

Faculty Profile of the Week

by Hal D. Coffey
News Editor

Mussels and midges and algae, oh my.

Dr. Pamela Botts, assistant professor of biology, is working on two projects that involve these types of organisms at Presque Isle.

The first project looks at small invertebrates (midge). The midges are aquatic in their imager (immature) forms, while they are aerial in their more mature forms.

On Presque Isle, the shore birds feed on the immature midges. Botts is researching how much food the midges are providing for these birds.

Zebra mussels are the subject of her second project.

"We know they settle on hard surfaces, but they are also settling on the aquatic plants," Botts said. "This is interesting because they (the mussels) benefit the plants by filtering algae out of the water so more light can reach the plants, but being covered doesn't help the plants."

Botts wants to find out how bad the mussels are for the plants and what they do.

Overall, she wants to record spatial and temporal patterns and how organisms respond to changes in the environment.

As for classes, Botts teaches some BIO 101 labs and BIOBD 410, which is luminology-- the study of inland waters.

She believes it is her responsibility to do whatever she can to help people learn, but she has high expectations.

"I have pretty high standards for myself and my students, but I'm willing to give a student every opportunity to meet those standards," Botts said.

Botts said she likes to battle large class sizes by offering "one-on-one" instruction as much as possible.

"If an explanation is unclear, I try different approaches until the student understands it," Botts said. "I really enjoy teaching."

Unlike some other professors, Botts does not believe in just giving facts for students to return at test time.

"I don't believe in spoon-feeding information for the students to regurgitate back on an exam," Botts said. "It is important to connect concepts

and put together diverse pieces of information. That takes problem-solving skills, and that's what college learning is all about."

Botts received her undergraduate degree at Trenton State College in New Jersey, majoring in, of course, biology.

"Biology ties everything together. Chemistry plus physics plus math gives you an incredibly diverse learning system," Botts said.

She parlayed that education into a 10 year job as a medical technologist.

After the birth of her second son, she decided to go back to school. She finished her Ph.D. work a year ago at the University of South Florida-Tampa.

This is her first year teaching at Behrend, and Botts is enjoying it.

"I get paid to play in the mud," Botts said. "I always wanted to know how things worked."

For the future, Botts hopes to find a site to do some long term research, because there are a lot of questions of space and time which require a large data base.

Botts is married and has two children, ages 8 and 12.



Amel Bakita/Collegian Photo Coordinator

Faculty Profile of the Week: Dr. Pamela S. Botts

Plastics Department Receives Accreditation



Jeff Zimmerman/Contributing Photographer

So this is what they do...: A student prepares an item for further work in the Plastics Lab. The lab is located downstairs in the Hammerrill Building.

by Terry Rucker
Collegian Staff

The plastics engineering technology baccalaureate degree program at Behrend was recently accredited by the Technology Accreditation Board (TAB) of the Accreditation Board for Engineering Technology (ABET).

Behrend is only the second of its kind in the United States to receive accreditation from ABET.

TAB evaluated the program by sending a field team to interview faculty, student administration, and board. The team reviewed the laboratories, the library, and the computer room. They also evaluated the facilities and the curriculum.

With the accreditation of plastics engineering technology, the ABET reaccredited Behrend's four-year mechanical engineering technology and electrical engineering technology programs, making all five engineering programs accredited.

Dr. Richard Progelhof, director of the School of Engineering and Engineering Technology believes the accreditation was the result of a group effort.

"Our accreditation is an indication that the combined efforts of the plastics technology faculty and the regional plastics industry result in a high-quality

education for Penn State-Behrend students," Progelhof said.

"I am committed to seeing that all the programs are accredited by ABET," Progelhof said. "It signifies that we are offering high-quality programs."

Students also have comments about the plastics program.

Jesse Shrock, senior plastics major, said, "It's a really flexible program. It lets you pick what you want to specialize in. The students decide what type of research projects they want to work on, and the professor guides the idea along."

Greg Dunham, another senior plastics major, agrees, "I can say it's an excellent program. It's difficult and time-consuming, but it's worth it."

Since 1988, plastics engineering technology graduates have received 100 percent job placements and one of the highest starting salaries university-wide.

Shrock attests to the success of the graduates.

"Students also make contacts within the industry which ensures quality jobs for them in the future."

The only other accredited plastics engineering technology program in the country is at the Pittsburg State University, Pittsburg, Kansas.