

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

# Patologia Generale e Immunologia 1

1718-2-H4101D255-H4101D173M

#### Aims

The primary goal of the course is to provide the students with the necessary tools to understand the fundamental biological defence and pathological mechanisms of the immune system; to understand the aetiology and pathogenesis of human disease, and to acquire the basic notions to deal with functional problems.

#### **Contents**

Immunology: General properties of the Immune System, Cells, Tissues, and Organs of the Immune System. Natural and Acquired Immunity. The Complement. The Antibodies and Antibodies response. Major Histocompatibility Complexes I and II, Antigen presentation. Regulation of the Immuno-Response. Tolerance. Immunity and Infection, Immunity and Tumours. Immediate Hypersensitivity Reaction (Type I), Delayed-type Hypersensitivity. Immunology of Organ Transplantation. Autoimmunity. Pathology: Aetiology, Pathogenesis, Causes of the Disease. Genetic Diseases. Molecular Pathology, Pathology of the Cell Structures, Acute and Chronic Inflammation. Wound Healing. Burns. Arteriosclerosis. Physiopathology of Thermoregulation. Aging. Alteration of the Cell Homeostasis. Tumours. Cancerogenesis. Genomic instability, Heredity and Tumours. Tumours and Hormones, Paraneoplastic Syndromes. Tumours Epidemiology.

**Detailed program** 

**Prerequisites** 

**Teaching form** 

Ex cathedra lessons, Laboratoty

## **Textbook and teaching resource**

Patologia generale e fisiopatologia: "Le basi patologiche delle Malattie" Robbins e Cotran VII ed. Elsevier; "Patologia Generale" Pontieri, Russo, Frati. III ed aggiornata Piccin "Cellule, tessuti e malattia- Principi di Patologia Generale" Majno e Joris, II ed. CEA Immunologia e immunopatologia: Roitt, Immunologia, Zanichelli, Abbas, Immunologia cellulare e molecolare, Piccin, Kuby, Immunologia, UTET.

#### Semester

Il Year, Il semester

#### **Assessment method**

Exam (oral and Multiple Choice Test)

#### Office hours

Upon request