

Regional

Jones seeks to engage students in chemistry

Some people think of chemistry as difficult and even dangerous, a field for which only a very few are inclined. Myron Jones sees it differently and successfully engages students in this branch of science.

Jones was born in Winchester, Tenn., and obtained his bachelor's degree in chemistry from the University of Tennessee at Chattanooga, his master's also in chemistry from Middle Tennessee State University and his doctorate in analytical chemistry from the University of Oklahoma. Today he teaches at Southern Illinois University Edwardsville.

Jones did not think of becoming a chemist when he went to college to study engineering. But he met Greg Grant, his undergraduate professor in chemistry, and his career path — and life — changed course.

"He basically watched me progress through his classes, and one day he came up to me and asked if I wanted to be a teaching assistant for him," Jones said. "And I didn't think that I had what it took to be a teaching assistant but he encouraged me to do that and I became a teaching assistant. I helped him during his labs and just got excited about helping students because I noticed when I explained things to them they would have an 'aha' moment and I was very excited about that."

That experience taught him about the impact that a good mentor can have on students. "The way that my mentor worked with us, he would never give us a direct answer to questions we had," Jones said. "He would always ask us questions and draw the answer out of us and so I think when a student comes to me and asks me a question the first thing I do is ask them, 'What have you done so far?' and then I will ask them questions to try and find out where they are on that particular subject. I am trying to explain to them through that process as opposed to me just simply telling them that answer. They can always go look an answer up in a book."



Dr. Myron Jones in his lab.

One of the barriers he said he has to overcome with his students is that most of them see chemistry as a hard subject. He said that he works to instill in them the idea that it is also fun and it is also practical, an idea he said should begin in high school chemistry classes. He said that high school chemistry teachers should approach the subject as more

than the simple memorization of equations, "but that the equations grow out of the material," he said. "And if they can see how the equations connect to the material I think it would be more fun for them."

He sees chemistry as a science that helps students to train their minds in beneficial ways, regardless of what they

later pursue in life.

"Chemistry is a very good subject to major in for lots of different careers," Jones said. "I have friends who were chemistry majors with me in college. Some of them are medical doctors. Some are lawyers. Patent law is a big area that you can go into if you are a chemistry major. So I think chemistry is a good,

Aldemaro Romero College Talk

broad subject area that you can use for lots of different careers."

On whether students prefer the basic or the applied side of chemistry, Jones has clear-cut opinions. "Students like applications," Jones explained. "They like to see why what they are learning is important. I think perhaps one of the hardest things for me to do is to find a way of teaching through an application. The content is important, but if you can find a way to engage them throughout the applications it is helpful."

When parents question him about why their kids should study chemistry, he has a very straightforward answer. "A good solid chemistry degree can help you in any field you want to go into if it is in the sciences or even outside of the sciences," he said. "So I think it depends on the person I am talking to and what their interest is as to what I can come up with to tell them."

Further, he sees good job opportunities for people with a chemistry degree.

"For chemists themselves, chemists can be involved in medicine, making pharmaceuticals. They can be involved in teaching. There are lots of different areas that people can go into."

Regardless of what his students decide to do with their careers, while they are in his class Jones works to keep them engaged. "I want to have some people in my laboratory to work on the projects that I have lined up," Jones said. "The details will come out as I work with the students."

Aldemaro Romero is the Dean of the College of Arts and Sciences at Southern Illinois University Edwardsville. His show, "Segue," can be heard every Sunday morning at 9 a.m. on WSEI, 88.7 FM. He can be reached at College_Arts_Sciences@siue.edu.

Shan Lu/SIUe