



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Medical Genetics

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

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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
