1145-34-2651   **Rosemary C Farley*** (`rosemary.farley@manhattan.edu`), Manhattan College, Department of Mathematics, Riverdale, NY 10471, and **Patrice G Tiffany** (`patrice.tiffany@manhattan.edu`), Manhattan College, Department of Mathematics, Riverdale, NY 10471. *An Effort to Assess the Impact a Modeling First Approach has in a Traditional Differential Equations Class.*

Our differential equations course is required of every student in the School of Engineering. As a required course, there is a syllabus with topics that have to be covered in preparation for a common cumulative final. All the traditional methods of solving differential equations by hand must be covered. In the Spring 2018 semester, there were nine differential equations classes and one was being taught with the modeling first approach advocated by SIMIODE.

We will explain how we incorporated the modeling first approach into our differential equations classroom while still covering the traditional topics required. We will explain how we managed to devote one-third of our class time to the use of a modeling first approach together with the extensive use of a computer algebra system while still preparing students for a traditional common final. We will provide several examples of modeling problems from the SIMIODE scenarios that we adapted to our needs and time restrictions. We will give examples of how we created test questions that reflected ideas from our modeling first scenarios. We will report on the data gathered from the common final results and analyze how our modeling first students compared to others who followed the more traditional approach. (Received September 25, 2018)