2006-2007 Student Programs

Reservation Requests for 2006-2007 Student Programs

The Ruth Patrick Science Education Center’s K-12 Student Programs offerings for 2006-2007 will be posted online on April 14, 2006. Teachers may download the 2006-2007 catalog and submit their reservation requests online at http://rpsec.usca.edu/student. Printed brochures and request forms will be mailed to schools the following week. Request forms may be mailed to the RPSEC or faxed to (803) 641-3615. Teachers may request up to four programs for the school year, but, pending funding, this number may be reduced—so please prioritize your requests. The deadline to submit reservation requests is Friday, June 16, 2006 at 5:00 p.m.. Due to the volume of anticipated requests, it is highly unlikely that late requests will be filled.

New Science Standards/Grade Level Changes for SC and Georgia

South Carolina and Georgia are both in the process of adopting new Science Standards, and some grade level changes will occur. The 2006-2007 Ruth Patrick Science Education Center Student Programs offerings reflect changes in both South Carolina and Georgia Science Standards. The grade levels of some of our programs have been changed to align with the new standards. For example, the program “Sound”-sational meets the physical science standards for

South Carolina third graders and for Georgia fourth graders. Magnets and Motions supports South Carolina’s kindergarten and Grade 2 standards, while Georgia students attend Magnets in Grades 1 and 3. The Earth Science Series meets the standards for Grade 3 (both) and for Grade 6 (Georgia) or Grade 8 (South Carolina).

Because we serve a large number of public school students from both states, this year we are publishing two separate information packets with programs and grade levels specific to South Carolina and to Georgia. Private school and home school students to whom the standards do not apply may request programs from different grade levels, provided they are developmentally appropriate.

Infusing the Love of Science, Math and Technology!
New RPSEC Student Programs for 2006–2007

Several new programs will be offered in 2006-2007. Teachers in Grade 3 may select a two-visit sequence of classes entitled Earth Science Series. Third graders will attend Marvelous Minerals and Merry Measuring II in February, then return in March for Planet Earth Rocks! and Mission to Mars. In the Marvelous Minerals class, students examine and classify minerals using a field guide and identification key. Students also learn the valuable uses of common minerals. In Merry Measuring II, third graders use Earth materials to investigate capacity and mass. They engage in small group problem solving activities such as estimating, measuring, and ordering the masses of different mineral samples. In Planet Earth Rocks! students observe, describe and classify samples of igneous, sedimentary, and metamorphic rocks. Fossils are also examined and described, and rock formation is discussed. Mission to Mars is a planetarium program that illustrates landforms and rock types on Mars as we zoom through space via NASA images and our Digistar projector.

Teachers in Grade 6 (Georgia) or in Grade 8 (South Carolina) may also choose a two-visit Earth Science Series. Middle School students attend Exploring Earth’s Resources and The Explorers of Mauna Kea in February, then return in March for Rockin’ & Rollin’ and Mission to Mars. Exploring Earth’s Resources focuses on mineral identification. Valuable products made from inorganic and organic earth resources are discussed as students participate in challenging, problem-solving activities.

The Explorers of Mauna Kea is a planetarium program in which students learn about volcanoes, earthquakes, and plate tectonics as they visit the world’s largest observatories on Mauna Kea, a dormant volcano in Hawaii. In Rockin’ & Rollin’, students observe and classify rock samples and investigate how igneous, sedimentary and metamorphic rocks are interrelated in the rock cycle. Geologic processes such as weathering, erosion, and volcanism are discussed.

Teachers in Grade 1 will have a new Earth Science program as well; first graders attending Dig In! will use magnifiers and sifting screens to investigate, sort, and describe properties of minerals, rocks, gravel, sand, soils, and clay. Another new first grade program entitled Push Me, Pull Me provides students an opportunity to experiment with balance, force, and motion using toys.

Finally, teachers in Grade 5 may want to consider CSI: Solutions, a new program in which students use filtration, sifting, magnetic attraction, and chromatography to separate mixtures and solutions in a simulated crime scene investigation.

