Mathematical modeling is a critical tool in our world. Mathematical modeling is also a valuable pedagogical tool. The differential equations course, by its nature lends itself to be a modeling rich course. Must we abandon this modeling approach when we transfer to a remote platform? I do not believe so. We cannot transform the course by means of just a document camera. However, the course can be transformed to a viable remote experience. The new course may be more structured. The group work may be mirrored in break out sessions and the students’ work may be monitored more closely. This modeling unit introduces the separation of variables technique through group work, modeling the spread of Ebola in western Africa. From there, the students go on to individual projects where they model the spread of COVID in individual states in the U.S. I will show how an in-class data driven modeling unit was transformed onto a remote platform. (Received September 15, 2020)