

## **CHM 414 Material Science 2 + 0 +0 (2 Credits)**

### **Pre-requisites : CHM 202**

Classification and properties of industrial materials. Type of bonding and its influence on both structure and properties of materials. Manufacture and properties of solid solutions (alloys). Structure of crystalline materials, coordination number, Crystallography. Stress-strain relationship in materials, elastic and inelastic regions, mechanical, thermal and electrical properties of materials.

Crystal growth and imperfections (defects). Material transformation-deformation, strengthening, electroplating and corrosion