Take a Giant STEP Toward Teaching Science!

The STEP program will be offering standards based programs for students in grades K-12, focusing on scientific investigations while utilizing classroom and outdoor laboratories.

STEP, formerly known as the Natural Resources, Science, Mathematics & Engineering Education Program (NRSMEEP), is conducted through cooperative efforts of the RPSEC, Washington Savannah River Company, the Silver Bluff Audubon Center and the US Forest Service. STEP classes are taught at the Savannah River Site and the Silver Bluff Audubon Center (located 15 miles south of Aiken).

At each location, STEP students get their “hands on” and their “minds on” topics such as water ecology, soils, wildlife, forestry, archaeology, careers and more.

The program is fun and exciting for students. Students participating in STEP have had improved test scores! For a complete list of student programs or to register for a 2006/2007 field trip, please contact Anne Bohnet at 803-471-0291 or AnneB@usca.edu.

Upcoming Planetarium Shows

April 7, 8, 21, 22
Larry Cal in Space – 7nd 8p.m.
June 2, 3, 16, 17
In My Backyard – 8p.m.
Digistar Virtual Journey – 9p.m.

May 5, 6, 19, 20
Dark Shadows – 7nd 8p.m.
July 7, 8, 21, 22
Blown Away – 8p.m.
Digistar “Laser” Fantasy – 9p.m.

For more info: http://rpsec.usca.edu/planetarium/ or 803-641-3654
RPSEC Staff Member to Represent Aiken on Rotary Group Study Exchange

John Hutchens, Director of the Traveling Science and Mathematics Demonstrations Program at the Ruth Patrick Science Education Center has been selected to join the Group Study Exchange (GSE) team for Rotary District 7750.

John will join fellow team members as they travel to Normandy, France from May 20, 2006 until June 24, 2006 as part of the Group Study Exchange program of The Rotary Foundation of Rotary International.

Through the program, teams of young professionals from Normandy, France and South Carolina will exchange visits. For five weeks, the SC team members will experience the way of life, customs, and vocational practices of another country, while sharing information about their homeland.

The purpose of the Group Study Exchange program is to promote international understanding and goodwill through personal connection. While abroad, team members will stay in Rotarians' homes and have the opportunity to meet their professional counterparts. They also give presentations to Rotary clubs and other groups about their home country.

Rotary is an organization of business and professional leaders united worldwide who provide humanitarian service and help to build goodwill and peace in the world. There are 1.2 million Rotary members in some 31,000 Rotary clubs in more than 165 countries.

STEP Director Receives National Award

Last year, Anne Bohnet was recognized as an outstanding Project Learning Tree (PLT) educator for the state of South Carolina. This year, Anne was recognized as an outstanding PLT educator for the entire nation. PLT is an award winning, multi-disciplinary, environmental education program for educators and students in PreK - grade 12. PLT, an American Forest Foundation program, is one of the most widely used environmental education programs in the United States. Each year, PLT recognizes outstanding educators from around the US. The national awardees were invited to participate in (at no cost to them) PLT's International Coordinators' Conference May 8-12, 2006 in Virginia Beach, VA, where they will be honored during a special luncheon as well as the World Forestry Center's International Educators' Institute July 22-29, 2006 in Portland, OR.

Congratulations to Anne for a job well done. It is great when hard work and effective teaching are honored in this way.

Janice Weeks Named CEA Employee of the Month for February 2006

Janice Weeks was named USCA CEA Employee of the Month for February. The Employee of the Month award is given to the employee whose character best exemplifies the city of Aiken’s Character of the Month.

The character trait for February was “Resourcefulness.” The nominator wrote, “Janice could be described as the resourcefulness queen. She can commonly be heard saying, ‘You could use that for…’ I do not know anyone else who can find more creative ways to use a variety of items that most people would discard. Janice was made to be this award winner!”
WASHINGTON GROUP INTERNATIONAL SUPPORTS
SCIENCE AND MATHEMATICS

Washington Group International (WGI) Corporate provided $10,000 in funding to support science and mathematics in the CSRA. These funds were allocated to fund kits used in the Traveling Science and Mathematics Demonstrations Program and to provide support for teacher workshops. The workshops include: Project WET, Energy and Society, Wildlife Land Management, and Project Learning Tree.

