

## 423 Chem

- 1- Soft and hard acids and base,
- 2- Nucleophilic substitution reactions in square at four coordination site
- 3- Mechanism of oxidation-Reduction reactions
- 4- Bio-inorganic chemistry includes: Non red-ox metallic enzymes
- 5- Oxygen carriers and the weight oxygen proteins, proteins of the hemoglobin. Nitrogen fixation and sulphur, iron proteins, heavy metal ion storage.
- 6- Metals and non-meals in medicine and biological system