

1056-N1-1699      **Diana White\*** ([diana.white@ucdenver.edu](mailto:diana.white@ucdenver.edu)), University of Colorado Denver, Campus Box 170, P.O. Box 173364, Denver, CO 80217-3364. *A course in Mathematical Knowledge for Teaching for pre-service secondary teachers.*

To effectively teach algebra, teachers must be proficient with the algebraic thinking that arises naturally in the material that students learn before algebra. In this talk, we discuss an innovative course in Mathematical Knowledge for Teaching for pre-service secondary math teachers. The course was co-taught by a mathematician and a high-school teacher, and course topics focused on number and operation as well as geometry at the middle level. Algebraic thinking was a recurrent theme, and connections to algebra were continually emphasized. We discuss course design and implementation, and both quantitative and qualitative data that was collected in a pre-post format. (Received September 22, 2009)