

Course: HUMAN GENETICS

Course content:

Mendelian inheritance, Population genetics and multifactorial inheritance, Molecular genetics: organization, regulation and genes engineering, Molecular genetics of human disease: Hemoglobin, Biochemical and molecular genetics of human diseases: endogenous metabolic diseases, alpha 1-antitrypsin deficiency, familial hypercholesterolemia, haemophilia, collagen and its ailments, Cytogenetics: cytogenetic methodology, chromosomal aberrations and clinical implications - syndrome DOWN, genomic imprinting, sex chromosomes and racial diversity, informal sex chromosomes, X chromosome inactivation, Anatomy of the human genome: Gene mapping, Location Based Cloning: linkage analysis, other methods of gene mapping, the human major histocompatibility complex (HLA), Cystic Fibrosis, the Human Genome, Cancer Genetics , Pharmacogenomics, gene Therapy.

LECTURERS

Ph. Stylianopoulou, Professor, Faculty Member Department of Nursing

METHOD OF ASSESSMENT:

Written examination at the end of the semester.

Project Assignments (voluntary) with a maximum score of 2 (total 10), provided that the student passes the Written examination.