology, and the spring semester will focus on the Ecology of the Southern Appalachians. Each semester will consist of 90+ hours of exciting field experiences and hands-on instruction at the RPSEC. The fall and spring sessions will each count for ½ credit and may be taken independently or together. Dr. Gary Senn and Darlene Smalley will be the instructors for this course.

Classes will begin at the RPSEC. Many will be held from 1-5 pm on Mondays, but day trips and a few overnight trips will be required. The cost for the fall semester is $800; this includes all fees for the many field trips that are planned. A minimum of 10 students must register by April 1, 2013 and submit a $50 deposit so that we can make arrangements for offsite visits. If you are interested in registering or obtaining more information, please go to http://rpsec.usca.edu/Courses/FieldEcology/ where you will find a registration form and a tentative schedule for the fall. You may also email Darlene at darlenes@usca.edu if you need additional information.
Family Earth and Sky Night

Celebrate National Astronomy Day and Earth Day with an evening of fun and learning at the Ruth Patrick Science Education Center. A variety of free, hands-on activities will be offered from 6:30 to 9:00 p.m., and our planetarium show, Worlds In Motion, will be presented at 7:00, 8:00, 9:00, and 10:00 p.m.

When: April 20, 2013
Where: Ruth Patrick Science Education Center at USCA
What: Hands-on activities, planetarium shows, and night sky viewing
Hosted by: The Astronomy Club of Augusta (ACA), the DuPont Planetarium, the Ruth Patrick Science Education Center and the University of South Carolina Aiken.

Hands-on Activities: 6:30 to 9:30
Will include demonstrations with live animals, nature crafts, opportunities to touch and identify minerals and rocks, sizing up the Sun and Moon with playdough, and kinesthetic astronomy

Planetarium Shows: Worlds in Motion will be presented on a first-come, first-served basis with start times of 7:00, 8:00, 9:00 and 10:00 p.m. Ticket prices are: Students 4K-12th $2.50, Adults $4.50, Senior Citizens $3.50, USCA Students and Staff $1.00.

Worlds in Motion
In this fast-paced show, you’ll discover that everywhere you look, ours is a universe on the move – from the atoms in the air to the dance of the planets! In addition, your hour in the planetarium will include a live sky tonight presentation on the constellations, planets, and other celestial objects that are visible in April.

Outdoor Observing: Once it gets dark, the observatory will open for viewing through the Bechtel Telescope, and amateur astronomers will set up other telescopes on the lawn. Weather permitting, see details in the Moon, Jupiter, Saturn and other celestial objects that are invisible to your unaided eyes. Members of the Astronomy Club of Augusta will orient you to the night sky: naked-eye, binocular, and telescopic. They will help you find many fascinating heavenly bodies with their telescopes or with your own. This is a good opportunity to learn the most important constellations and stars, and how to star hop from one to another.

Weather: Family Earth and Sky Night will be held rain or shine. Plan to bring friends and family no matter what the weather!
Public Shows

<table>
<thead>
<tr>
<th>DATES</th>
<th>SHOW NAMES</th>
<th>SHOW TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 April 6, 13, 20, 27,</td>
<td>Worlds in Motion</td>
<td>7:00 and 8:00 pm</td>
</tr>
<tr>
<td>Earth &amp; Sky Night 4/20</td>
<td></td>
<td>Additional shows at 9:00 and 10:00 on 4/20/13</td>
</tr>
<tr>
<td>2013 May 4, 11, 18, 25</td>
<td>In My Backyard</td>
<td>8:00 pm</td>
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<tr>
<td></td>
<td>More than Meets the Eye</td>
<td>9:00 pm</td>
</tr>
<tr>
<td>2013 June 1, 8, 15, 22, 29</td>
<td>*Solar System Adventure Tour</td>
<td>8:00 pm</td>
</tr>
<tr>
<td></td>
<td>Blown Away: Wild World of Weather</td>
<td>9:00 pm</td>
</tr>
<tr>
<td>2013 July 6, 13, 20, 27</td>
<td>Explorers of Mauna Kea</td>
<td>8:00 pm</td>
</tr>
<tr>
<td></td>
<td>Digistar “Laser” Fantasy</td>
<td>9:00 pm</td>
</tr>
<tr>
<td>2013 August 3, 10, 17, 24, 31</td>
<td>Mission to Mars</td>
<td>8:00 pm</td>
</tr>
<tr>
<td></td>
<td>Digistar Virtual Journey</td>
<td>9:00 pm</td>
</tr>
</tbody>
</table>

All shows last one hour unless otherwise noted. Each show includes a live “sky tonight” portion.

