1056-00-1674 **Michael Robert Yatauro*** (myatauro@stevens.edu), 806 Village Dr., Avenel, NJ 07001. *Best Monotone Degree Conditions for the Integrity and Tenacity of Graphs.*

It can sometimes be shown that all realizations of a degree sequence must have a certain property. A well-known theorem of V. Chvátal provides a "best monotone" degree condition for a graph to be hamiltonian. Similarly, it is possible to find a bound on a graph parameter so that in all realizations of a degree sequence the parameter will satisfy the given bound. Such a "best monotone" degree condition for graph connectivity was given by F. Boesch and J.A. Bondy. We will discuss what it means for a set of degree conditions to be best monotone. We then provide similar theorems for the integrity of a graph and the tenacity of a graph along with some examples. (Received September 22, 2009)