Summer Bridge Curriculum Proposals Due Tomorrow

All faculty not teaching during Summer Session II or Summer Session III are invited to submit a proposal for a science, math or information technology course that would include 10 hours of instruction geared for sophomores or juniors in high school.

Proposals should include the title of the course, course description, budget, facility requirements, learning outcomes and expected final product such as a student produced project, presentation or poster to be presented during the closing session of the camp.

The Summer Bridge Curriculum Committee will choose four courses to offer during the week-long summer camp for female high school sophomores and juniors interested in science, math and information technology. Faculty who teach during Summer Bridge 2010 will be compensated.

For more information about compensation, contact the CSAT Dean’s Office.

Interested faculty should email their proposals to Ann Brown, Assistant to the Dean (abrown238@radford.edu), by Oct. 30, 2009 at 5 p.m.

Student Will Discuss Research During Tonight’s Chalk Talks

Each month, biology professor Gary Cote’ leads the student engagement program Chalk Talks. This event offers students from across CSAT disciplines an opportunity to discuss their research in a supportive and informal environment.

This experience builds students’ comfort and confidence in a presentation-like setting. Many students who are planning to present their research at conferences use this forum to gain experience and receive feedback from faculty mentors and fellow students.

Tonight, Ohene Ampo- sem, who is working with Dr. Gary Cote’, will be discussing the research he started on the regulation of crystal producing cells in plant leaves at 5 p.m. in Reed Hall, room 215.

Faculty and students are invited to join Ampo- sem in the discussion.

Geology Professor Featured in MES Public Lecture on Tuesday

On Tuesday, Nov. 3, join Professor Parv Sethi as he takes you on a journey that begins where the Colorado River first cuts into the Canyon near Lees Ferry and ends near Powell Point, in the heart of the canyon. The lecture begins at 7 p.m. in Hurlburt Auditorium.

In addition to the basic geology observable in the Grand Canyon, this presentation will also include a virtual-reality field-trip in which the audience will be treated to a 3-D slide-show about the Grand Canyon. 3-D glasses will be provided.

One of the natural wonders of our world, the Grand Canyon National Park is a window to our Earth’s history. The thousands of rock layers that make up its towering cliffs and canyons are a geologists’ paradise - with each layer telling its own geologic story. For more information, visit www.radford.edu/mes.
Student’s Work to be Published in *Virginia Wildlife* Magazine

Biology senior Justin Honaker’s career goal is to be a pharmacist in his hometown of Grundy, Va., and serve the community in which he strongly believes.

He says his love of community was fostered by a man with a story. In “Clinch River Anointing,” to be published in the Summer 2011 edition of *Virginia Wildlife* magazine, Honaker introduces readers to Jeff Owen, an avid angler and passionate conservationist.

In his article, Honaker writes about the Clinch River and its impact on Owen’s life and passion for it.

“It roams through these foothills and slows down time, reminding us to appreciate the sights and sounds of a forgotten era when coal once pumped life into what are now ghost towns, and when small general stores—now chipped, grey, and boarded over—provided everything from shoe polish to lemonade,” he writes.

Honaker describes how the Clinch became a way of life for Owen who taught local children how to fish from its banks and about the need to protect the local mussel population from extinction. “I admired him for his dedication to the Clinch River and how he transferred his passion to other people,” adds Honaker.

Later, Owen developed multiple sclerosis. Honaker writes in his article, “As MS began to take more and more mobility from Jeff, he refused to lose this love. Frequently, he would drive down to the riverbank, grab his chair and stumble out into the river. Here he would sit for hours and feel the cool river run beneath him.”

Owen passed away in 2008 on Valentine’s Day. “I hoped this article would be published to honor him,” says Honaker. “His wife is still having a hard time coping with his death,” Honaker says. “Jeff never blew his own horn, but he is one of the few who should be honored and talked about for his dedication and passion for the Clinch River.”

Biology major Justin Honaker honored his friend Jeff Owen (above) in a story to be published in *Virginia Wildlife* magazine. The article was written for an assignment in Karen Francl’s Conservation Biology class.

SPSC Receives $3,000 From Parents and Family Fund

The College of Science and Technology Small Project Support Center received $3,000 in support from the RU Parents and Family Fund.

Center director Jeff Pittges says the funds will provide wages for students to develop software applications for the Undergraduate Curriculum and Catalog Review Committee (UGCCRC) and Peer Instruction. The UGCCRC application will allow the committee to upload electronic copies of proposals to change the undergraduate catalog. The second project is to develop an online system for Peer Instruction. This system will allow students to contact and communicate with peer instructors online, which will increase the availability of peer instructors.

