Harel Barzilai* (hxbarzilai@salisbury.edu), Dept of Mathematics, Salisbury University, 1101 Camden Ave, Salisbury, MD 21801. Quantitative and Citizen Literacy through Key Environmental Issues of our time. Preliminary report.

We describe the curricular development and first-time teaching experience for a 100-level Liberal Arts mathematics course centering on quantitative literacy and environmental topics. The course was taught via activities, group explorations and short readings (including newspaper articles) rather than a textbook, and touched on some of the major environmental challenges of our day, such as climate destabilization and climate feedbacks, Peak Oil, and exponential growth on a finite planet. Curricular materials will be shared which allow authentic quantitative explorations of these issues by students in a General Education course.

Related questions for discussion which arise include: how can relevant real-world examples be used to both motivate the study of, and also to deepen student understanding of, mathematical ideas? How can relevant mathematical ideas be included in a General Education course at a level which is accessible, while still providing students with powerful lenses and tools through which the complex issues in the world around them can be understood throughout their lives as citizens? (Received September 13, 2008)