WASHINGTON SAVANNAH RIVER COMPANY STEPS UP TO SUPPORT STEP

Washington Savannah River Company (WSRC) through its Education Outreach Program sponsored the new Science and Technology Enrichment Program (STEP) program by providing funding in the amount of $33,000.

The Ruth Patrick Science Education Center (RPSEC) is delighted to work with the WSRC to establish STEP. This program is based on the successful Natural Resources, Science, Engineering and Education Program (NRSMEEP) sponsored by the United States Forest Service Station at the Savannah River Site (USFSS SRS). The goal of STEP is to provide science and technology related enrichment opportunities for students and teachers throughout the Central Savannah River Area. The enrichment activities are conducted on the two STEP campuses, one located at the USFSS SRS and one located at the Silver Bluff Audubon Center in Jackson, SC.

The STEP activities are designed to provide K-12 teachers and students with hands-on science, mathematics and technology opportunities through real-world, issues oriented investigations that focus on responsible environmental stewardship.

MASTERS DEGREE IN EDUCATIONAL TECHNOLOGY

Become a Technology Leader

The Educational Technology program at the 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 641-3489.

Foundational Core Courses (12 hours)
AERM/EDRM 700 – Introduction to Research in Education
AEET/EDET 709 – Applications of Learning Principles
AEET/EDET 722 – Instructional Design and Assessment
AEET 731 – Instructional and Informational Applications of Technology or
EDTE 731 – Integration of Technology and Instruction

Technology Core Courses (15 hours)
AEET/EDET 603 – Design and Development Tools I
AEET/EDET 735 – Technological Applications for Diverse Populations
AEET/EDET 746 – Management of Technology Resources
AEET/EDET 755 – Design and Evaluation of Information Access and Delivery
AEET/EDET 780 – Seminar in Educational Technology

Electives (9 hours chosen from the following courses)
AEET 650/EDET 650,651 – Internship in Educational Technology
AEET/EDET 652 – Design and Evaluation of Games and Simulations
AEET/EDET 703 – Design and Development Tools II
MGMT 772 – Employee and Organizational Development
AEET/EDET 793 – Advanced Instructional Design and Development
EDRM 736 – Program Evaluation
Creating and Maintaining Teacher-Learning Communities in Math and Science: Increasing Student Achievement on PACT Through Collegial Efforts

Last summer, the South Carolina Association of School Administrators hosted noted speaker Richard DuFour to give a presentation on Professional Learning Communities (PLC). School administrators across the state are creating school plans that are grounded on PLC philosophy. This workshop is centered around the critical element of a professional learning community at school: creating and maintaining a teacher-learning community that is collegial and focused on student achievement.

The goals of this workshop are centered around two basic ideas: (1) teachers who employ ‘best practices’ within the Curriculum-Assessment-Instruction (CAI) model will see significant gains in student achievement on PACT, and (2) teachers who work cooperatively in collegial teacher-learning communities share ideas and learn from each other as they go about the task of significantly improving student achievement at their school. The workshop is designed to give participants specific, research-based strategies that result in high student achievement and to give participants specific strategies that help teachers create and maintain teacher-learning communities at school. CAI strategies are based on the work of Marzano. Strategies that are useful in creating and maintaining teacher-learning communities are based upon work on professional learning communities (DuFour & Eaker, 1998 and Hord, 1997) and leadership training (Baldrige and TQM frameworks).

Since the focus of the workshop is on collaboration, teachers are encouraged to apply as a team (grade-level or vertical). The workshop includes four days of team training, May 29- June 1, 2006. The training will be held at the RPSEC.

