Billy Jackson* (bjackson@sxu.edu). Fundamentals of Nonlinear Control on Time Scales. Preliminary report.

Based upon earlier joint work with others done by the author in stability theory for linear and nonlinear systems, we examine crucial aspects of control for nonlinear systems. This includes basic criteria for nonlinear systems to be controllable, observable and realizable. Examples will be given to indicate the utility of such an analysis, particularly on non-uniformly spaced domains. (Received August 27, 2010)