So You Want to Be an Engineering Major but You’re Afraid of Math.

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 are required to take a two year mathematics sequence, which includes both Calculus and Probability and Statistics, regardless of their expected major or field of study. However, every year approximately 5 percent of the freshmen enter under-prepared for success in the school’s math sequence or its core engineering and science classes. These students are enrolled in an introductory mathematics course that is designed to alleviate their math-anxiety and fear of math while nurturing their creativity, critical thinking, and application of technological tools in a problem solving environment. The course serves as a foundation for success in future math and engineering courses, with over 50 percent of the enrolled students ultimately selecting a math, science or engineering major. 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. (Received September 19, 2007)