1067 - V1 - 2119

Erin Terwilleger Mullen* (erin.terwilleger@uconn.edu), Department of Mathematics, U-3009, University of Connecticut, Storrs, CT 06269, and Amit Savkar (amit.savkar@uconn.edu), Department of Mathematics, U-3009, University of Connecticut, Storrs, CT 06269. A comparison of two paths in college level calculus. Preliminary report.

The department of Mathematics at the University of Connecticut recently restructured its first year calculus sequence. There are now two paths the students can take; first is the traditional Calculus I course, and second is a slower two semester sequence which covers the same material with more emphasis on precalculus. Both of these lead into a traditional Calculus II. The goal of this research is to compare the student learning of calculus in these two different paths and how it affects performance in Calculus II. In addition, we will study the impact of students' previous math experience in high school on their performance in college level calculus.

To assess the student learning in these two pathways, we will compare the grades of the students on common questions on the final exam. We intend to understand the students' perception of their learning by comparing knowledge surveys given and the beginning and end of the semester. To assess the performance of the two populations in Calculus II, we are using a pre-test over Calculus I material given at the beginning of the semester and questions on the final exam. This past spring we collected the initial set of data of the four semester long project, and we will give preliminary results. (Received September 22, 2010)