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Enhanced student learning and attitudes with weekly MATLAB explorations. Preliminary report.

The MATLAB program has been integrated into Linear Algebra at WTAMU the past six years. The past three years the class format has been restructured to include a weekly MATLAB exploration/lab. The labs implemented over the past 3 semesters incorporate experience with lab materials used over the past 12+ semesters that have been effective. The labs fit topical coverage of an introductory Linear Algebra course. Students are introduced to MATLAB tools and explore or visualize theories. With the encouragement and technical support of Wiley, the labs have a uniform accessible look with streamlined content. The presentation will illustrate tools developed to visualize linear combinations and span and a lab on visualization of the actions of linear operators. Incorporation of the labs has enhanced learning and improved retention. Assessment of added learning and improved attitudes due to student experience with the labs was completed through pre/post course reflection and feedback surveys. Results will be presented. (Received August 07, 2014)