Matthew J Haines* (haines@augsburg.edu), 2211 Riverside Ave, Department of Mathematics and Statistics, Minneapolis, MN 55454. Challenge Investigations in a Sophomore/Junior-Level Geometry Course. Preliminary report.

In a course where the students meet once a week, small groups are formed to examine weekly challenge investigations. One or two online postings per week are performed to stimulate discussion about the problem. At the start of the weekly class session, the groups meet to discuss their work from the week and report to the class the progress made. Two of the learning objectives are to build students' communication of mathematical ideas and practice problem solving skills in a low-stakes environment. Past implementation has produced mixed but promising success. (Received September 20, 2016)