1046-C1-319 Lisa S. Yocco* (lisay@georgiasouthern.edu), Department of Mathematical Sciences, P.O. Box 8093, Statesboro, GA 30460. Social Science Applications in an Applied College Algebra Course.

One of the biggest challenges in teaching college algebra is convincing non-science and non-engineering students that algebra is important in their future studies and careers. One solution to this is the development of an algebra course based on real life applications in a setting that connects mathematical content with the real world. In addition to applications in management and life sciences, applications related to the social sciences are emphasized. These applications, which include population growth, the normal curve for IQ, life span, poverty threshold, global warming, cohabiting households, SAT scores, Internet use, and spread of a disease, show students that there is a connection between mathematics and their world. These and other applications can be used with data analysis, modeling, and technology so that the approach is refreshing and interesting to the students. For example, when discussing linear functions, the connection between the slopes of the graphs and the rates of change of the functions permits us to ask much more interesting questions. Creating functions that model real data and solving equations that are modeled or related to real data is more meaningful and satisfying than "working" skill exercises with no apparent application. (Received August 26, 2008)