

Course Catalog - Fall 2006

Theoretical and Applied Mechanics

427 ***Mechanics of Polymers*** credit: 3 hours.

Mechanical behavior of amorphous and semi-crystalline polymers; overview of polymer structure, properties, and processing; polymer linear viscoelasticity using Boltzmann superposition and mechanical models; measurement of viscoelastic properties; polymeric yield phenomena; fracture and craze formation; impact and fatigue. Same as AE 427. Prerequisite: TAM 324/CEE 300 or ME 330.