

962-G1-1014 **William P Fox*** (wfox@fmarion.edu), Department of Mathematics, Francis Marion University,
Florence, SC 29501. *Service in Ordinary Differential Equations.*

Our ordinary differential equations course is taken more by chemistry , physics, and environmental science majors than by strict mathematics majors. Thus, I tailor the course towards the other sciences. The course covers all the required mathematical topics of an ODE course. However, each major block has applied projects for the students to work on and submit for grade. These projects are interdisciplinary and require not only mathematical calculations but also interdisciplinary discussions. Over the last few semester, I have used a Bungee Cord Project (physics), mixture of solutions (chemistry), permeability through a membrane (chemistry), predator-prey models (environmental sciences). The students work hard on the projects and appreciate the ability to see mathematics used to solve "real world" problems in their discipline. (Received October 01, 2000)