

### **FST 312: Food Rheology (2 Units)**

Deformation elasticity and flow; shear, Newtonian and Non-Newtonian flow; viscometry of fluid food materials, dilute and concentrated food suspensions; sedimentation; rheopexy (thixotrophy); viscoelasticity. Dynamics of fluid flow applications. Flow in a curved path, radial flow, vortex free and forced vortex flow. Real and ideal fluids, velocity distribution, boundary layer and separation. Frictional losses in flow through pipes, fittings, bends and drag, etc.