

1086-VB-398 **Alison Ahlgren*** (aahlgren@illinois.edu), Department of Mathematics, 1409 West Green Street, Urbana, IL 61801, and **Marc Harper** (marcharper@ucla.edu). *The Impact of Arithmetic Skills on Success in Calculus II and III*. Preliminary report.

We discuss correlations between failure in traditional second semester and multivariate calculus courses with a lack of basic arithmetical skills, indicated by performance on an ALEKS assessment. In particular, we will discuss the relationship between initial arithmetic performance measured in terms of skills from precalculus and earlier subjects (no calculus) and final course grades for approximately 1000 students for two years with data derived from the placement program at the University of Illinois. We will also discuss specific items/skills for which the lack of is highly correlated with course failure. (Received August 29, 2012)