

CHM112: General Chemistry: Physical 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:

Quantum theory, Quantum mechanics of simple systems, Particle in a box, Harmonic oscillator, Rigid rotor, Hydrogen atom, Many-electron atoms, Molecular orbital theory, Spectroscopy of simple molecules.

Reference Books:

- [1] P. W. Atkins and Julio de Paula, Physical Chemistry
- [2] D. A. McQuarrie and J. D. Simon, Physical Chemistry A Molecular Approach
- [3] I. N. Levine, Quantum Chemistry