

1023-K1-1713 **Talitha M Washington*** (tw65@evansville.edu), Department of Mathematics, University of Evansville, 1800 Lincoln Avenue, Evansville, IN 47722. *Discrete Logistic Model in Calculus II.*

In this talk, a project that explores the discrete logistic model that arises in ecology as a model for population growth will be discussed. This project provides an opportunity to use sequences as a tool to describe and predict populations. Using Excel, we can easily modify the growth rate and obtain interesting information about the solutions. Since each term in the logistic sequence depends only on the previous term, a Ricker diagram can be utilized as a graphical technique to predict the long-term behavior of populations. In past semesters, this project improved understanding of a sequence as well as its uses to model biological systems. (Received September 26, 2006)