

1145-R1-2959 **Andrew J Krause** (krausea3@msu.edu), **Ryan J Maccombs*** (maccomb1@msu.edu), **Willie W Wong** and **Mark Iwen**. *Case study of MATLAB integration in Calculus II: Insights and Improvements*. Preliminary report.

Traditionally Calculus II this has been a course focused on integration techniques and methods for determining if a series converges which is arguably becoming less important in the age of computers. To help prepare our students for 21st Century problems we have begun piloting another model for Calculus II in which students utilize MATLAB and complete lab assignments, developed by two of our faculty, during small (35person / 50 min) recitation sections. We have completed Quantitative comparison of content-knowledge learning outcomes, surveyed student experiences, and held interviews of participating students. During this session we will explore the specific labs, go over results of our analysis, and state how we plan to move forward with the lessons learned from this experiment. (Received September 25, 2018)