Jessica L Williams* (jessica.williams@converse.edu), 580 East Main Street, Converse College, Spartanburg, SC 29302. Effects of Active Learning Techniques on Precalculus Students' Beliefs. Preliminary report.

The enrollment of a precalculus course often consists of a mix of students completing precalculus as a terminal math course and potential STEM majors completing the course as preparation for calculus. Encouraged by research supporting the effectiveness of active learning and inquiry-based learning techniques on both student learning and attitudes, a study was conducted in a precalculus course at a small college. A comparison is made between a lecture-based section and a section incorporating a variety of active learning techniques, with simultaneous evaluation of potential STEM majors and non-STEM majors. Structure of the overall course, breakdowns of lecture time versus active time, and individual activities will be discussed. Evidence presented will include data and commentary regarding changes in beliefs and attitudes surrounding the study of mathematics. This data is gathered from pre- and post- course surveys in addition to surveys regarding specific activities. (Received September 19, 2016)