Martha J. Siegel* (msiegel@towson.edu), Mathematics Department, Towson University, 8000 York Road, Towson, MD 21252. Helping Students "Function in the Real World".

We discuss the goals and outcomes of a pre-calculus course that emphasizes active learning for mastery of basic pre-calculus mathematical concepts. STEM students are asked to work in teams on real world problems requiring graphical, numerical, and symbolic analysis. They tackle problems in biology, chemistry, and physics that require their understanding of the fundamental mathematical ideas in pre-calculus. In a natural setting, the concepts are shown to be essential tools for solving typical problems in STEM areas. (Received September 15, 2016)