

1145-R5-1739 **Suzanne Sumner*** (ssumner@umw.edu), 1301 College Avenue, Fredericksburg, VA 22401.

Engaging Modeling Students through Epidemiology. Preliminary report.

The University of Mary Washington's "Introduction to Mathematical Modeling" lower-level course is taught to satisfy Quantitative Reasoning and Speaking Intensive general education requirements. The course focuses on two projects that cover curve-fitting to environmental data sets in the first half the semester and using difference equations to model environmental scenarios in the second half. Each of these group projects involves a paper and a poster presentation. A third project covers modeling the spread of disease with an SIR model and difference equations. Students present their research on a disease topic of their choice in an individual presentation. Rather than write another paper, students instead create a brochure about their disease topic, similar to what is distributed at the doctor's office or health department. This assignment allows the students to showcase their research in a creative manner. Overall, this epidemiology project engages students because they find the topic directly relevant to their lives. (Received September 24, 2018)