



University of
Central Arkansas™

UCA Research in STEM Education Seminar

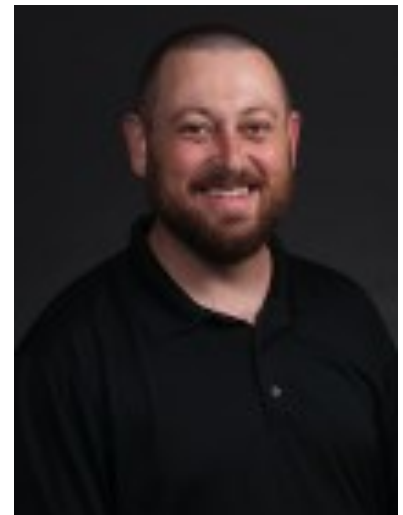
Speaker: Dr. Matthew Thomas

Title: Analyzing Interactively-Engaged
Instruction and Conceptual Gains in
Introductory Calculus

Date: Friday, April 4, 2014

Time: 1:00-2:00 p.m.

Place: MCS 220



**REFRESHMENTS WILL BE SERVED PRIOR TO
THE SEMINAR**

Abstract: Instruments called concept inventories are being used to investigate students' conceptual knowledge of topics in STEM fields, including calculus. One interactive instructional style called Interactive-Engagement has been shown to improve students' gains on such instruments in physics. In this talk, I will discuss the development of a video coding protocol which was used to analyze the level of Interactive-Engagement in calculus classes and investigate the correlation with gains in conceptual understanding as measured by the Calculus Concept Inventory. I will discuss preliminary results as well as current work, and there will be plenty of time for discussion.