1059-39-62 **Reza Ahangar*** (reza.ahangar@tamuk.edu), MSC 172 Mathematics Department, 700 University BLVD, Texas A & M University- Kingsville, Kingsville, TX 78363. *Dynamic Behavior of Perturbed Logistic Model.*

- A model that represents the rate of changes of the population with limited environmental resources can be described by,

where a measures the growth rate in the absence of the restriction force and a/b represents the carrying capacity of the environment and b represent a restricted factor. The random perturbation g(t, p) is generated by random change in the environment. The behavior of the solution of this model for continuous and discrete case when g(t,p)=r.p with a random change factor r will be studied. The stability and the behavior of the equilibrium point will also be investigated. A computational approach to the solution and logistic regression applied to the statistical data will be presented. (Received February 14, 2010)