

1145-97-1770 **Rebecca A Segal*** (rasegal@vcu.edu), Department of Mathematics, PO Box 842014,
Richmond, VA 23284. *Connecting Partner Disciplines with Mathematics through Applications in
Differential Equations.*

Virginia Commonwealth University teaches an average of 28 sections of Differential Equations per year. The majority of the students in the course are majors in Engineering or Sciences. Anecdotally, students are not transfer knowledge content from the math course into courses within their majors. In order to improve knowledge retention, we have worked to establish conversations between Mathematics and the partner disciplines of Chemistry, Biology, Physics, and Engineering. Using the “Curriculum Foundations Project: Voices of the Partner Disciplines” report as source of discussion questions, a Fishbowl activity was held with faculty from Chemistry, Biology, Physics, and Engineering. There was good consensus about having the students explore a variety of application problems within each differential equation techniques. To further prioritize content for the course, a follow-up online survey was used to compile a topics wish list from the partner disciplines. Using this information, we began to move the instruction of Differential Equations to have a greater inclusion of application focused class activities and projects. Sample assignments will be discussed as well as preliminary student survey data on the impact of this effort. (Received September 24, 2018)