CSAT Receives Grant to Investigate Handheld Technology

CSAT faculty Jeff Pittges, Andrew Ray, Gary Cote and Joe Chase have received a $20,000 RU Seed grant to investigate handheld applications for the classroom. The main goal of the project is to increase students’ engagement in their own education. The team hopes to gather evidence to support a million-dollar five-year National Science Foundation Science, Technology, Engineering and Mathematics Talent Expansion Program (STEP) grant proposal to expand on their research.

They plan to develop and support a range of new classroom activities using Wireless Interactive Learning Devices (WILD), in this case an iPod touch that provides wireless connectivity, a touch screen interface on a vibrant display, a learning activity delivery network, and an ability to merge with existing campus technology. For example, biology students can interact with classmates and their professors by linking all iPod touches in the classroom to explore a 3D image of a cell. This gives the professor an opportunity to include many of the students’ senses in the learning activity. Professors can also ask questions in class or poll the class and receive instant feedback.

The research team will use the seed grant to develop at least two learning activities for the biology and information technology departments and measure feasibility for different types of learning activities. This will also allow the team to set up a process to expand the program to include more disciplines in the future.

The knowledge the team gains will help them to develop a more compelling proposal for NSF funding of a major project to include providing each CSAT student an iPod touch so the team can study the educational impact of using handheld devices in the classroom. The major project will also study the feasibility of training students and faculty to use the applications. The team intends to include one representative from each CSAT department on the major project, but the seed grant project will be scaled back to include representatives from biology and IT. Students will have an opportunity to help build applications for the learning activities. The students will be working in the Small Project Support Center during the summer and the center will maintain and support the applications.

Students will be hired in January as employees of the Small Project Support Center to become familiar with the iPod touch device and application development during the spring semester. Starting in May, the students will develop applications while the research team tests the applications and provides feedback to the student developers.

Faculty and students interested in learning more about this project or becoming involved may contact Pittges at jpittges@radford.edu.

ARCOVA Will Visit CSAT to Explore Partnerships

CSAT faculty are invited to attend a meeting between the college and the American Research Corporation of Virginia (ARCOVA) on Friday, Dec. 12 from 2–4 p.m. in Reed 206. This will be an informal meeting where faculty could discuss or present their research and research interests and ARCOVA scientists could describe their potential to collaborate with CSAT faculty and provide internship experiences and jobs to CSAT students.

ARCOVA, located on 4th Street in Radford, was formed in 1982 to conduct research and development in science, engineering and healthcare for government, university and industry. ARCOVA scientists’ research and development efforts include areas such as biotechnology, environmental monitoring, food processing, healthcare and materials processing.

If you would like to attend the meeting, contact Dean Rogers at jgoroges@radford.edu.
RU CSAT Signs Articulation Agreement with SWCC

Southwest Virginia Community College recently signed an articulation agreement with CSAT. SWCC students who have completed the Software Development Fast Track program or the Associate of Applied Science degree in Information Systems Technology will be accepted into RU’s Computer Science and Technology program. These students will lack only 38 credit hours of junior and senior level information technology coursework when they enroll at RU. Radford University began offering the Bachelor of Science degree at SWCC this fall through a distance completion program coordinated by CSAT IT faculty David Daugherty. Classes are taught by Radford faculty in the evenings and broadcast to SWCC. Participants can earn a Bachelor of Science degree with a database concentration or software engineering concentration.

Biology Students Talk Research During Chalk Talks

Close to a dozen people attended November’s lively Chalk Talks. Student scientists Megan Beaton and Jennifer Gunnell talked about their research on bacterial communities from an old arsenic mine.

Chalk Talks are open to faculty and students who want to learn more about student research on campus and to offer valuable feedback for outstanding student researchers.

Cline Receives Grant from Virginia Academy of Science

Biology assistant professor Mark Cline was recently awarded a $1,250 grant from the Virginia Academy of Sciences to support his research. The research project Mechanisms of Neuropeptide VF Induction of Anorexia is designed to explore brain mechanisms that mediate neuropeptide VF’s effect on appetite.
I would like to remind everyone that now is the time to line up your independent studies, directed study and research classes for spring 09. These are considered classes and the paperwork must be completed in the regular registration period. A student can add an independent study or research class during the schedule adjustment period. All paperwork must be completed and submitted to the Registrar’s Office by 5 p.m. on Friday, Jan. 23. Any requests for adding the class after the deadline must be due to extenuating circumstances for Dr. Rogers to consider the petition.

Please make sure to submit all grade sheets to the Registrar’s Office by 10 a.m. on Monday, Dec. 22. Late grade submissions results in the student receiving an “I” for a grade, which causes confusion and panic and can in some circumstances affect whether or not a student can return for the spring semester.

New freshmen who make below a 1.25 their first semester are suspended, although a few of them are invited back if they join the Students On the Road to Success (SORTS) program. This program includes mandatory meetings with New Student Program personnel and mandatory study halls. Students who were readmitted in the fall with below a 2.0 can also be suspended if they did not make up ½ of their deficit.

I hope you all have a nice break.—Susan Underwood

CSAT Participates in STEM Day Camp at SWVHEC

On Tuesday, CSAT faculty traveled to the Southwest Virginia Higher Education Center to participate in the third annual STEM Conference for 700 sixth-grade girls and their teachers from the counties of Washington, Smyth and Russell and the city of Bristol.

The purpose of the conference was to introduce the students to the STEM fields through a day of fun activities centered around science, technology, engineering and math.

At the end of Patterson Rogers’ class about math and origami, one student said, “I never would have believed that I could do this.” This statement exemplified one of the goals of the conference—to show girls that they can succeed in STEM fields.

The STEM Conference was a partnership between the Southwest Virginia Higher Education Center, Eastman Chemical Co., Northrop Grumman, General Dynamics, CGI, Alpha Natural Resources and other regional firms. Colleges and universities that participated include RU, Virginia Tech, University of Virginia and Emory and Henry.
The College of Science and Technology inspires students to look beyond their world and into the global arena of ingenuity, invention and research.

College faculty dedicate themselves to their students' success. They are mentors who guide inquiring minds through the process of discovery in the classroom and in real-world research.

The College of Science and Technology houses the Departments of Mathematics and Statistics, Information Technology, Geology, Chemistry and Physics, and Biology.

College faculty and students collaborate across disciplines in research and real-world problem solving. This synergy inspires many opportunities for faculty and student innovation to take root and grow to meet the ever changing needs of the global community.

Thank you for being a part of our CSAT faculty. You inspire excellence within our students and your colleagues.