Data mining is the process of extracting previously unknown information from a large, real-world data set. Though there is a natural link between data mining and statistics, data mining is rarely taught on the undergraduate level. Data mining techniques can be applied to data from such fields as medicine, business, psychology, and political science, just to name a few. Therefore, these techniques are well suited to apply to real-world data sets and illustrate statistical concepts such as classification (supervised learning) and clustering (unsupervised learning). The action of performing data analysis on data that is most relevant to students promotes an active learning environment in which college students are able to construct their own mathematical knowledge as they apply data mining techniques to data of interest to them. (Received October 05, 2004)