Jim Fulmer* (jrfulmer@ualr.edu) and Tom McMillan (tcmcmillan@ualr.edu). Teaching an Introduction to Proof Course Using Inquiry-Based Learning.

This presentation describes an inquiry-based course pioneered at the University of Arkansas at Little Rock. Two mathematics department faculty members team-taught the course, Introduction to Proof, which was offered as a Selected Topics course, with a prerequisite of Calculus I. Our talk will cover warm-up activities (challenge problems to get the students comfortable working together), and the approaches we used in class to encourage students to write their proofs and to gain confidence in their abilities to communicate with others. The primary textbook for the course was the set of class notes, Introduction to Proof, by Ron Taylor of Berry College. The course was a trial run, which proved successful. As a result, Introduction to Proof, MATH 2350, will be required at the sophomore level for all mathematics majors beginning fall semester 2012. The authors express their appreciation to the Educational Advancement Foundation for financial support, and to Mike Starbird and his colleagues at the University of Texas at Austin for generously allowing us to attend well established and well designed inquiry based learning classes. (Received September 25, 2012)