Kimberly J Presser* (kjpres@ship.edu), Shippensburg University, Department of Mathematics, Shippensburg, PA 17257, Katherine G McGivney (kgmcgi@ship.edu), Shippensburg University, Department of Mathematics, Shippensburg, PA 17257, and Thomas A Evitts (taevit@ship.edu), Shippensburg University, Department of Mathematics, Shippensburg, PA 17257. Balancing Mathematical Content with Practical Application to the Classroom in Mathematics Cluster Courses for a Masters Program in Curriculum and Instruction. Preliminary report.

This talk will focus on the activities and materials developed for new graduate courses in mathematics developed for the Mathematics Cluster of a Masters in Education in Curriculum and Instruction Program at Shippensburg University. A team consisting of mathematics professors, mathematics education professors, high school teachers and middle school teachers collaborated to plan the courses and develop classroom materials. This project was funded through a National Science Foundation (NSF) sponsored Collaborative for Excellence in Teacher Preparation in Pennsylvania (CETP-PA) Level II Grant. The goal of the project was to develop courses which contain significant mathematical content while at the same time relate directly back to applications in the middle and high school mathematics curriculum. The two courses developed so far are Algebra for Teachers of Mathematics and Concepts of Calculus. Samples of the materials developed will be available for session participants. (Received September 23, 2005)