

BTH 202: INTRODUCTORY GENETICS (3 Units)

The meaning and importance in modern biology. Mendelian genetics. Probability and test of goodness of fit. Quantitative inheritance. Gene and chromosome theories of inheritance. Linkage, crossing over and chromosome mapping. Sex linkage. Physical and chemical nature of genes: DNA replication, transcription and translation. Mutations and variations in Genome structure. Introduction to microbial genetics, extrachromosomal and epigenetic systems. Variation, natural selection and introduction to population genetics. Human genetics and genetic analysis