John C.D. Diamantopoulos* (diamantj@nsuok.edu) and Cynthia Huffman Woodburn (cwoodburn@pittstate.edu). Techniques from the Ancients for Verification of Right Angles.

Right angles have played an important role as long as there has been architecture, construction and surveying. In this presentation, we’ll take a look at several ways that ancient peoples used basic, readily available materials such as knotted cords and pegs to lay out right angles prior to the advent of more technological tools. Methods will range from the well-known use of a 3-4-5 triangle by the Egyptians to a lesser-known Mayan technique involving three equilateral triangles. The various techniques will be shown via a hands-on demonstration that can easily be adapted for classroom use. We’ll also show videos of successful implementation with a high school audience. (Received July 23, 2013)