

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Genetica Medica

2223-1-I0303D002-I0303D008M

Aims

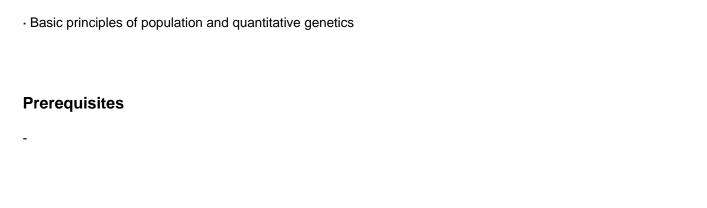
- to recognize the mode of inheritance of Mendelian characters
- to know the structure of human chromosomes
- to know the sources of genetic variation
- to know the mechanisms of epigenetic regulation of gene expression
- to know basic concepts of quantitative genetics and population genetics

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



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

Being an integrated course, the evaluation will cover all four modules.

Regarding the Medical Genetics module, the evaluation will consist of a written test that will be used to ascertain the level of knowledge and ability to understand the topics covered during the course and to be able to solve problems. The student will have to answer 10 quizzes (Multiple choice test) concerning the topics of Medical Genetics.

Oral examination will be required at professor's discretion (discussion of the written test). The oral test will serve to clarify critical issues emerged from the written test and to verify the communication skills of the student and will focus on the topics covered by the written test

Office hours

On appointment by e-mail request

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | GENDER EQUALITY