1154-E5-2624 **Lucas Castle*** (castlelc@vmi.edu). *Art Gallery Design: Where's the Math in That?!?* Preliminary report.

As part of a general education math course, we task students with designing a large art exhibit. This assignment, developed in conjunction with an art historian in our English, Rhetoric, and Humanistic Studies department, challenges students to use the math modeling process to navigate arranging 40 pieces of art in a 3D space. In addition to math modeling, this project addresses the mathematical skills of ratios and spatial reasoning, as well as the transferable skills of verbal, written, and visual communication. Rather than prescribe a set format for the submission, students are encouraged to be creative in how they communicate their design concept. As a result, we have seen students submit models made from cardboard, in Minecraft, using AutoCAD, and more! In this talk, we will explain the project, give examples of student submissions, and share feedback from our students. (Received September 17, 2019)