

1067-Q1-1878 **Lily S. Khadjavi*** (lkhadjavi@lmu.edu), Loyola Marymount University, 1 LMU Drive Suite 2700, Los Angeles, CA 90045, Los Angeles, 90045. *Climate change and the mathematics of sustainability in student projects for calculus and statistics courses.*

The mathematics of sustainability lends itself to bringing real-world questions into the classroom and presents us with an excellent opportunity for students to consider these questions for themselves. Students recognize topics from the news headlines, but rarely have they had the chance to directly analyze data related to these situations.

The goal of this session is to provide concrete resources – including sources of data and background material – so that projects accessible to calculus and statistics students can be easily incorporated into such courses.

Moreover, these projects fit well with growing interest in multidisciplinary work and student writing. In order to effectively use their mathematical tools and tackle problems of sustainability, students must be able to communicate clearly to those outside of their classroom. The talk will focus on specific examples related to climate change and to the BP oil spill. Sample writing assignments will be described, along with background information that students can be given as motivation for their analysis, e.g., international agreements limiting average temperature increase and carbon emissions, or BP's claims about the size of the spill. (Received September 23, 2010)