



E-Commerce

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Expanded e-commerce solutions are being built through relationships with infiNET (www.infinet-inc.com) and Moneris Solutions (www.monerisusa.com). Bill presentment, payment acceptance, and a future shopping cart functionality will be implemented.

Tuition. For Fall tuition, students may pay online with e-checks. In addition, the vendor-based solutions provide the ability to use credit card payments online. The vendor forwards tuition payments to the university, and charges a separate fee to support its portion of the transaction. The convenience of the payment system is expected to prove attractive to significant numbers of students.

The **Banner Finance Team** has been working to integrate the partnership with the Accounts Receivables portion of Banner. The system went into production earlier this month.

Transcript requests. Currently supported by the University Payment Gateway, transcript requests will also employ the online service suite. The **Banner Student Team** has undertaken the conversion and implementation of the new system.

Advantages to the university include the increased and enhanced convenience for students, parents, and others, fuller integration and streamlined operations, and preventing a need for the university to store credit card information.

Field Engineering

In this issue

- E-Commerce 1
- Field Engineering 1
- Online Course Evaluations 2
- Security Presentation 2
- Community Development 2

Field Engineering's work is central to the opening of new campus facilities. In the nine months preceding Fall Semester, Field Engineering will have installed over one million feet of cabling—the most ever in an equivalent time period.

In the west stadium addition, 260,000 feet of Category 6 cabling provides infrastructure for voice and data. This high quality copper cable supports stadium operations from police and rescue to computer classroom and tutoring rooms. Also, 50,000 feet of coax cabling are being installed for television operations.

The Alumni Center Complex consists of three elements—the Inn at Virginia Tech, with voice, data, and television in each guest room, plus additional services in offices and

public spaces; the Skelton Conference Center, dependent on voice and data and television; and Alumni Hall. The Inn opens July 10, and the other facilities soon after. Field Engineering is installing 334,000 feet of Category 6 cabling for voice and data and 40,000 feet of coax cabling for television.

Other major projects this summer include renovation in Donaldson Brown and the Agriculture/Forestry building. As the new center for Graduate Studies, Donaldson Brown's connectivity is being changed and upgraded. Nearly 100,000 feet of cable is being installed—70,000 of voice and data Category 6, and 23,000 feet of station fiber to support conversion of the hotel rooms to graduate student housing. The Agriculture/Forestry building on central campus will have 234,000 feet of category 6 cable.

Standard course evaluation instruments have been supplied for many years by Test Scoring in Learning Technologies, using the Student Perception of Instruction questions and optically scanned paper forms. Online courses have used various other methods for end-of-term evaluations. Learning Technologies has been working on an open source project to create course evaluation tools for online student input for all course formats. The new tool will make it possible to create consistency between online and in-person courses, and will free class time traditionally used for in-class evaluations.

As a part of the Sakai collaboration (see www.sakaiproject.org—pronounced with the accent on the second syllable), the Online Course Evaluation project is a collaboration among Virginia Tech, Columbia University, and MIT. The evaluation system builds upon a tool developed at Columbia University. That system was initially written in Cold Fusion with an Oracle database. One of the challenges for the Virginia Tech developers in building on the Columbia product was scaling it for our larger environment, including enhancing performance. Another is to make it compatible with other tools in Sakai's Collaboration and Learning Environment for higher education. Moving from Cold Fusion to Java code base—J2EE, the revised tool uses JSF and Spring IOC, along with JIRA for bug tracking. Hibernate provides database independence for the system. The Virginia Tech development team leader is Aaron Zeckoski. Graduate students Kapil Ahuja and recent graduate Justin Gawrilow, both masters students in Computer Science, comprised the development staff. Work on the project contributed to building the professional portfolio of these students, while creating a much-needed tool for Virginia Tech and the growing number of other Sakai collaborative universities—70 at last count!

The course evaluation system itself is designed for flexible use among the colleges and departments at Virginia Tech, and for use at the collaboration partner schools. It consists of four hierarchical levels, with evaluation questions inherited downwards—an institution-wide level, one used for colleges and schools, another for departments, and finally, one for the instructor. The instructor may also customize questions for different sections of courses taught. Space for comments is always available along with multiple-choice and other question formats.

When used for end-of-course evaluations, the instrument can have questions contributed by all levels. The system may also be used for feedback from students at any time throughout the semester. Course-specific questions may be readily added. Students in the courses receive an e-mail with instructions for completing the evaluation, and will receive reminders to complete the form before the end of the term. Authentication to the system is through the Enterprise Directory, and authorization is tied to the course registration. Responses are confidential, and the instructor cannot associate answers with particular students. The system produces reports with both text and graphics to support instructor and departmental decisions, and permits downloading the raw data for analysis in Excel or other tools.

Pilot versions will begin in the fall semester. For more information, contact Tom Head (tom.head@vt.edu).

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Effective Cyber-security Practices for Higher Educa- tion

With Tammy L. Clark from Georgia State University, **Mary Dunker** led a seminar at the Educause Southeast Regional Conference on June 6. The seminar reflected the work of the Educause/Internet2 Security Task Force.

See <http://www.educause.edu/Library/DetailPage/666?ID=SER0539>

Community Development for a New Economy: lessons learned from the Dan River regional effort

Anne Moore reviews the issues in the economic development project in Southside and the role of Information Technology for the [Virginia Issues and Answers Magazine's Spring 2005 edition](#). <http://www.via.vt.edu/spring05/feature3.pdf>