

**CRE Faculty Name:** Matthew D. Johnston

**Project Title:** "Modeling the Spread of COVID-19 with Differential Equations"

**CRE Course:** MCS 2423 - Differential Equations

**Student Research Name(s) and Major(s):** Leo Williams (dual enrolled), and Maria Vega Hazas (biomedical engineering)

**CRE Project Description:** The global emergence of COVID-19 in early 2020 has altered life as we know it, infecting over 7 million worldwide, killing hundreds of thousands, and necessitating widespread social distancing policies which have impacted vast sections of the economy. This project continues the timely study started in MCS 2423: Differential Equations of differential equation models to the spread of this highly contagious disease. This project will focus on forecasting the impacts on disease transmissibility of public policy mandates, social distancing, face mask efficacy, travel restrictions, and the George Floyd protests.

**For the full reports, click [HERE](#).**