“The student wages will directly impact two or three students who develop the applications,” says Pittges. “However, the applications will indirectly benefit many students by helping to increase accuracy and timeliness of the undergraduate catalog and providing better access to peer instructors,” adds Pittges.

Pittges and information technology professor Joe Chase are working on a National Science Foundation grant proposal to study how the peer instruction system will impact retention in information technology courses, and later additional STEM courses in the college.
Nicole Eastep Will Present Research in Washington, D.C.

In November, biology major Nicole Eastep will present her recent research regarding plant-derived compounds that both kill mosquito larvae and kill La Crosse virus at the annual meeting of the American Society of Tropical Medicine and Hygiene in Washington, D.C. Under the direction of faculty mentor Justin Anderson, Nicole’s goal is to identify compounds that do both and could potentially make mosquitoes resistant to infection with the virus. “She has already demonstrated that coffee extract has larvividal and virucidal properties, and we are pursuing this further this semester,” says Anderson.

Eastep was the recipient of the 2009 Rogers Undergraduate Research Award for the College of Science and Technology. The award funded an outstanding undergraduate research project conducted during the spring and summer of 2009 and completed during the 2009-2010 academic year. The 2010 award will fund research during the spring and summer of 2010 and completed during the 2010-2011 academic year.

One award of $500 will be granted on a competitive basis by the CSAT scholarship and awards committee to a current sophomore or junior undergraduate student enrolled in the college. Applicants must be a full-time RU undergraduate student and must remain enrolled at RU through the completion of their project.

Application deadline for the Rogers Undergraduate Research Award for the College of Science and Technology is Dec. 4, 2009. For application materials or more information, contact Ann Brown at Abrown238 @radford.edu.

Tree Planting in Bissett Park Scheduled for November 7

On Saturday, November 7, RU faculty and students will team up with Pathways for Radford and complete the second installment of erosion control and riparian health improvement. At Bissett Park near the Memorial Bridge, 28 saplings will be planted along the riverway -- the hiking path that parallels the New River. The City of Radford will assist with digging the holes prior to next Saturday. RU and Pathways participants will handle tree-planting, mulching and surrounding saplings with beaver-proof guards to ensure successful establishment. It is anticipated that 30 volunteers will take part in this community improvement effort.

Biological faculty members Judy Guinan and Karen Francl received a Water Quality Improvement grant in Spring 2009 from the Virginia Department of Conservation and Recreation and Virginia Department of Forestry. The goal of the project is to restore and improve riparian health by curbing erosion along the New River. Last April, Guinan, Francl, and 18 student volunteers worked with Virginia Department of Forestry’s David Richert to plant hundreds of “live stakes” in the bank areas that were most prone to soil erosion. The hope is that these shrub stakes will become established and act as a permanent buffer to soil erosion.

STEM Club Hosts NASA Speaker November 11

During the past 10 years, scientists’ understanding of the Solar System has advanced dramatically.

The CSAT STEM Club will host a talk by Russell De Young, a senior research scientist in the Science Directorate of NASA Langley Research Center on Wednesday, Nov. 11 at 7 p.m. in McGuffey 206. De Young will highlight some of the exciting discoveries NASA and other nations have recently made in understanding the unique characteristics of the individual planets as well as the search for life beyond our own planet. He will also discuss space missions that are in progress or being planned from the Sun to Pluto.

All CSAT students and faculty are invited to attend.
CSAT STEM Club Spotlight: Activities and Upcoming Events
By Arielle Reynolds, STEM Club secretary

CSAT STEM club participated in the RU Scared event on Tuesday, October 27th from 5-7 in the Muse Banquet Hall. There were children activities and trick-or-treating.

On November 7, the club will go to the Science Museum of Western Virginia in Roanoke. A van will leave at 9:15 a.m. RSVP Laura Spielman at lspielman@radford.edu. We have been invited by the Physics club to join them in going to the National Radio Astronomy Observatory in Green Bank, WV on January 22-24, 2010. Lodging and travel costs will be covered by the STEM Club and Physics Club. RSVP to Rhett Herman by Jan. 1, 2010.

CSAT STEM held a game night in the Bonnie on Monday, October 19. Free pizza was served and the turn out was excellent. Faculty, present members, and prospective members enjoyed playing pool and bowling.

The club is preparing for a canned food drive November 2-13. At our last meeting we decorated boxes and will decorate posters at our next meeting. Our goal is to collect at least 100 cans, but with the help of faculty and advertisements we hope to obtain a lot more.