MECH 6354 Experimental Mechanics (3 semester credit hours) This course provides experimental techniques and theoretical analysis for measurements of deformations and analysis of stress in engineering materials and natural bio-materials subjected to mechanical loadings. Various methods for measurement and characterization of chimerical properties such as elastic modulus, strength, failure strain, toughness, etc. will be discussed. Essential theoretical modeling for analysis of experimental results will be presented. Experimental techniques such as scanning probe microscopy, nanoindentation, and micro-tensile testing, etc. will be introduced through several lab sessions. Prerequisite: MECH 4301 or equivalent. (3-0) Y (2016-02-05 23:39:05)