Does the use of an interdisciplinary topic to motivate the study of College Algebra produce better results than a more traditional lecture approach? Two professors at Howard University attempted to introduce several of the concepts taught in College Algebra by linking them to modeling problems that arise in the investigation of global warming. Linear functions were used to model temperature changes in several cities; exponential functions, to model the increase in CO2 levels in the atmosphere. These courses were compared with courses taught in a more traditional style by other colleagues, and by the same faculty in former semesters. Data gathered will include course grades and course evaluations. (Received September 22, 2010)