

1116-S1-2197 **John B Thoo*** (jthoo@yccd.edu), Yuba College, 2088 N BEALE RD, MARYSVILLE, CA
95901. *Teaching Differential Equations the SIMIODE Way.*

When teaching differential equations, we typically introduce a type of equation, explain the methods to solve it, and then assign exercises to practice solving it. A few of these exercises might be modeling scenarios, but almost all are not. SIMIODE proposes to flip this with a “modeling first” approach to teaching differential equations. Either through a hands-on activity to gather data or through a narrative, students first develop a model that introduces a type of differential equation. From there, students might use technology or learn analytical techniques to solve the model equation or equations of that type. As described at www.simiode.org, this is “modeling forward differential equations . . . for modern times based on the strong tradition of the field in its origin—modeling change.” This talk presents concrete examples to illustrate this approach to teaching differential equations. (Received September 22, 2015)