

## **FST 210 Thermodynamics (2 Units)**

Basic concepts. The ideal gas, Heat and Work, Reversible and Irreversible processes and cycles; entropy; thermodynamics properties of ideal and fluids. The first law of thermodynamics, applications to open and closed systems. The second law of thermodynamics and its corollaries; reversibility and irreversibility; the thermodynamic temperature scale entropy and its characteristics; pure substances; state changes in a system consisting a pure fluid substance. Introduction to heat engines and heat pumps; introduction to power refrigeration cycles, gas liquefaction. Phase equilibria, chemical for homogenous and heterogeneous system.