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Geoffrey Kuhlmann* (Geoffrey.Kuhlmann@usma.edu), Department of Mathematical Sciences, United States Military Academy, 646 Swift Road, West Point, NY 10996, and Gerald Kobylski, Alex Heidenberg and Jack Picciuto. A Course BEFORE Calculus, but not necessarily BELOW Calculus, Continued Growth and Evolution. Preliminary report.

Under a grant from the NSF, the USMA math curriculum has been changing to better meet the future needs of its students. As part of the curriculum shift, all incoming freshman begin their mathematics sequence with a course in modeling and problem solving. The course emphasizes using effective problem solving strategies and modeling theory to solve complex and often ill-defined problems. It nurtures creativity, critical thinking, and exploits technological tools that enhance an understanding of data analysis. The course provides a nice transition from the HS curriculum to the environment of the college classroom. Last year we gave a presentation that included implementation issues for the course, faculty development, and the initial assessment results of student achievement and attitudes. This presentation will build on last year's by first focusing on topics that we added and deleted from the course and the rationale behind those changes. We will also discuss our continuing assessment of faculty development as well student attitudes and achievement. Also addressed will be the use of our on-line book that was developed in order to cover the addressed topics. The presentation will conclude with thoughts on the future direction of the course. (Received September 27, 2005)