JNC 314 (Aug) 3:0 Biophysical Chemistry

Instructor: Prof. P. Balaram

Biological Molecules: Structural Determinants, Conformations, intermolecular interactions. The hydrophobic effect and water. Protein sequence-structure-folding-function relationships. Biological membranes and compartmentalisation in cells. Energetics in Biology, oxidative phosphorylation. Catalysis of biochemical reactions, enzymes and reaction rate theories. The logic of cellular metabolism. Biomolecular recognition"

Reference Books:

- 1. Principles of Physical Biochemistry, K. E. Van Holde, C. Johnson and P.S. Ho (Pearson, 1998)
- 2. The Molecules of Life: Physical and Chemical Principles, J. Kuriyan, B. Konforti and D. Wemmer (Garland 2013)