1014-G1-621 William P. Fox* (bfox@fmarion.edu), Department of Mathematics, Francis Marion University, Florence, SC 29501, and Richard D West (rwest@fmarion.edu), Department of Mathematics, Francis Marion University, Florence, SC 29501. Beginning with a 21st Century View: Mathematical Modeling and Problem Solving Courses with Interdisciplinary Applications in College Algebra. Preliminary report.

Developing problem-solving skills in the modeling sense is a central component in refocusing our modeling and problem solving courses to emphasize process, conceptual understanding, and student growth. We established a two-course alternative sequence that uses problem solving, real applications, and interdisciplinary projects to motivate the use of college algebra. Our emphasis is on the use of these algebraic techniques and not necessarily on memorizing the basic 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. Technology is a major part of our course work. In this talk, we will discuss these problem solving courses, our interdisciplinary projects, our integration of technology, and our assessment strategies that will be used in our General Education Assessment Initiative in preparing for SACS. (Received September 21, 2005)