1056-Z1-578   **David R Gurney*** (`dgurney@selu.edu`), SLU 10541, 500 Western Avenue, Hammond, LA 70402. *A Matrix Approach to Linear Statistical Models.* Preliminary report.

This is a proposal for a second course in statistics based on the topic of linear statistical models. Starting from simple examples, techniques will be introduced for estimating model parameters and then used to develop more general formulas. The course would have a linear algebra prerequisite and will use that linear algebra knowledge - matrix methods in particular - to develop single and multivariable linear models and some polynomial models. In the process, concepts of statistics such as the correlation coefficient, degrees of freedom and unbiased estimates will be explained in detail. (Received September 13, 2009)