

Cell division: mitosis and meiosis; Chromosome morphology; Mendelian genetics; Modification of Mendelian ratios; Lethality and interaction of genes; Quantitative genetics; Sex determination and sex chromosome; Linkage and chromosome mapping in eukaryotes; Chromosome mutations: structural and numerical changes; Chromatin assembly and gene structure; Cytoplasmic heredity; Elements of population genetics; Role of genetics in medicine, agriculture and society.

Text Books:

1. D.P. Snustad and M.J. Simmons. Principles of Genetics, John Wiley & Sons, Inc., New York, 2003.
2. W. S. Klug and M.R. Cummings. Concepts of Genetics, 6th edition, Prentice Hall, Inc., New Jersey, 2000.

References:

1. E.J. Gardner, M.J. Simmons and D.P. Snustad. Principles of Genetics, 8th edition, John Wiley & Sons, Ltd., Singapore, 1991.
2. Recent papers from:

Annual Review of Genetics; Current Genetics; Molecular and General Genetics; Trends in Genetics.