

Meeting: 1000, Albuquerque, New Mexico, SS 16A, Special Session on Mathematics for Secondary Teachers: Curriculum and Assessment

1000-97-44 **Gary A Harris*** (g.harris@ttu.,edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409. *Computer Algebra Systems in the Preparation of Middle School and High School Mathematics Teachers.*

There can be little doubt that the availability of computer algebra systems is having, and will continue to have, fundamental impact on mathematics education at all levels; not only on how mathematics is taught, but also on what mathematics is taught. Therefore it is critical that future teachers of mathematics receive ample experience with the use of these systems, and we believe the best place to gain that experience is in their own learning of the mathematics they eventually will be teaching. To this end we have developed two lab-based, capstone mathematics courses centered around MAPLE worksheets. One course is required of all students preparing to teach middle school mathematics and the other of all students preparing to teach high school mathematics. In this presentation we describe these two courses. The description will include a discussion of our rationale for the development of these courses, our assessment of their impact to date, and examples of materials from the worksheets. (Received August 04, 2004)