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Victoria Brown, Adam Childers, Jan Minton, Hannah Robbins* (robbins@roanoke.edu),
Kristin Emrich and **David Taylor**. *Curing the High DFW Rate in First Year
Calculus*. Preliminary report.

Our department recently restructured our first calculus course to address the fact that it has perennially had one of the highest DFW rates at the college. Our solution was to offer both a one semester and a two semester version of calculus 1. Both versions cover the same calculus material as our previous calculus 1 course, and the two semester version also contains just-in-time algebra review. We use a placement test, along with SAT math scores and high school GPAs, to place students into the appropriate version. Additionally, we allow students to switch from the one semester version back to the two semester version after the first test.

The goal of our study is to see how successful this new course structure is in helping students succeed in first and second year calculus. We collected and analyzed students' grades, placement test scores, and final exams in the first two years of the restructured course, and compared them to data from the last year of our old version of calculus. Additionally, we collected grades for those students who continued on into our second calculus course. In this talk, we will give details about implementing this new calculus curriculum and discuss the preliminary results of our assessment. (Received August 31, 2016)