

1077-B1-2486 **Debra L. Hydorn*** (dhydorn@umw.edu), University of Mary Washington, 1301 College Avenue, Fredericksburg, VA 22401. *Fostering Artistic Explorations with Geometer's Sketchpad.*

I have taught a first-year seminar on the mathematics of art and design for several years. For the first of two individual projects for the course students design and produce a tessellation. The second project is "student's choice." Due to the structured nature of the tessellations project, the resulting art is generally of fairly high quality, even though the work is done by hand and some students are less confident in their artistic abilities. Results for the student's choice project, however, have not been as creative, perhaps owing to the open nature of the assignment. After exploring different tools for creating computer-generated art, I decided to try a new project assignment for this course. For this project students use Geometers Sketchpad and, using the same operations they used to create their tessellation, produce geometric digital art. They are encouraged to find geometric patterns and designs that they can mimic using Sketchpad and then explore ways to transform the design. To aide them in learning to use Sketchpad, I have created several videos using Jing that demonstrate the basic functions of Sketchpad and its use to create designs and patterns. Example Jing videos and student projects will be shared in this presentation. (Received September 22, 2011)