

1163-J5-1545 **Michael C. Barg*** (mbarg@niagara.edu). *Forming a Collaborative Research Group with an Introductory Differential Equations Class*. Preliminary report.

Amidst the educational upheaval that was the latter part of the Spring 2020 semester, I revised my traditional introductory differential equations project in such a way as to harness the energy of the ever-evolving COVID-19 pandemic. I formed a research group with my students in order to explore variations on the standard SIR model. There were some tasks that all group members completed, while other responsibilities were delegated to individuals who reported their findings to the larger group. A regular Wednesday evening meeting served as a requirement that all research group members had to complete. My students embraced this opportunity to work together. We collected data, estimated parameters in our models, and computed numerical solutions to SIR-based systems of differential equations. In this time of great uncertainty, we found comfort in the project and sought ways to understand our models and their relationships to a real-life developing situation. This session will include an account of the transition to the collaborative project, some details of our work, and commentary from students. While I hope that such a devastating scenario does not present itself again, the situation provided an opportunity of a lifetime for my students. This is our story. (Received September 15, 2020)