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Raegan Higgins\* (raegan.higgins@ttu.edu), Department of Mathematics & Statistics, Box 41042, Lubbock, TX 79409. Oscillation of Second-order Half-linear Delay Dynamic Equations on Time Scales. Preliminary report.

In this talk we consider the second-order half-linear delay dynamic equation

$$\left(\left(y^{\Delta}(t)\right)^{\gamma}\right)^{\Delta} + q(t)y^{\gamma}(\tau(t)) = 0$$

on a time scale  $\mathbb{T}$ , where  $\gamma \geq 1$  is the quotient of odd positive integers and q(t) is a positive right-dense continuous function on  $\mathbb{T}$ . We assume that  $\tau(t) \leq t$  and  $\tau: \mathbb{T} \to \mathbb{T}$ . Our goal is to establish some new oscillation results for this equation and to establish the theory of lower and upper solutions for related dynamic equations. (Received February 10, 2014)