Heather Stevenson\* (Heather.Stevenson@usma.edu), Department of Mathematical Sciences, United States Military Academy, West Point, NY 10928, and Gerald Kobylski. Assessing Critical Thinking Skills While Improving Student Confidence in a Pre-Calculus College

Course. Preliminary report.

The USMA math curriculum has been changing to better meet the future needs of its students. All incoming freshmen now begin their mathematics sequence with a course in modeling and problem solving. The course emphasizes using 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. This presentation will focus on our continuing assessment of student preparation and their attitudes toward the course. We have found that students are very uneasy when they prepare for the assessment of their creativity and critical thinking skills because there is not a defined set of problems they can study, rehearse or memorize. We discuss this feeling of uneasiness as well as our methods to reduce these feelings. We will also discuss the students' achievement in the course by reviewing our assessment techniques that are based on the course's goals. Our presentation will conclude with the direction of the course in the future based on our initial assessments. (Received September 28, 2005)