

1014-L1-622

**William P. Fox** (bfox@fmarion.edu), Department of Mathematics, Francis Marion University, Florence, SC 29501, and **Richard West\*** (rwest@fmarion.edu), Department of Mathematics, Francis Marion University, Florence, SC 29501. *Introductory Mathematical Modeling and Problem Solving Courses with Interdisciplinary Applications in College Algebra as a General Education Mathematics Course*. Preliminary report.

"Would you be proud to say that a student finished college only with our traditional algebra skills as their general education mathematics?" and "What mathematical skills and problem solving skills are essential to today's minimal success in the real world?" The second issue was could a course such as this be used as a bridge for students to take solid follow on mathematics courses, like calculus. Based on some of our answers, we established a two-course alternative sequence that uses problem solving, real world applications and interdisciplinary projects to motivate the college algebra and enhance the learning of skills. We integrated real-world problems in the form of projects, applications, and activities to motivate students to better understand the basic principles of algebra. Performance improved and feedback from most of the students was positive. Based on the overall positive experience, these two new freshmen algebra courses have become prerequisites to other mathematics courses instead of just terminal courses. (Received September 21, 2005)