Meeting: 1003, Atlanta, Georgia, MAA CP J1, MAA Session on Projects and Demonstrations that Enhance a Differential Equations Course, I

1003-J1-1189Ethan Berkove* (berkovee@lafayette.edu), Department of Mathematics, Lafayette College,
Easton, PA 18042. Bringing Desalination into the Classroom.

If you are on the prowl for an unusual but approachable differential equation to include in a course, you may want to consider the differential equation associated to desalination. Built from modest assumptions, this separable differential equation can be solved directly or studied via slope fields.

We introduced the desalination differential equation in a classroom project where we had our students perform a theoretical analysis of a desalination machine. In this talk, we will outline the project, its goals, and its implementation. Copies of the project will be available. (Received October 04, 2004)