*New Show!

Special Events

- Spring Earth & Sky Night and National Astronomy Day: April 20, 2013
- For Planetarium information call: 803-641-3654
- From Augusta: 803-278-1967 ext. 3654

More information is available on our website: http://rpsec.usca.edu/Planetarium/

Become a Galactic Guardian for 2013

See page 6 for more information

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.

SUMMER GROUP PROGRAMS

The Ruth Patrick Science Education Center & DuPont Planetarium will offer a variety of programs during the months of June, July and early August.

We will offer several planetarium shows each month as well as hands-on classroom programs. These programs are for interested groups such as Daycare Centers, Camps, Church Groups, Scout Troops etc.

For more information please visit http://rpsec.usca.edu/summer/ or call (803) 641-3313.
Camp Invention Returns to the Ruth Patrick Science Education Center this Summer

The Ruth Patrick Science Education Center and Invent Now, Inc. are pleased to announce that the nationally acclaimed Camp Invention program is returning to Aiken, June 17-21. First started in 1990, Camp Invention is a weeklong summer day program for children entering grades one through six, created in partnership with the National Inventors Hall of Fame and the United States Patent and Trademark Office. The program engages children to discover their own innate creativity and inventiveness through hands-on Science, Technology, Engineering and Math (STEM) content.

“We are focused on infusing the love of STEM subject areas with hopes of helping to address a critical shortage of scientists and engineers in the workforce of the 21st century,” explains John Hutchens, Director of Special Programs at the Ruth Patrick Science Education Center. “Camp Invention nurtures creative thinking in children, providing them with open-ended opportunities to explore ideas, make mistakes, and reinvent solutions.”

Each day children rotate through integrated modules that employ creative thinking to solve real-world challenges. Children learn vital 21st century life skills such as problem solving and teamwork through imaginative play.

Even if a child has participated in Camp Invention in the past, he or she will benefit from brand new adventures throughout the week.

This year’s Camp Invention program is GEO-QUEST, which features the I Can Invent: Launchitude module, where children combine physics and re-engineered household items to create the ultimate Duck Chucking Device. The program is directed by John Hutchens.

Aiken County educators and district employees receive $35 OFF the base price of $220. Please email johnh@usca.edu for a special host district registration form. Every program participant receives a coveted Camp Invention T-shirt that features clever, new artwork each year.

To register a child for the program or to learn more about Camp Invention, visit www.campinvention.org or call 800.968.4332.

Since Camp Invention’s inception, the program has grown to include over 1,200 school partnerships in 49 states. In 2012, more than 77,000 children participated nationwide. The United States Patent and Trademark Office continues to support Invent Now’s mission to inspire creativity and inventive thinking in children of all ages.
This Summer...

Take an Adventure

in Discovery, Creativity, Innovation

CAMP SUCCESS
Promoting Career Exploration

July 21-26, 2013
USC Aiken
Ruth Patrick Science Education Center

At Camp Success, creativity takes shape, brain cells power the imagination, and fun and discovery join forces for awesome results. Be a part of this amazing, fun-filled adventure. Camp Success promotes career exploration at a learning day camp for students entering grades 7 and 8. The program helps students develop the creative, innovative thinking skills behind the latest inventions and technologies.

Camp Success will be held on the campus of Aiken Technical College and USC Aiken’s Ruth Patrick Science Education Center. Hands on laboratory experiences combined with recreational activities, academic study, and field trips make Camp Success an unforgettable experience.

For more information and application:
SharonSilverCrescent@usca.edu
803-641-3563
www.campusccsa.org

FREE Teacher Resources and Visiting Scientists Available

The Traveling Science and Mathematics Demonstrations Program has over 300 science and math kits available for use in the classroom. Supplement your curriculum with nationally recognized and state adopted exemplary materials. Kits have been correlated to SC state standards. Many kits contain children’s literature so that you can integrate your science and language arts lessons.

