

1125-VK-1979      **Ratna Khatri\*** (rkhatri3@masonlive.gmu.edu), George Mason University, Attn: Department of Mathematical Sciences, 4400 University Drive, Fairfax, VA 22030, and **Evelyn Sander** (esander@gmu.edu), George Mason University, Attn: Department of Mathematical Sciences, 4400 University Drive, Fairfax, VA 22030. *Mathematical Education and 3D Printing in the GMU Math Maker Lab*. Preliminary report.

3D Printing is revolutionizing the production industry. It has made prototyping time-saving and accessible to people. In this talk, we present our experiences of using 3D Printing as an instructional tool in mathematics courses. We describe details of how we have successfully incorporated 3D printing in teaching calculus and upper-level undergraduate math courses, in a combination of in-class demonstration materials and hands-on learning. We have also included 3D printing as part of our outreach activities, through which we expose middle and high school children to the application of 3D printing in mathematics. We additionally facilitated the math learning experience of a blind student using 3D printing through the use of tactile graphs. The talk will include examples of 3D printed models which have enhanced student understanding and intuition of mathematical ideas. (Received September 19, 2016)