The spotted lanternfly arrived in Berks County, PA, in 2012 from Asia and has spread outward to neighboring counties and states. Spotted lanternflies are known for damaging trees, grapevines and other agricultural goods by feeding on them and excreting a sticky substance that leads to mold. The SLIMES (Spotted Lanternfly Investigated through Mathematical and Environmental Sciences) program is a two-year program designed to engage area high school students, particularly from underrepresented groups, in scientific and mathematical investigation. Participants will contribute to a lean but growing body of research aimed at reducing the spotted lanternfly population. This talk will discuss the progress of the SLIMES program’s first year as well as the college-readiness aspects of the program intended to encourage high school students from a background of economic need to consider pursuing a STEM-related career. (Received September 17, 2019)