[GSCI164] physical science: learning through teaching

karlyn**williams** // writer

Instead of spending class listening to lectures and taking endless notes, students in GSCI 164: Physical Science - Learning Through Teaching learned how to teach science concepts by using hands-on techniques.

Sophomore Miranda Lojek had asked Professor Nicole Radziwill to teach this course in the spring because Lojek had enjoyed her teaching style during the fall semester.

"She gets on a personal yet still professional level with her students," said Lojek. "She does her very best to make herself available for her students. She's willing to Skype, text, call, e-mail or whatever is easiest for the student."

Though the spring was Radziwill's first time teaching this course, she had taught all the enrolled students during her first semester at the university in the fall.

"I know them all from before, so we can get started full force," said Radziwill. "It's nice because it is only an eight-week course."

For the first few weeks, Radziwill reviewed a few basic concepts with her students, who were all Interdisciplinary Liberal Studies (IdLS) majors. Then Radziwill stepped back, and the students taught the course. Their major project was to pick a topic, create a lesson plan and find a way to effectively demonstrate that concept to the rest of the group.

"Professor Radziwill leaves the assignments very open," said sophomore Katie Putnick. "We are able to take our own ideas and run with them."

The class only had 12 students, which made it easier for Radziwill to focus on the students' specific needs. Junior Vanessa Dunn enrolled in the course because she hoped to understand the concepts in physics better.

"Physics is not my strongest subject," said Dunn. "I want to be able to better understand so I can feel confident when teaching."

Radziwill encouraged students to adopt a hands-on approach to teaching and learning so they could begin thinking outside the box when they created their own lesson plans.

"In 10 years down the road, I want them to remember and internalize the fundamental concepts through memorable experiences in class," said Radziwill.

Since they were learning about momentum in the beginning of the course, Radziwill took the class to play pool in order to learn about the effect of mass and velocity on the momentum of the pool balls.

"In my opinion, this is a much better alternative to sitting in class and working through sample problems," said Putnick. "We are actually able to see the reasons behind the formulas."

After the students' lesson plans were completed, Radziwill had a surprise for her students. She published a PDF document of all of the students' work in a book, so that each student had the class' entire collection of lesson plans to use in the future when teaching their own classes. //

Sophomore **Kelly Merle** takes notes during a student-led presentation on thermodynamics. GSCI 164 was a block course that lasted eight weeks, where students taught the last four weeks of the course.
photo // emily**law**

Professor **Nicole Radziwill** sets up a student presentation. In her first year teaching at the university, Radziwill encouraged her students to keep in contact through phone calls, e-mails, texting and even Skyping.
photo // emily**law**





Jade Morse
Chloe Mulliner
Matthew Phillips
Andrew Reese
Alyssa Richardson





Skye Riddle
Corbin Rugh
Kaitlyn Schmit
Emily Senn
Michael Serna





Amy Shadron
Alex Smart
Katlyn Stiedle
Thomas Stokes
Elisabeth Sundin





Ethan Thompson
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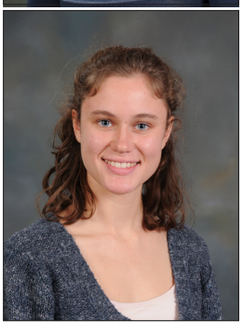
Brock Wallace

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