

1135-34-735

Patrice G Tiffany* (patrice.tiffany@manhattan.edu), Manhattan College, Department of Mathematics, Riverdale, NY 10471, and **Rosemary C Farley** (rosemary.farley@manhattan.edu), Manhattan College, Department of Mathematics, Riverdale, NY 10471. *It's Time to Change our Traditional Differential Equations Course.*

We have been using a modeling first approach in our DE classes while others have used a more traditional approach. The course is required of every engineering student. There is a common cumulative final that typically includes traditional methods of solving DE by hand. Last spring there were 9 sections with a total of 244 students and 7 faculty members. In the fall, there are only 2 sections and we are the only faculty involved in teaching differential equations.

We are using modeling first approach together with the extensive use of a computer algebra system. We have found that the modeling first approach works best when students actually solve problems and get answers that make sense. This semester we are going to add more modeling scenarios and more qualitative analysis. We will be working with a member of the assessment team at our institution to collect the information to evaluate our progress. Hopefully these results convince others to join us in this modeling first approach. Perhaps we will even be able to convince the department that it is time to make significant changes in the course description.

We will report on the progress made during this semester including the modeling activities that worked best, how our students reacted, and what the assessment revealed. (Received September 13, 2017)