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**Tracy Weyand\*** (weyand@rose-hulman.edu). *Integrating Modeling into Differential Equations Courses.*

I'm certain that you too have experienced it; just because a student can use a certain solution (or analysis) technique for a differential equation does not mean that he/she can successfully apply that same technique to a physical situation. Many scientists and engineers will be doing exactly this, so how do we make sure students walk out of our class prepared?

I will describe how I am slowly transitioning my differential equations course(s) to incorporate more modeling and applications without overburdening myself and while keeping to a common course schedule and curriculum. I'll describe several ways I have found, adapted, and integrate modeling in my course(s). This will include my work with the SIMIODE (Systemic Initiative for Modeling Investigations & Opportunities with Differential Equations) as both a user and author of their modeling scenarios. I will also note similarities and differences that I have noticed about my students throughout this process. (Received August 31, 2020)