In addition to these resources, you can request a visiting Scientists with Traveling Resources and Neat Demonstrations (STRAND) volunteer for classroom presentations.

USC Aiken Kids in College Summer Camps

Once again, it’s time for USC Aiken’s annual Kids in College summer camp program. The 2013 catalog will be available online April 1st. http://www.usca.edu/kidsincollege/

For more information please contact Laura Anderson
LauraA@usca.edu 803-641-3563

For more information please visit
http://rpsec.usca.edu/travelingscience
The Ruth Patrick Science Education Center thanks the following individuals, corporations, and organizations for their generosity and support of our mission by being a Friend of the RPSEC. For information on how you can become a Friend, please call (803)641-3313.
**ADOPT AN ANIMAL**

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 with the adoptee, and they will be recognized in the Center’s publications and website as Friends of the RPSEC. Donations are tax deductible; sponsorship opportunities for 2013 are listed below. For more information, please contact Deborah McMurtrie at DeborahMc@usca.edu or (803) 641-2834.

<table>
<thead>
<tr>
<th>Wildlife</th>
<th>Adopted by</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>BIRDS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barred Owl (Strix varia) Non-releasable male, Raleigh</td>
<td>Mr. and Mrs. Bruce A. Morgan</td>
<td></td>
</tr>
<tr>
<td>Eastern Screech Owl (megascops asio) red phase non-releasable male, Not Named</td>
<td></td>
<td>$300</td>
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<tr>
<td>Eastern Screech Owl (megascops asio) grey phase non-releasable female, Not Named</td>
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<td>$300</td>
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<tr>
<td><strong>REPTILES: CROCODILIANS</strong></td>
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<tr>
<td>American Alligator (Alligator mississippiensis) female, hatched 2012, Al</td>
<td>John M. Hutchens</td>
<td></td>
</tr>
<tr>
<td>American Alligator (Alligator mississippiensis) male, hatched 2009, Tex</td>
<td>Gloria W. Allen</td>
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<td><strong>REPTILES: SNAKES</strong></td>
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<tr>
<td>Eastern Kingsnake (Lampropeltis getula getula)</td>
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<td>$100</td>
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<tr>
<td>Grey Rat Snake (Elaphe obsoleta spiloides)</td>
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<td>$100</td>
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<tr>
<td>Corn Snake (Elaphe guttata)</td>
<td>Tristan Davis</td>
<td></td>
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<tr>
<td>Corn Snake (Elaphe guttata)</td>
<td></td>
<td>$100</td>
</tr>
<tr>
<td>Albino Corn Snake (Elaphe guttata)</td>
<td></td>
<td>$100</td>
</tr>
<tr>
<td><strong>REPTILES: TURTLES</strong></td>
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<tr>
<td>Box Turtle (Terrapene carolina carolina)</td>
<td></td>
<td>$75</td>
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<tr>
<td>Snapping Turtle (Chelydra serpentina)</td>
<td>Mr. &amp; Mrs. James Ferrell</td>
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<tr>
<td>Painted Turtle (Chrysemys picta picta)</td>
<td>Dr. &amp; Mrs. Kenneth Perrine</td>
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<tr>
<td>Chicken Turtle (Deirochelys reticularia)</td>
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<td>$75</td>
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<tr>
<td>Red-Eared Slider Turtle (Trachemys scripta elegans)</td>
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<td>$75</td>
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<tr>
<td>Red-Eared Slider Turtle (Trachemys scripta elegans)</td>
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<td>$75</td>
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<tr>
<td>Yellow-Bellied Slider Turtle (Trachemys scripta scripta)</td>
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<td>$75</td>
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<tr>
<td><strong>AMPHIBIANS</strong></td>
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<td></td>
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<tr>
<td>Barking Tree Frog (Hyla gratiosa)</td>
<td>Dr. Robert E. and Dr. Carol S. Botsch</td>
<td></td>
</tr>
<tr>
<td>Green Tree Frog (Hyla cinerea)</td>
<td>Mrs. Beatrice A. Crawford</td>
<td></td>
</tr>
<tr>
<td>Gray Tree Frog (Hyla versicolora)</td>
<td>Mrs. Beatrice A. Crawford</td>
<td></td>
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<tr>
<td>Southern Toad (Bufo terrestris)</td>
<td></td>
<td>$50</td>
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<tr>
<td>Spotted Salamander (Ambystoma maculatum)</td>
<td></td>
<td>$50</td>
</tr>
<tr>
<td>Tiger Salamander (Ambystoma tigrinum)</td>
<td>North Augusta Middle Science Department</td>
<td></td>
</tr>
</tbody>
</table>
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$400 level:
1. Milky Way - Adopted by Barbara Fenstermacher
2. Sun
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:
Zodiac Constellations:
13. Virgo
14. Libra
15. Scorpius
16. Ophiuchus-
17. Sagittarius
18. Capricornus
19. Aquarius
20. Pisces
21. Aries
22. Taurus
23. Gemini
24. Cancer
25. Leo

