We will report on our experience designing and teaching "Math for Sustainability", a course for non mathematical majors at Penn State revolving round six key themes of measuring, flowing, networking, changing, risking and deciding. High school algebra is the only mathematical prerequisite and the course is intended for students who need to meet a general education requirement and will not take additional mathematics in future. Student writing and anonymous peer review form a significant component of the course. A textbook with the same title is being published by Springer-Verlag and we hope to have pre-publication copies available at the session as well as at Springer’s booth in the exhibition hall. (Received July 17, 2017)