

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

1003-J1-250 **William P Fox*** (bfox@fmarion.edu), Department of Mathematics, Francis Marion University, Florence, SC 29501. *A Modeling Approach to a Differential Equation Course that is Tailored by Discipline.* Preliminary report.

Over the past 6 years, our differential equations course has been mainly populated with non-mathematics majors. Students majoring in environmental sciences, biology, chemistry, and physics (computational and health physics) are now the majority of the student population in this introductory course. There are always a few mathematics majors. Over the past few years I have re-structured the course to cover applications in these other disciplines. The course now includes projects, technology labs, and tests that are discipline specific in those problems with applications. All students cover the same topical material but the application of the material is different. Antidotal evidence from the reflective summaries in the students ODE portfolios suggests that the majority of students enjoyed this approach. (Received September 03, 2004)