

1163-D1-1361 **Meredith L Greer***, 205 Hathorn Hall, Bates College, Lewiston, ME 04240. *Teaching Mathematical Epidemiology in the Time of COVID-19*. Preliminary report.

Models for mathematical epidemiology, such as SIR (Susceptible-Infectious-Removed), have been used as examples in undergraduate mathematics courses such as calculus and differential equations. Some undergraduate biology curricula discuss these models as well. Network models of disease spread appear in math, biology, and computer science curricula. For several years, such models have been examples of the ways math, biology, and computer science could intersect. Though clearly useful, they were not a central focus of daily news.

Now, due to COVID-19, every student and instructor has likely heard extensively about using models and data to track and understand epidemics. Political interpretations abound. Instructors no longer need to explain why these models are studied. Students may have strong opinions about which models to study or how models should be used (or not used) for the development of public policy.

This talk develops strategies for teaching epidemiological models in and after 2020. Topics may include: communication between students and instructors; selecting course topics and activities; managing mathematical or scientific discussions involving people with conflicting opinions; building from classroom topics toward civic engagement; and more. (Received September 15, 2020)