962-K1-488 Constant J Goutziers\* (GoutziCJ@oneonta.edu), Department of Mathematical Sciences, SUNY, College at Oneonta, Oneonta, NY 13820. Local implementation of the Boston University ODE project and the ATLAST initiative in Linear Algebra.

This paper describes implementation within the Oneonta curriculum of the ideas of the Boston University Ordinary Differential Equations Project and the ATLAST initiative for Linear Algebra. We adapted these programs in the following way: In stead of using IDE, we support the Blanchard, Devaney and Hall textbook with Maple, and in our two semester Linear Algebra sequence we have combined the ATLAST materials with Gilbert Strang's book. In the Ordinary Differential Equations course, the goal is to present an overview of qualitative, numeric and analytic techniques. Students are expected to visualize differential equations and their solutions, through slope fields, vector fields, graphs of solutions and solution curves in the phase plane, and apply all of these tools to obtain a better understanding of the behavior of the solutions. In Linear Algebra the central items are linear systems and eigenvalues. In a two-semester sequence, we aim to cultivate the students understanding of these items and enhance their appreciation of the elaborate mathematics involved. The ATLAST materials provide a rich collection of modeling examples, which serve as a window to the extensive way linear algebra is used in science and industry. (Received September 14, 2000)