$100 level:
Special Constellations:
26. Andromeda the Princess
27. Aquila the Eagle
28. Auriga the Charioteer
29. Bootes the Herdsman - Adopted by Dr. Gary Senn
30. Canis Major the Big Dog - Adopted by Rich Smalley
31. Canis Minor the Little Dog - Adopted by Brooke Nicholson
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
41. Perseus the Hero
42. Ursa Major, Big Dipper
43. Ursa Minor, Little Dipper

$75 level:
Galaxies and Nebulae:
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 - Adopted by Salley Patterson

$50 level:
Other Constellations:
70. Centaurus
71. Cetus the Sea Monster
72. Columba the Dove - Adopted by Bobby Cue
73. Corona the Crown
74. Corvus the Crow
75. Delphinus the Dolphin
76. Lepus the Hare
77. Monoceros the Unicorn
78. Sagitta the Arrow - Adopted by Mr. Robert and Mrs. Nancy Harrington

Stars and Star Clusters:
79. Albireo, a double star - Adopted by Darlene Smalley
80. Beehive cluster
81. Alcor & Mizor, double stars
82. Hercules globular cluster - Adopted by Roderick C. Lee
83. Pleiades, the Seven Sisters
84. Polaris, the North Star - Adopted by Dr. and Mrs. David W. Hayes

Brightest Stars:
85. Aldebaran - Adopted by Dr. Paul & Mrs. Moncia Dainer
86. Altair
87. Antares
88. Arcturus
89. Betelgeuse
90. Capella
91. Castor
92. Deneb
93. Fomalhaut
94. Pollux
95. Procyon
96. Regulus
97. Rigel
98. Sirius
99. Spica
100. Vega
CALL FOR NOMINATIONS

The Ruth Patrick Science Education Center is seeking nominations for the Spirit of Ruth Patrick Award and the Robert E. Alexander Outstanding Administrator of the Year Award. If you know a teacher or school administrator who fits the criteria below, please nominate them for an award. Nominations must be received by May 15, 2013 to be considered for this year’s award. Biographical sheets will be sent to each nominee and the RPSEC Advisory Board will determine the winner. If you have any questions, please call Aimee Barton at 803-641-3313 or contact her by email at AimeeB@usca.edu.

Spirit of Ruth Patrick Award

Since 2006, this prestigious award has been presented annually to a K-12 educator who has demonstrated a keen interest in mathematics and science and has been effective in providing meaningful learning for K-12 students. This award recognizes a teacher in the CSRA who demonstrates a passion for teaching and infusing a love of science, technology, engineering and mathematics. In 1986 the RPSEC was named for Dr. Ruth Patrick, a world renowned scientist who developed a way to test the water quality of the Savannah River while the Savannah River Site was built in the early 1950s.

Previous Winners of the Spirit of Ruth Patrick Award:
2006 Susie Yonce, Edgefield County
2007 Helen Campbell, Aiken County
2008 Ellen Cotton, Aiken County
2009 Beth Eberhard, Aiken County
2010 Debbie Courtney, Edgefield County
2011 Debra Rood, Aiken County
2012 Jennifer Craig-Holley, Aiken County

Robert E. Alexander Outstanding Administrator of the Year Award

The University of South Carolina Aiken and the Ruth Patrick Science Education Center are accepting nominations for the annual Robert E. Alexander Outstanding Administrator of the Year Award. This prestigious award recognizes administrators in the CSRA for their efforts and support of bringing full awareness to math and science education and using the resources of the RPSEC to help meet science and math standards. Recipients of the award are also individuals who encourage teachers to work with the RPSEC to develop skills needed for science and math instruction.

