

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Genetica Medica

2324-1-I0303D002-I0303D008M

Aims

- to recognize the mode of inheritance of Mendelian characters
- to know the structure of human chromosomes
- to know the sources of genetic variation
- to know the mechanisms of epigenetic regulation of gene expression
- to know basic concepts of quantitative genetics and population genetics

Contents

The course aims to provide the student with the basis of formal human genetics, introducing the student to the most basic methodologies to understand hereditary disease

Detailed program

- · Mitosis and meiosis in relation to conventional cytogenetics
- · Mendelian genetics, extensions, recombination and linkage, genetic and physical maps
- · Mendelian Inheritance in man, pedigree reconstruction
- · Sex determination and X chromosome inactivation
- · Fundamentals of epigenetics
- · Polymorphisms and mutations in the context of genetic variability

- Basic principles of population and quantitative genetics
Prerequisites
-
Teaching form
Lectures
It is required 70% course attendance
Textbook and teaching resource
Peter J. Russel Genetica Fondamenti
Supplementary material will be provided by teacher
Semester
First semester
Assessment method
Office hours
On appointment by e-mail request
Sustainable Development Goals
GOOD HEALTH AND WELL-BEING GENDER EQUALITY