The cost of the workshop is $100 per teacher. School teams interested in this workshop should contact Gregory MacDougall at 803-641-3250, or gregm@usca.edu.
FREE Teacher Workshop

Project WET: Water Education for Teachers

Dates: August 9, 2006 (Tenative)
Times: 9:00a.m. - 3:00p.m.
Workshop Fee: FREE
Location: TBA

Project WET is a nonprofit water education program for educators, grades K-12. The Project WET Curriculum and Activity Guide is a collection of innovative, water-related activities that are hands-on, easy to use and FUN! These activities will help you teach topics such as chemical and physical properties of water, why water is essential to all life, ways that water resources are managed and how water connects all earth systems.

Each participating teacher will receive a Free Curriculum Guide!

To register or for more information contact Anne Bohnet at AnneB@usca.edu or 803-471-0291.

Special Thanks to our Sponsors- Westinghouse Savannah River Co., STEP (Science and Technology Enrichment Program), SC Department of Natural Resources, and Silver Bluff Audubon Center

FALL GRADUATE COURSE

Management of Technology Resources

Credit: 3 hrs graduate credit
Instructor: Dr. Gary J. Senn
Course Number: AEET 746
Dates: Web based and Wednesday 8/25
Fall, 2006
Times: 5:00 - 7:40 p.m.
Course Fee: Regular Tuition
Location: B&E 238f
Course Description: The organization and administration of media programs in school buildings and districts, regional and state centers, and colleges and universities. Procedures, problems, and trends for an integrated instructional support system will be emphasized.

To Register: Call Karen Morris at 641-3489

USC Aiken Graduate Fee Schedule

|$392.00 Graduate Resident (per semester hour)
|$816.00 Graduate Non-resident (per semester hour)
|$266.00 Graduate (certified teachers Resident) (per semester hour)
|$295.00 Graduate (certified teachers Non-resident) (per semester hour)

Graduate fees must be paid by graduate students whether the courses taken are graduate or undergraduate.

Note: Students enrolled in courses at another USC campus will be required to pay the tuition and fees of that campus in addition to the USCA tuition and fees for USCA courses.

Other Required Fees

|$100.00 Technology Fee (per semester for full-time students)
|$8.00 Technology Fee (per credit hour each semester for part-time students)
|$15.00 Parking and Security Fee (per semester)

Summer Camp

The Ruth Patrick Science Education Center is excited to announce that the Camp Invention program, an exciting weeklong summer day experience for children entering grades one through six, will be returning to the Ruth Patrick Science Education Center the week of July 17-21, 2006. The program is designed to inspire creativity and inventive-thinking through loads of hands-on activities and F-U-N! Children will participate in five inventive modules each day, which include: disassembling old machinery and using parts to make their own inventions in I Can Invent™; collecting marine samples in the deep sea and building boats in Sea Worthy™; letting their imaginations soar when they design their own carnival games in Fair Games™; constructing a device to find a special note that leads to buried treasure on a faraway island in The Lost Treasure™; and inventing the rules in mind-boggling AMAZing Games™. The Camp Invention program integrates science, mathematics, history, and the arts in an exciting environment conducive to learning disguised as fun!

This year, the Camp Invention program is being hosted by the Ruth Patrick Science Education Center. John Hutchens will be the camp director, and local, certified teachers will lead the five modules each day. Enthusiastic college students will serve as counselors. The program features a low staff to child ratio, with one staff member for every eight children.

The registration fee also includes snacks and a cool T-shirt. Bring a buddy to receive $20 off the base registration price; alumni are eligible for even greater savings! Call 800.968.4332 today to inquire about savings opportunities for your family.

Registration is limited to 110 children. Don't let your child miss all the fun! For more information, visit www.campinvention.org or contact John Hutchens at 803-641-3313.
STORKS & CORKS

Mark your calendars!!  The 3rd annual “Storks & Corks” event is to be held August 12, 2006 at the Silver Bluff Audubon Center & Sanctuary. The evening will begin at 6 p.m. on the edge of Kathwood Lake viewing the endangered Wood Storks as they glide in to the shallow water to feed. Last year, the Wood Storks numbered over 150 and put on quite a show! Bring your binoculars and be prepared to see this fascinating bird up close and personal. Spotting scopes will be on hand for really close looks!