Previous Robert E. Alexander Outstanding Administrator of the Year Award Winners:
2001-02 Hannah Fowler, Columbia County
2002-03 Dr. Karen Blanset, Aiken County
2003-04 Dr. Deborah Bass, Aiken County
2004-05 Michele Connor, Aiken County
2005-06 Dr. Sharon Keesley, Edgefield County
2006-07 Alexia Clamp, Barnwell County
2007-08 Stacy Mabray, Richmond County
2008-09 Dr. Angela Burkhalter, Aiken County
2009-2010 Teresa G. Reid, Barnwell County
2010-2011 Dr. Elizabeth Everitt, Aiken County
2011-2012 Ron O. Youmans, Allendale County
Masters Degree in Educational Technology

Earn Your USCA Degree Online

Do you enjoy using your computer? Do others ask you how to do something on their computers? Do you enjoy showing others something new on your computer? Have you considered getting a masters degree? Then maybe it is time for you to consider the Masters of Education in Educational Technology (MEd Tech). The MEd Tech program at University of South Carolina Aiken (USCA) and the University of South Carolina (USC) Columbia is accepting applications for enrollment. For more information visit http://edtech.usca.edu/.

The focus of the program is to develop capabilities essential to the effective design, evaluation, and delivery of technology-based instruction and training (e.g., software development, multimedia development, assistive technology modifications, web-based development, and distance learning) in order to (1) prepare educators to assume leadership roles in the integration of educational technology into the school curriculum, and (2) to provide graduate-level instructional opportunities for several populations (e.g., classroom teachers, corporate trainers, educational software developers) that need to acquire both technological competencies and understanding of sound instructional design principles and techniques.

Anyone interested in enrolling in this program should contact Karen Morris at 803-641-3489.
Students from Aiken Area Home Educators received first place recognition at the 2013 South Carolina Regional Future City Competition, sponsored by Savannah River Nuclear Solutions and the Ruth Patrick Science Education Center. The competition, which each year invites 6th, 7th and 8th graders to create a city of tomorrow, was held January 21st on the USCA campus.

This year’s winning team created the futuristic city, Emerald Gardens, and included students Samuel Boyd, Marjorie George, and John Potvin, along with Vickie Boyd, teacher and faculty sponsor of the Future City Team, and engineer mentor Larry Morris.

In addition to a $1,000 USC Aiken scholarship sponsored by AT&T, students on the winning team received a trip to the 20th Annual Future City National Finals in Washington, D.C., held Feb. 17-21 during Engineers Week. Team members were also awarded $100 each, luggage, a trophy, and medallions.

Sponsored by the nation’s professional engineering community, Future City is the nation’s largest engineering education program, encouraging interest in science, technology, engineering, and mathematics through hands-on applications.

2ND PLACE - KENNEDY MIDDLE SCHOOL  3RD PLACE - W.A. PERRY MIDDLE SCHOOL

**FUTURE CITY SPECIAL AWARD WINNERS**

- **BEST ENGINEERED PROJECT** - WESTVIEW MIDDLE SCHOOL
- **BEST PROJECT MANAGEMENT PLAN** - ST. MARY ON THE HILL SCHOOL
- **BEST ENERGY SYSTEM** - ST. MARY ON THE HILL SCHOOL
- **BEST PLANNED CITY** - PAUL KNOX MIDDLE SCHOOL
- **BEST INCORPORATION OF NUCLEAR ENERGY** - KENNEDY MIDDLE SCHOOL
- **EXCELLENCE IN FUTURISTIC CONCEPTS** - W. A PERRY MIDDLE SCHOOL
- **STUDENT CHOICE** - ST. MARY ON THE HILL SCHOOL
- **BEST MODEL** - NORTH AUGUSTA MIDDLE SCHOOL
- **BEST AUTOMATION / COMPUTER APPLICATIONS** - PALMETTO MIDDLE SCHOOL
- **BEST ESSAY** - PAUL KNOX MIDDLE SCHOOL
- **BEST USE OF SYSTEMS ENGINEERING** - ST. MARY ON THE HILL SCHOOL
- **PROTECTING PUBLIC HEALTH & SAFETY** - AICEN AREA HOME EDUCATORS
- **MOST CREATIVE USE OF MATERIALS** - DENT MIDDLE SCHOOL
- **ROOKIE TEAM AWARD** - WESTVIEW MIDDLE SCHOOL
- **BEST AUTOMATION / COMPUTER APPLICATIONS** - Palmetto Middle School
- **BEST ESSAY** - Paul Knox Middle School
- **BEST USE OF SYSTEMS ENGINEERING** - St. Mary on the Hill School
- **PROTECTING PUBLIC HEALTH & SAFETY** - Aiken Area Home Educators
- **MOST CREATIVE USE OF MATERIALS** - Dent Middle School
- **ROOKIE TEAM AWARD** - Westview Middle School
- **BEST AUTOMATION / COMPUTER APPLICATIONS** - Dent Middle School
- **BEST ESSAY** - Ashley Hall
- **BEST AUTOMATION / COMPUTER APPLICATIONS** - Dent Middle School
CE-MIST Summer Institute

