

New facility promises improvements for science, math and computer science

New equipment and labs provide new opportunities for students and faculty.

TIFFANY ADAMS
Managing Editor

Last Wednesday students and faculty held the first classes in the long awaited and highly anticipated Science and Mathematics Building.

New equipment such as projection cameras, microscopes and data recording computers, as well as the overall design of the building will improve learning in the science and math fields at Meredith.

The new building also features specialized laboratories for anatomy, genetics and evolution, cell biology, biochemistry, molecular biology, microbiology, anatomy and physiology, ecology, organic chemistry, inorganic chemistry, earth science, physics and computer science.

Dr. Virginia Knight, head of the Department of Mathematics said the design of the classrooms is conducive to using technology. She added that the auditorium has individual outlets so that students can plug their laptops in during class and every room has a projection screen and document projector for displaying materials during class.

Knight said the projection equipment "makes it much easier to display documents to show students exactly how to do something."

Dr. Reginald Shiflett, head of the Department of Chemistry, Physics and Geoscience, said, "The presentation equipment available, such as the document cameras, which will make it very easy for all students to see demonstrations being done at the lecture desk, will improve learning."

More impressive than the classrooms are the state of the art laboratories in the new Science and Mathematics Building. The building more than triples Meredith's original specialized lab space and it contains student-faculty research labs, which provide established homes for long-term research projects.

The labs contain new instrumentation such as the Scanning Electron Microscope, Nuclear Magnetic Resonance Spectrometer, and light microscopes. In addition to new instrumentation in the labs, the size and design of the rooms will facilitate a better overall learning experience.

According to Dr. Bill Schmidt, professor of calculus-based physics, "The size of the physics lab will allow more students per lab. Each lab station has a new computer and data-recording equipment."

Shiflett said, "Most of the laboratories are designed to facilitate collaborative learning in the lab. Rather than work individually or with a lab partner, students can work in small groups on inquiry-based experiments. Studies have demonstrated that this is an effective way for students to learn about science and the scientific method."

Dr. John Mecham, head of the Department of Biology and Health Sciences, said the design of the new building allows professors to combine lectures and labs. "This way," he said, "You don't have the classical distinction between lab and class, so [the course] becomes more of a total experience."

Although the curriculum for many classes may not change drastically, "the biology department has decided to modify its major

requirements to include one year of undergraduate research because the department now has the space to dedicate to research programs that will not interfere with teaching," Mecham said.

Shiflett added, "Science majors will benefit significantly from having experiences with sophisticated instrumentation such as the Nuclear Magnetic Resonance Spectrometer. In addition, they will have opportunities to be involved with ongoing research projects since each faculty member now has a research lab in which to do research with students. Meredith will become more visible at local and national professional meetings as students and faculty present the results of their work."

Another important change as a result of the new building's opening is offering of additional laboratory courses and concentrations. Shiflett says the chemistry department is planning to offer additional laboratory courses, perhaps in instrumental analysis, and a major or concentration in biochemistry.

In general, Mecham said, the new building "gives a lot more flexibility and capability in teaching sci-

ence."

Knight said her curriculum will not change much, but the way she teaches it will change, namely using technology in different ways.

She said the building offers many benefits for math students, but mainly makes math more appealing to students.

Aside from the many ways students will benefit from having the new building, professors will benefit as well.

Shiflett said, "Faculty will benefit from having individual research labs in which to carry out ongoing research with students. Research will also be enhanced by the heavy investment in sophisticated instrumentation."

Knight added, "Professors all have nice, large offices that are very comfortable. The furniture is designed for what we do and we have lots of storage space."

As with any change, faculty have faced some challenges with the transition into the new building. For example, "moving and getting the lab equipment and supplies organized in the new laboratories has been quite a challenge," Shiflett said.

Knight also added there was a period of time that

professors could move in and unpack, but could not actually work in the building. The first official workday was Jan. 7. She said Rodgers Builders, LLC and Meredith's Facilities Services were a tremendous help during the move.

The building, according to Knight, is designed for informal and formal interaction. "It has neat gathering spots with tables, chairs and benches, all equipped with electrical outlets for laptops," she said.

Shiflett said, "I think we will all need to live in the building for a while to fully appreciate its potential. We are delighted to finally be here!"

"One of the greatest benefits of the new building may be the learning environment it creates. It is a beautiful modern building with great landscaping and a very educational ambiance," Schmidt said.



!! Come in for your free visit !!

3801 Hillsborough Street

Suite 153

Raleigh, NC 27607

828-7773

1st Visit Free

5 Visits \$15

10 Visits \$25

20 Visits \$35

1 Month Unlimited \$25

Prices Good Through 1/31/03

Do you want to keep your family informed of all the news on campus? Order a subscription to the Herald!

Contact Aundrea Hildreth at HAUNDREA@aol.com to place an order!