**MECH4301 - Intermediate Mechanics of Materials**

*MECH 4301* Intermediate Mechanics of Materials (3 semester credit hours) Course material includes topics such as principal stresses; constitutive relations, thermal strains; stress concentration, brittle and ductile failure; fracture and fatigue; two-dimensional linear elasticity; material plasticity; energy concepts, unit load method, Castigliano's theorems; St. Venant theory, shear center; curved beams; introduction to plates. Prerequisites: *MECH 2320* and *ENGR 3300*. (3-0) Y