Using High Interest Topics to Weave STEM Instruction across the Disciplines

In Partnership with Hands On: Real World Lessons for Middle School Classrooms at the University of Tennessee

July 8 & 9, 2013 from 9:00 AM – 4:00 PM (Lunch provided)
Ruth Patrick Science Education Center at USCA

Registration Deadlines: April 16 (CE-MIST Schools). May 17 (Open registration, as available)
$25 Registration fee; $225 Stipend*

Purpose of the Workshop: To provide and model examples of interdisciplinary curricular units as a means of empowering participants to incorporate cross-disciplinary instruction into their regular classroom practice.

Structure of the Workshop: The workshop will be interactive and hands on, utilizing a combination of modeling demonstrations, seminar-style discussions, and strategic work sessions.

Outcome of the Workshop: Upon successful completion of the workshop activities, the participant will understand instructional theory and current research on the impact of interdisciplinary instruction on student learning outcomes. Participants will also receive three ready-to-use interdisciplinary units aligned to Common Core standards.

Important Information: Participants will benefit from attending the workshop with one or more teammates. However, individuals attending alone will still benefit.

Instructor:
Dr. Jennifer Richards, Research Assistant Professor,
University of Tennessee

Teachers will receive a certificate of participation at the completion of the workshop.

For more information: http://rpsec.usca.edu/CE-MIST/CE-MIST_SummerInst.html

*The $25 registration fee and $225 stipend result in a net payment of $200.
**Common Core State Standards Mathematics (CCSSM)**

**Taking CCSSM Implementation to the Next Level**

**SUMMER PROFESSIONAL DEVELOPMENT INSTITUTES**

**For K-12 Mathematics Teachers**

### JUNE COMMON CORE STATE STANDARDS INSTITUTES

(See descriptions and registration details below.)

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Subject</th>
<th>Dates</th>
<th>Location</th>
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<tbody>
<tr>
<td>Middle and High School Teachers</td>
<td>Algebra I and Algebra II Grades 8-12</td>
<td>June 17-20, 2013</td>
<td>V.I.P. Room Convocation Center USC Aiken</td>
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<tr>
<td>Elementary School Teachers</td>
<td>Grades 3-5 Elementary CCSSM</td>
<td>June 24-27, 2013</td>
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### JULY COMMON CORE STATE STANDARDS INSTITUTES

(See descriptions and registration details below.)

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<td>Middle School Teachers</td>
<td>Grades 6-8 CCSSM</td>
<td>July 22-25, 2013</td>
<td>RPSEC USC Aiken</td>
</tr>
</tbody>
</table>

Over the past year, hundreds of enthusiastic teachers, administrators, curriculum coaches and coordinators from across South Carolina participated in Transitioning to the Common Core State Standards Mathematics (CCSSM), a series of introductory professional learning sessions offered by the Ruth Patrick Science Education Center (RPSEC) located at USC Aiken. Based on the participants' reflections, they now have a wealth of knowledge regarding the CCSSM, Smarter Balanced Content and Item specifications, and resources for effective implementation of the Standards. The participants also increased their content knowledge of K-12 mathematics and understanding of rigorous classroom instruction designed to foster student success. The CCSSM sessions provided experiences in evidenced-based methodologies that lead to improved student achievement.

