

1116-G5-2218 **Erin M McNicholas*** (emcnicho@willamette.edu), 900 State St, Salem, OR 97301.
Quantitative Reasoning and Modeling in a One-Semester Calculus Course.

Five years ago the Willamette mathematics faculty redesigned our calculus offerings to reflect the current need and demand for a meaningful one-semester applied calculus course that focuses on quantitative reasoning and modeling with real-world data. We have offered Modeling with Calculus for the past four years with much success (as measured by student satisfaction and reports from graduates who have gone on to use methods and ideas from our course in other contexts). A hallmark of the course is its focus on experiential learning through the completion of two open-ended projects involving the analysis of data using RStudio. In this talk I will discuss the design and implementation of our course, challenges we have encountered, and our success incorporating RStudio labs, projects, and in-class explorations. (Received September 22, 2015)