David Mazur* (dmazur@wnec.edu), Department of Mathematics, Western New England College, 1215 Wilbraham Road, Springfield, MA 01119. One course to serve them all: mathematicians, computer scientists, and engineers.

Linear algebra courses serve many disciplines but therein lies the challenge. Math majors are familiar with proof and abstraction yet might not have the background to understand the latest application areas. Computer science majors enjoy applications such as image compression, graphics, and search engine design but it takes precious class time to introduce these topics to everyone else. Engineering majors often have no proof-writing experience and have their own set of applications of interest. How can all three groups be effectively served by one course? We highlight some concrete ways that we have overcome these challenges in teaching undergraduate linear algebra. (Received September 22, 2009)