The four 2013 CCSSM Summer Institutes are designed to assist schools and districts in taking the implementation of Common Core State Standards to the next level. Please refer to the next few pages for descriptions of four summer institutes and registration information.
The Ruth Patrick Science Education Center will continue to offer a series of in-depth Common Core State Standards Mathematics (CCSSM) Institutes. The four 2013 summer professional development institutes will focus on grade level domains and conceptual categories. Each engaging CCSSM Professional Learning Institute is designed to assist schools and districts in taking the implementation of the CCSSM to the next level. By the end of each institute, participants will have gained new classroom experiences to support a thorough understanding of the following:

- **Common Core State Standards for Mathematics**
- **Smarter Balanced Mathematics Content Specifications, and Item Specifications**
- **Achievement Level Descriptors (ALDs) and College Content-Readiness Policy**
- **Webb’s Depth-of-Knowledge (DOK)/Cognitive Rigor Levels**
- **Bloom’s Taxonomy of Educational Objectives**
- **Learning progressions**
- **Domains and Conceptual Categories**
- **Standards for Mathematical Practice**
- **Evidence-centered Methodologies**
- **Instructional Rigor of CCSSM**
- **Modeling, Multiple Representations, and Effective Use of Technology**
- **Mathematics Instructional Shifts & Priorities**
- **State and National Instructional Resources**

**Incentives:**
Stipends and recertification credit as approved by individual school districts.

**Institute Time Frame:**
Monday – Thursday, 8:30 AM-3:00 PM

**Location:**
RPSEC, USC Aiken
Lunch will be provided.

**Institute Follow-up:** (Optional)
Quarterly one-day sessions during the 2013-14 School Year

**Registration Fee:**
Four-Day Summer Institute - $400

**Early Registration Deadline:**
Monday, May 17, 2013

For more information, please contact: Gloria Allen, Coordinator, Professional Learning, RPSEC, USC Aiken, 803-641-3592 or gloriaa@usca.edu.

*Space is limited! Please register early!*

REGISTRATION FORMS AVAILABLE @
http://tinyurl.com/RPSECSummerInstitute2013
# Taking CCSSM Implementation to the Next Level

## SUMMER PROFESSIONAL DEVELOPMENT INSTITUTES

For K-12 Mathematics Teachers

### Middle and High School Grades 8-12 Algebra I and II CCSSM Institute

**Monday – Thursday, June 17-20, 2013 8:30 a.m. – 3:00 p.m.**

Participants will explore the CCSS Algebra I and II Traditional Pathway Units. Emphasis will be placed on understanding the Mathematical Content Standards, the Mathematical Practices, and Modeling Using TI-Nspire Instructional Technology.

**Conceptual Categories – Areas of Focus:**

- **Monday, June 17:** Number and Quantity  
- **Tuesday, June 18:** Algebra  
- **Wednesday June 19:** Functions  
- **Thursday, June 20:** Statistics and Probability

### Elementary Grades 3-5 CCSSM Institute

**Monday – Thursday, June 24-27, 2013 8:30 a.m. – 3:00 p.m.**

**Elementary Domains - Areas of Focus:**

- **Monday, June 24:** Number and Operations in Base Ten  
- **Tuesday, June 25:** Number and Operations – Fractions  
- **Wednesday, June 26:** Operations and Algebraic Thinking  
- **Thursday, June 27:** Geometry, and Measurement and Data

### High School Grades 9-12 Geometry CCSSM Institute

**Monday – Thursday, July 15-18, 2013 8:30 a.m. – 3:00 p.m.**

**Traditional Pathway Geometry Units:**

- **Monday, July 15:** Congruence, Proof, and Constructions  
- **Tuesday, July 16:** Similarity, Proof, and Trigonometry; Extending to Three Dimensions  
- **Wednesday, July 17:** Connecting Algebra; Geometry Through Coordinates  
- **Thursday, July 18:** Circles With and Without Coordinates; Applications of Probability

### Middle School Grades 6-8 CCSSM Institute

**Monday – Thursday, July 22- 25, 2013 8:30 a.m. – 3:00 p.m.**

**Middle School Domains – Areas of Focus:**

- **Monday, July 22:** Ratios and Proportional Relationships; The Number System  
- **Tuesday, July 23:** Expressions and Equations & Functions  
- **Wednesday, July 24:** Geometry  
- **Thursday, July 25:** Statistics and Probability

