

1056-G1-856

Matt Boelkins* (boelkinm@gvsu.edu), Department of Mathematics, A2178 Mackinac Hall, Grand Valley State University, Allendale, MI 49401. *Learning the Language of Linear Algebra: Using Reading Assignments to Immerse Students in Terminology and Ideas.*

Imagine being an average college sophomore encountering linear algebra for the first time. Sometime in the second week of class, after already seeing and hearing a variety of new ideas, terms, and perspectives that seem remarkably different from calculus, you experience a class in which phrases like “linearly independent set”, “linearly dependent set”, “span of the set V ”, and “linear combination of the columns of A ” are being used frequently by the instructor. The number of terms alone is overwhelming, and the discussion in class feels less and less helpful. While it should probably occur to you to read the book in advance of class, it is hard to require this habit of yourself, and it is perhaps not apparent how useful this might be.

In this talk, we will describe a structured approach to teaching linear algebra centered on the use of daily reading assignments in advance of class. Specifically, we’ll consider the motivation behind this approach, some of the many resulting benefits of these assignments, and practical issues involved from the instructor’s point of view. (Received September 18, 2009)