The evening will continue with hors d’oeuvres and wine tasting at the Silver Bluff visitor center where you’ll also have an opportunity to bid at a silent auction offering artwork (including exquisite Wood Stork photographs), binoculars, and more. So sign up today as space is limited! Call 803-471-0291. The fee for this very special event is only $25/person. We look forward to seeing you at “Storks & Corks!”

Gear Updates

The GEAR UP staff would like to thank all those wonderful employees of USCA who answered our call for volunteers to mentor one or more GEAR UP students. On November 19th, volunteers met with students and their families at a luncheon held at the Ruth Patrick Science Education Center to mark the beginning of their relationship. On that day we also presented certificates of completion to the students who had completed the Fall SAT Preparation Workshop which ran from October 22nd to November 19th.

Students and mentors attended their first GEAR UP sponsored field trip on the evening of January 16th when they attended a presentation offered by the Augusta Ballet in honor of Dr. Martin Luther King, Jr. The Urban Bush Women, a New York troupe, entertained and educated the audience about African American history through dance, acting, and song.

February was our busiest month thus far. On February 4th students attended a workshop facilitated by Mrs. T. Ella Strother of Strother Associates, where they began the process of writing the personal essay they will need as part of many college applications. On February 18th GEAR UP joined forces with the South Carolina Alliance of Black School Educators, Aiken chapter, in presenting its semi-annual community conference.

In one session, parents learned about South Carolina’s Reading Standards from Dr. Rosa Ishmal, Catherine Hamilton and Dorothy Brooks and in the other workshop, Dr. Marsha Harris demonstrated how parents could help improve student achievement by using the MegaSkills® Academics and Character program.

While their parents and guardians were examining these strategies, approximately fifty students were learning test-taking skills from Karen Cue, Sheneque Jackson and Sheila Suggs-Green. They also participated enthusiastically in a workshop entitled “Thinking Games: Fun Alternatives to TV” facilitated by Gwen Johnson, Janie Key and Mary Brown.

Another activity which began in February was the spring session of our popular SAT Preparation workshop which began on February 25 and ran for five consecutive Saturdays through March 25, 2006. If you know of any student who may benefit from one of our SAT preparation workshops, please contact Joyce Johnson or Jenifer Ramseur at 803-641-3313. The next workshop is scheduled to take place over the school’s summer break. The workshops are open to non-GEAR UP students as space is available.

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 programs. These programs are for interested groups such as Daycare Centers, Camps, Church Groups, Scout Troops etc. For more information please call Janice Weeks at 803-641-9769.
Teams from 21 South Carolina middle schools participated in the South Carolina Regional Future City Competition, January 28th at USC Aiken. Anderson Home School from Anderson, SC, took home first place with their city, “The Electric City.” The students—Julian Davis, Alex Diaz, and Elizabeth Hazelwood—teamed up with their teacher Ann Hazelwood, and volunteer engineer mentor Richard Hazelwood to win the SC Regional Competition for the second straight year. “The Electric City” team received an all-expense paid trip to the National Engineers Week Future City Competition in Washington, D.C. where they won the Best Land Surveying Award sponsored by the National Examiners for Engineering and Surveying.

At the SC Regional Competition, second place went to Paul Knox Middle School, from North Augusta, SC for their Future City “Aquality.” Herlad 5 Home School from Chapin, SC, took third place honors for their Future City, “Primera Opcion.” The SC Regional Future City Competition is sponsored by the RPSEC and Washington Savannah River Company.

The Ruth Patrick Science Education Center Newsletter is a publication of the RPSEC for our patrons. The Center encompasses the CSRA Mathematics and Science Regional Center (MSRC), Center of Excellence in Educational Technology (CEET), Dupont Planetarium, RPSEC Student Programs, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), Traveling Science, and the Science and Technology Enrichment Program (STEP). 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 July 1, 2006.