CRE Faculty Name: Bruce Pell
Project Title: "Data-Based Modeling of COVID-19 Disease Spread"
CRE Course: MCS 3863 - Linear Algebra
Student Research Name(s) and Major(s): Andrea Houck (Physics) and Aleksandar Ivanovic (Biomedical Engineering)

CRE Project Description: With COVID-19 confirmed cases quickly approaching 8 million worldwide and the significant impact it has had on the world, it is important and timely to understand the dynamics of the disease spread so that new tools can be developed and assessed to help mitigate the current and possible secondary outbreaks. This project aims to apply statistical data-fitting techniques developed in MCS 3863: Linear Algebra to test the effectiveness of social distancing, travel restrictions, and face mask utilization on restricting the spread of COVID-19 across the state of Michigan. These models will then be used to predict how COVID-19 will spread as businesses open back up for the summer and campuses return to business in the fall.

For the full reports, click HERE.