



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Genetica

1920-1-I0201D127-I0201D035M

Aims

GENETICS: To know the organization of the human genome. To understand biological mechanisms involved in Cell cycle, mitosis and meiosis, gametogenesis and Sex-determination. To know the origin of mutations and polymorphisms and their consequences. To understand Inheritance of mendelian traits and apply it to the Classification of human Genetic Disorders.

Contents

The course is intended to provide students with fundamental concepts on pathology and genetics relevant for their professional field

Detailed program

GENETICS:

Organization of the human genome (chromosomes and genes). Cell cycle, mitosis and meiosis, gametogenesis and Sex-determination.

Genetic code, mutations , polymorphisms and their impact on proteins.

Inheritance of mendelian traits and pedigrees. Classification of human

Genetic Disorders (chromosomal, mendelian and non mendelian disorders). Examples of genetic diseases: cystic fibrosis and muscular dystrophies.

Prerequisites

DNA structure and replication - The flow of genetic information from DNA to protein - Gene expression regulation

Teaching form

lectures

Textbook and teaching resource

GENETICA: Dallapiccola

B., Novelli G., Genetica Medica essenziale, 2012, CIC Edizioni Internazionali

Semester

First semester

Assessment method

multiple choice quiz. Open Questions. Oral examination on the teacher's evaluation

Office hours

By appointment required by mail
