

Department of Mathematics and Statistics Colloquium

Science and Mathematics Learning

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Abstract: Many scientists and engineers consider mathematics as a tool to help them solve the problems they are working on or to help them determine patterns in the process or system they are studying. However, mathematics is also a language with specific rules and because of this we can extend the language using the rules to learn more mathematics. This process not only helps us learn more mathematics, but also helps us to learn more science and to do better engineering. The interaction of science, engineering and mathematics helps us to learn more about ourselves, our societies, our world, our earth and universe. Most of the dynamical interactions and patterns in our universe obey some mathematical pattern or piece of mathematical language. By mathematics, I also include statistics, probability and logic.

In this talk I will discuss my philosophies and beliefs on how the Science and Mathematics Learning Center can assist in helping not only science and engineering majors become better at mathematics, but also increase the importance of knowing mathematics to advance STEM (Science, Technology, Engineering, Mathematics) across the JMU campus and increase the success rate of our students in STEM. I will discuss some of the STEM projects I have been involved in over the years at JMU and some of the ways I tried to increase the use of science and mathematics across the JMU campus.

I will present ideas through the number systems we commonly use. Through these number systems, I will also discuss how the SMLC and the Department of Mathematics and Statistics can work together to increase the learning of mathematics across the JMU campus.

Monday, February 11 at 3:50 in Roop 103

Refreshments at 3:30