

1046-C1-1941 **Xuhui Li*** (xli2@csulb.edu), 1250 Bellflower Blvd, Department of Mathematics, California State University - Long Beach, Long Beach, CA 90840. *Make College Algebra More Meaningful for Non-Calculus-Bound Majors.*

In Fall 2007 the math department at California State University – Long Beach started to offer MATH 109, Modeling with Algebra, as the last General Education math requirement for social science majors, health professionals and others that use algebraic language at a moderately technical level. The main goal is to provide an exposure to the usefulness of algebra in real world situations without demanding all the symbolic dexterity required from calculus-bound students. The expected learning outcomes include: 1. Formulate real world situations in mathematical forms, including graphs, tables, diagrams or equations, and in words. 2. Execute symbolic manipulations and computations in order to solve a posed problem. 3. Recognize and be able to combine and evaluate fundamental mathematical expressions and functions such as polynomials and exponentials. 4. Interpret the mathematical result about real world situations derived mathematically. Besides regular homework, quizzes and exams, the course assessment also included essay-writing and other open-ended questions, and group poster projects. An end-of-course survey revealed that MATH 109 students had a more favorable attitude towards the meaningfulness and usefulness of algebra than those in calculus-bound algebra sessions. (Received September 16, 2008)