Keith E Mellinger* (kmelling@umw.edu), University of Mary Washington, 1301 College Avenue, Trinkle Hall, Fredericksburg, VA 22401. The ingredients for a successful liberal arts course in quantitative reasoning. Preliminary report.

Following in the footsteps of Dot Sulock’s inspiring course Reality Math taught at the University of North Carolina Asheville, MATH 120: Quantitative Reasoning for the Sciences has been redesigned at the University of Mary Washington to include inquiry-based learning activities, exploratory writing assignments, and student-led class discussions. This completely non-lecture course appeals to the liberal arts students with units on energy and electricity, health and fitness, and personal finance, along with a healthy emphasis on learning to use quantitative information to strengthen your writing. The talk will explain the delivery of the course, both in an online and a face-to-face environment. We provide many, many examples of the activities used to develop the students’ quantitative skills while simultaneously providing them with concrete examples of how quantitative information can be used to understand contemporary issues such as wind power, carbon emissions, sugar in our diets, interest growth, and firearm deaths. Students leave the course as more informed citizens, able to use quantitative information to better support their own views on these important issues. (Received September 15, 2016)