

SYLLABUS :-

Prerequisite : CY41003

Review of classical thermodynamics; Third law of thermodynamics and residual entropy; Introduction to Statistical thermodynamics; Thermodynamic quantities from partition functions; Applications to gases, solids, atomic liquids and polymers. Chemical equilibrium; Chemical kinetics and molecular reaction dynamics; Theories of chemical reaction rates.

Book: Physical Chemistry by P.W. Atkins; Physical Chemistry: Statistical mechanics by H. Metiu; Physical Chemistry: Chemical Kinetics by H. Metiu.