962-J1-221 **Dean E Allison\*** (deallis@bentley.unco.edu), Department of Mathematical Sciences, University of Northern Colorado, Greeley, CO 80639. Effective Uses of a Computer Algebra System in a Differential Equations Course. Preliminary report.

My experiences over four semesters with a computer algebra system in a differential equations course has convinced me that the use of a CAS in such a course greatly enhances the students' learning. I have used Mathematica and VisualDSolve, a commercially available add-on package, in an introductory ordinary differential equations course for these four semesters. I will discuss the specific uses of the software, with examples of how it is used on homework assignments and projects. In addition, I will discuss successes and lessons learned about effective ways to use the technology. (Received August 29, 2000)