CHM113 General Chemistry: Inorganic & Organic Chemistry

Credit Units: 3-1-0-0-4

Per Week Lectures: 2 (L), Tutorial: 1 (T), Laboratory: 0 (P), Additional Hours: 0 (A),

Credits (1.5*L+1*T+0*P+0*A): 4

Duration: Modular (Half semester, 14 Lectures)

Course Description:

Inorganic Chemistry: Crystal Field Theory and Structure of Coordination Complexes, Oxidative Addition, Reductive Elimination, Insertion Reactions, Hydrogenation, Hydroformylation, Monsanto Acetic Acid Process and Ziegler-Natta Polymerization, Metalloenzymes

Organic Chemistry: Conformational Analysis of Alkanes and Cycloalkanes, Chirality, Substitution and Elimination Reactions, Introduction to Biomolecules.

Reference Books:

- [1] Shriver and Atkins' Inorganic Chemistry
- [2] J. E. Huheey, Inorganic Chemistry: Principles of Structure and Reactivity
- [3] L. Wade, Organic Chemistry
- [4] J. Clayden, N. Greeves, and S. Warren, Organic Chemistry
- [5] E. L. Eliel, Stereochemistry