



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Patologia Generale

1920-1-I0201D127-I0201D034M

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#### Aims

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

#### Contents

**PATHOLOGY:** Homeostasis and disease. Etiology and pathogenesis: disease-causing agents. Acquired and innate immunity. The immune response. Cell and tissue damage. Inflammation and tissue repair. Oncology. **GENETICS:** Organization of the human genome. Cell cycle, mitosis and meiosis, gametogenesis and Sex-determination. Mutations and polymorphisms. Inheritance of mendelian traits. Classification of human Genetic Disorders and examples.

#### Detailed program

**PATHOLOGY:** Homeostasis and disease. Etiology and pathogenesis: disease-causing agents. Acquired and innate immunity. Cells, tissues and organs of the immune system. Cell and tissue damage. Inflammation and tissue repair. Cellular growth alterations. Oncology. **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**

ex cathedra lessons

### **Textbook and teaching resource**

PATOLOGIA GENERALE: Pontieri G.M., Elementi di Patologia per i corsi di Laurea in Professioni Sanitarie, III Edizione, Piccin GENETICA: Dallapiccola B., Novelli G., Genetica Medica essenziale, 2012, CIC Edizioni Internazionali

### **Semester**

I year II Semester

### **Assessment method**

Multiple Choice Test

### **Office hours**

Upon request

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