

Department of Mathematics and Statistics Colloquium

**The Art of Teaching
Discovery Learning
(A tribute to G. Edgar Parker)**

Jim Sochacki, JMU

Abstract: G. Edgar Parker was a topologist in our department who had a different language for talking mathematics. One of the reasons he formed this language was that he wanted his students to have to discover great mathematical ideas on their own. Some students and some faculty members enjoyed his teaching style and language and some abhorred it. However, because he wanted to discover things without using textbooks, he made a beautiful observation. He shared this observation with most of his colleagues at JMU and his students. This observation led to his colleagues looking at differential equations in another way. This led faculty and students in our department to discover new methods for solving and analyzing differential equations. Several faculty members in our department discovered a whole unexplored history for differential equations. Others have met researchers in differential equations they may have not met. I will discuss his beautiful observation and how it impacted our department and how Edgar was able to get many faculty and students to work on this problem. I will also talk about where the idea has led many of us in the department and a question that he asked that many researchers are now trying to solve.

**Monday, September 16 at 3:45 in Roop 103
refreshments at 3:30**