1135-C1-1020   **David M McClendon*** (`mcclend2@ferris.edu`), Department of Mathematics, ASC 2021, Big Rapids, MI 49307. *A thematic linear algebra course focused on four problems of the form* $T(x) = b$. Preliminary report.

Past assessment from our linear algebra course at Ferris State University reveals that our students were very competent at performing linear algebra computations (row reductions, matrix multiplication, etc.) but weak at demonstrating understanding of linear algebra terminology and theory.

To address this issue, I developed a linear algebra course centered around four "key" problems: a traditional system of linear equations, an indefinite integral, a linear differential equation, a problem asking for an equation of a curve which best fits some data. Throughout the semester, the terminology and theory of linear algebra is developed as a mechanism to observe similarities between these problems. In this talk, I'll discuss more about the structure of this course, and reveal some of its successes. (Received September 18, 2017)