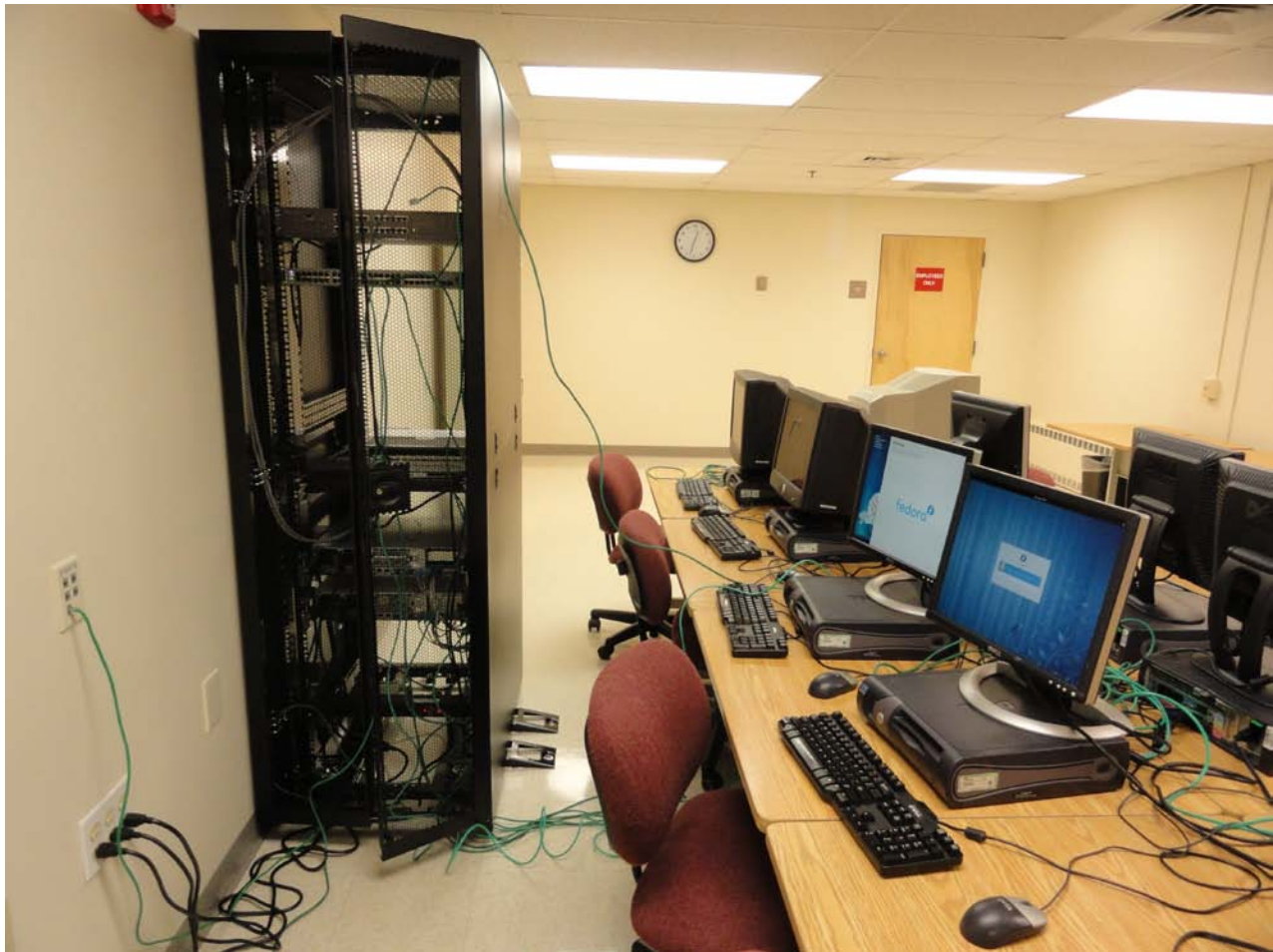


NEW EXPERIMENTAL COMPUTER LAB OFFERS GRADUATE STUDENTS A VARIETY OF RESEARCH PROJECTS

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A new Experimental Computer Science Laboratory is open in the Sylvia Trotter Hall (room STH-136). It will support the instructional and research needs of the Computer Science graduate students and faculty at Rivier College. The Computer Science Lab will allow instructors to design new advanced course labs and research projects requiring a dedicated network of systems and which would be undesirable and unsafe to conduct on the Rivier College network, including projects involving distributed computing and cyber security topics. The Lab will also serve as a general computing resource for Computer Science students and faculty.

There are now ten computers connected in a local area network available for students' use in the Computer Science Lab: seven are dual boot Linux (Fedora 15) and Windows XP machines; and three are single boot Linux (Fedora 15) systems. The computers have basic design and development software,

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including compilers, database management systems, web servers and associated development tools. The systems are connected in a local area network through a Nortel 5510 switch.

One of the servers in Lab equipment is running Linux Fedora 15 and is acting as the DNS server for the network. The machines in the network have Internet access, but filtered through an IT department router to prevent unauthorized access to the equipment. Within the local area network, machines have complete network access to each other and can be configured to bring up local web servers as needed by class activities.

For the Windows systems, the Windows Server will be installed on the remaining server machines using media supplied by IT. The best approach for the Linux systems is currently explored.

Dr. David Pitts, an Assistant Professor of Computer Science, has already used the Experimental Computer Science Lab in his courses in Fall-2011 semester. His students successfully used the Lab computer systems in CS690AH1 Distributed Computing class meetings. They experimented with the development of web services using SOAP and WSDL technologies, culminating in the development of a small application using a web service supported by the National Weather Service. Students also performed a lab using Java's remote method invocation mechanism. This example highlights a major benefit of having this isolated lab facility: the software they used in the Distributed System course activities was identified and discussed during one class meeting; by the next class meeting, Dr. Pitts had downloaded the software, installed it and had it ready for the students to use. He has also used the Lab systems in his CS586A High Octane Java course for hands on activities in Java network programming.

The Lab design, system settings, and maintenance could not be successfully implemented without the outstanding support of Sr. Therese Larochelle, p.m., Ph.D., Vice-President for Academic Affairs; the Office of Information Technologies (Bill Schleifer, Marie McMullen, David Bedard, and Sr. Martha Villeneuve), and the Division of Sciences (Dr. Paul Cunningham and Jackie Madison). ■