

Presentation for the Symposium on BEER

November 2020

The COVID-19 Consequences of College Class Continuity Calculator

Sharon Bewick^{1,*}, Erika Ludden¹, Suzanne Robertson², Jeffrey Demers³

¹Department of Biological Sciences, Clemson University, Clemson, SC 29634

²Department of Mathematics and Applied Mathematics, Virginia Commonwealth University, Richmond, VA 23284

³Department of Biology, University of Maryland, College Park, MD 20742

sbewick@clemson.edu

As schools prepared for the start of the Fall 2020 semester, many were struggling to make decisions regarding whether or not to return to on-campus classes or whether to remain fully online. Not surprisingly, there was no "one-size-fits-all" answer, and schools had to balance their own risks against the costs of remote learning. Unfortunately, COVID-19 infection rates have not improved since August. In fact, they have become dramatically worse. At the same time, the financial crises facing many schools has been exacerbated by lost housing revenue and lower enrollment. Consequently, schools will be facing similar if not more difficult decisions as they plan for the Spring 2021 semester. We have developed a tool that integrates information about study body composition with predictions of COVID-19 infection rates in order to provide clarity and insight into the decisions facing colleges and universities nationwide as they weight whether the risk of face-to-face classes is worth the benefit. Our tool is freely available and currently hosted at the following location: <https://bewicklab.shinyapps.io/covid-1/>