Robert E. Burks Jr.* (robert.burks@usma.edu), 211B Barry Road, West Point, NY 10996.

"Rock Math" - Helping Under-prepared Students make the Transition to College Mathematics.

The United States Military Academy’s math curriculum is continually evolving to better meet the future needs of its students. All students entering the Academy, regardless of major, are required to take a two year four semester mathematics sequence which includes single, multi-variable Calculus, and Probability and Statistics. However, every year approximately 5 percent of the freshmen enter under-prepared for success in the school’s math sequence. These students are enrolled in a year long introductory mathematics course affectionately referred to by the students as "Rock Math". This course is designed to alleviate student math-anxiety, the fear of math, and develop organizational and learning skills, while nurturing student creativity, critical thinking, and application of technological tools in a problem solving environment. This presentation focuses on the structure of the course, classroom practices and techniques to prepare our students for success in future math and engineering classes, and an assessment of outcomes. (Received September 15, 2008)