

1035-P1-1939 **Mary R. Parker*** (mparker@austincc.edu) and **Hunter D. Ellinger**. *Modeling data with linear, quadratic, exponential, and other functions*. Preliminary report.

In a "math for liberal arts" course, with about one-quarter of the time in the course, we cover modeling with several types of functions. Students use a spreadsheet to fit a particular model by considering how the graph of the model fits the data, systematic minimization of the standard deviation, and how to compare models by analyzing the residuals. They work with a transparent fitting mechanism rather than canned routines. Students also learn about handling outliers, interpolation and extrapolation, and natural parameterization of models. Complete instructional materials, example spreadsheets, and notes for instructors are available at <http://www.austincc.edu/mparker/modeling/>. (Received September 20, 2007)