1046-G1-1423 **Rachel M Dunwell*** (dunwellr@rhodes.edu), Rhodes College, 2000 North Parkway, Memphis, TN 38112, and **Christopher W Seaton**. *Teaching Applied Calculus through Environmental Modeling.*

As climate change becomes more of an important part of the lives of Americans, introducing students to the basic mathematical concepts used to predict climate change is appropriate at an early level and for a broad audience of college students whose focus is not mathematics or even a natural science. Although it is of course not practical to try to teach the sophisticated mathematical techniques involved in such models, students can become familiar with the process involved in producing, evaluating, and adjusting a model to study behavior and make predictions. In this talk, we discuss how we are introducing modeling techniques with an emphasis on climate modeling in a terminal first-semester Applied Calculus course at Rhodes College. Through a heavy emphasis on Mathematica, the students of this course learn introductory differentiation and integration by studying the modeling process itself, beginning with data collected by environmental scientists. We discuss the mechanics of this class as well as our assessment of its impact. (Received September 15, 2008)