

1163-M1-1551 **Corban Harwood*** (rharwood@georgefox.edu). *Introducing Differential Equations through a Simulation, Data Analysis, and Modeling Project.*

Visually analyzing data is a key modeling skill that can actively engage students across the curriculum, from making content tangible to guiding further analysis. In this talk, we will share an introductory project in differential equations where students investigate the impact of heightened hygiene and decreased interactions on the spread of an infectious disease. Students first focus on the common cold to bring their own experience to bear, and then extend the analysis and conclusions to COVID-19. Students generate and analyze their own data, engage with each other and the content as they argue and reason through the modeling steps. Also, we will share modifications of this project for remote teaching where students perform the group simulation over Zoom, analyze that data through a collaborative spreadsheet, and record a presentation of their results. (Received September 15, 2020)