

1106-H1-69

Annalisa Crannell* (annalisa.crannell@fandm.edu), PA, and **Marc Frantz** and **Fumiko Futamura**. *Desargues's Theorem and drawing shadows: a discovery-based approach.*

Projective Geometry applied to Perspective Art is an inquiry-based course designed for sophomore- and junior-level mathematics majors. This talk highlights two of the modules we have developed for this course. The first module has students devise, explore, and compare solutions to an art problem: how to draw the shadow of the letter 'A' using ruler, pencil, and eraser. From there, students investigate the geometry of projected triangles via *Geogebra* to discover Desargues's Theorem. The second module uses a modified Moore method approach to lead students toward a rigorous proof of Desargues's theorem. (Received June 26, 2014)