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## Teacher Reflections: Summer 2012 and Fall/Winter 2012-13 CCSSM Sessions

- “I am more prepared for full implementation. Ready to help students and teachers make the shifts.”
- “This has given us more tools and practical ways to teach deeper and more rigorously.”
- “It's given me great ideas to use in the classroom. It's not as hard as it looks; I can do it!”
- “I came to the middle and high school sessions. These meetings were very informative and I look forward to the next sessions. The resources are awesome!”
- “This was very interesting. I can use the same strategies and techniques to work with my teachers. Effective use of technology (TI-Nspire graphing calculator).”
- “The sharing of ideas/discussions with other teachers and math professionals, and differing viewpoints were most useful.”
- “You have given us a wealth of information regarding CCSS, TI Nspire, etc. I feel more comfortable in teaching with these.”
Essential Question: How can we ensure that 100% of our students receive daily instruction on appropriate content standards, delivered through a rigorous curriculum, specific to their performance level as indicated by formative assessment?

Institute Overview: Come join your colleagues for three fun-filled days of Common Core Number and Operations – Base Ten standards explorations. The three-day institute will be offered Monday – Wednesday, June 10 – 12, 2013 for K-2 Aiken County Elementary School Teachers. The teachers will experience exemplary instructional strategies aligned to the CCSS, applications of the Mathematical Practices; textbook alignment, and exemplary online resources. Teachers will work in teams to explore Number and Operations Base-Ten standards explanations and examples; reflect on rigor and relevance in instructional practices; examine the elementary grades Learning Progressions for place value and common student misconceptions; and explore appropriate integration of manipulatives and instructional technology. Each engaging session will be designed to extend teachers’ experiences in content area writing tasks including guiding questions, resources, and allowable stimulus material. Strategies learned will assist teachers in moving to the next level of implementation of the CCSSM.

Participants: K-2 Teachers. School teams of three are highly recommended.
Date: June 10 – 12, 2013
Location: USC Aiken Convocation Center V.I.P. Room
Time Frame: Monday – Wednesday, 8:30 a.m. - 3:00 p.m. Lunch will be provided.
Incentives: Recertification credit and stipend as awarded by the district.
To Register: Please email Rashelle Stokes at RSTOKES@aiken.k12.sc.us by May 24, 2013.

For more information, please contact:
Mrs. Janice Kitchings 803-641.2540 or jkitchings@aiken.k12.sc.us
Mrs. Peggy Trivelas 803 641.2447 trivelas@aiken.k12.sc.us, or
Ms. Gloria Allen 803-641-3592 gloriaa@usca.edu

Spaces are Limited! Please Register Early!!!

Co-sponsored as a partnership initiative among the Aiken County School District, The University of South Carolina Aiken- Ruth Patrick Science Education Center, and Public Education Partners.
The Aiken Writing Project

AWP 2013 Summer Institute
Hands-on professional development for K-12 teachers.

**Three hours graduate credit**
Deadline for application: April 1, 2013

Three Week Institute
June 10-13, 17-20, 24-27
Mon.-Thurs., 9:00 AM – 1:00 PM

- Integrate content with writing instruction.
- Strategically address reading & writing goals across the content areas.
- Use writing strategies to gain mastery in content areas.

Visit our Web site to apply: [www.aikenwritingproject.org](http://www.aikenwritingproject.org)

Registration at USCA is required.
Publications and Presentations

Publications

Presentations
Senn, G. J. (2013, March). Shadows on Earth and in space. Presented at the South Carolina Science Council regional meeting, Aiken, SC.


Coleman, B. K., McMurtrie, D. H. & Taylor, K. E. (2013, March). Bullying 101: Advocacy for the victims. Presented at the South Carolina Middle School Association Conference, Myrtle Beach, SC.


Senn, G. J. (2013, January 17). Ruth Patrick Science Education Center. Presented at the meeting of the Aiken Kiwanis Club, Aiken, SC.

Senn, G. J. (2012, November). Exploring the Heavens. Four 1-hour astronomy presentations to the Academy of Life Long Learning, Aiken, SC.

Coleman, B. K., McMurtrie, D. H., & Senn, G. J. (2012, November). Early field experiences for pre-service teachers. Presented at the Association for Middle Level Education conference, Portland, OR.
