1056-N1-36 Ira J Papick* (ipapick2@math.unl.edu), Mathematics Department, 203 Avery Hall, University of Nebraska-Lincoln, Lincoln, NE 68588, and Jim Lewis (wlewis1@math.unl.edu), Mathematics Department, 203 Avery Hall, University of Nebraska-Lincoln, Lincoln, NE 68588. Algebra for Algebra Teachers. Preliminary report.

Algebra for Algebra Teachers is part of a 3-course, 9 credit hour graduate integrated sequence that assists practicing Algebra teachers in becoming master Algebra teachers with special strengths in algebraic thinking and knowledge for teaching algebra to middle/high school students. The main goal of the course is to help teachers better understand the conceptual underpinnings of school algebra, and how to leverage that understanding into improved classroom practice. Emphasis will be placed on developing the habits of mind of a mathematical thinker.

During a 2-week summer institute, teacher participants take 2 integrated 3 credit hour graduate courses: Algebra for Algebra Teachers and Seminar in Educational Psychology: Cognition, Motivation, and Instruction for Algebra Teachers. In the academic year following their participation in the summer institute, teachers will return to the classroom and work with an instructional coach or teaching mentor as they strive to transfer knowledge gained in the summer institute into improved classroom practice. To complete the sequence, participants take a 3 credit hour yearlong pedagogy practicum course focused on enhancing their ability to teach algebra to all students and to becoming a reflective practitioner. (Received July 07, 2009)