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Dan Seth* (dseth@wtamu.edu), Department of Math, Chemistry and Physics, WTAMU Box 60787, Canyon, TX 79016. The incorporation of weekly laboratory explorations with MATLAB in the Linear Algebra Curriculum. Preliminary report.

The MATLAB program has been integrated into undergraduate Linear Algebra at WTAMU the past 5 years. The course has been taught in a computer classroom. However, the plethora of software and on-line sites is increasingly a distraction to learning. Beginning fall 2011 the class format was modified to include a weekly lab in a computer classroom with the other days in a "smart" classroom. Friday labs include: solving systems of equations with MATLAB, balancing chemical equations, linear combinations and rank, visualizations of spanning space and vector or matrix norms, DE's and linear algebra, diagonalization, and least squares. Classroom attentiveness, retention and the comprehension of theoretical concepts have improved. Students like the lab format and have indicated it helps them learn. We will discuss the format change, address effective enhanced learning through technology labs, and present a cool lab or two. (Received September 03, 2012)