Functional Biology-I

Credit Hours 3+0

Biological Methods

Principles of Cellular Life
Chemical Basis
Structure and Function
Principles of Metabolism
Energy Acquisition

Principles of Inheritance

Mitosis and Meiosis
Chromosomes
Observable Inheritance Patterns
DNA Structure and Function
RNA and Proteins
Genes
Genetic Engineering and Biotechnology

Biodiversity

Fundamental Concept of Biodiversity
One or two examples of each of the following from commonly found organism
Prions
Viruses
Bacteria
Protistans
Algae
Fungi
Plants
Crops
Animals
Invertebrates
Vertebrates

Reading

1. Roberts, M.M., Reiss and G.Monger. 2000. Advanced Biology, Nelson.
2. Starr, C, and R, Taggart, 2001. Biology: The Unity and Diversity of Life Brooks and Cole.
3. Campbell, N.A., J.B, Reece, L.G. Mitchell, M.R, Taylor. 2001. Biology: Concepts and Connections. Prentice-Hall.