



UNIVERSITY OF
CENTRAL
ARKANSAS™

DEPARTMENT OF MATHEMATICS MASTER THESIS DEFENSE

SPEAKER: Robert Habimana, Graduate Student
Department of Mathematics

Title: Stability Analysis of the Leslie Age Specific
Population Model

Date: Tuesday, July 19, 2016

Time: 2:00-3:00 pm

Place: MCS 220

One of the most recent innovations in population growth modeling is the Leslie Matrix Population Model. The Leslie Matrix Population Model is a discrete age specific population model that models the growth of females in a given species based on age classes. In this thesis, we discuss some of the better known population models and build a continuous Leslie Matrix Population Model. The stability and long term behavior of the model are discussed.