

1056-Q5-1531 **Jeff R Knisley*** (knisleyj@etsu.edu), Box 70663, Dept. of Math, East Tennessee State University, Johnson City, TN 37614-0663. *Predictive Modeling in Quantitative Biology*.

A predictive model is a mathematical model that predicts the outcome of an experiment or observation, often by estimating a probability distribution for the experimental result. They are used extensively in the sciences, in business, in engineering, and elsewhere for activities such as data mining, reverse engineering, and similar data intensive applications. Indeed, as this presentation will illustrate, predictive modeling as pedagogy addresses most of the recommendations in BIO2010 as well as many recent trends in quantitative biology. Consequently, an interdisciplinary course in predictive modeling at the undergraduate level has become an important component of the Symbiosis Project at East Tennessee State University, and we will describe this course and its outcomes in this presentation. (Received September 22, 2009)