



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### General Pathology

2021-2-I0303D007-I0303D028M

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#### Aims

The student must be able to perform the:

- Classification and characterization of cell damage and death mechanisms
- Description of vascular and general mechanisms of acute inflammation
- Description of pathogenetic mechanisms of chronic inflammation
- Description of pathogenetic mechanisms of hemostasis
- Description of tissue repair and regeneration
- Definition of cellular and molecular mechanisms of atherosclerosis
- Description of cell-mediated and humoral immunological mechanisms
- Classification and description of hypersensitivity responses

- Description and characterization of preneoplastic lesions
- Description of neoplastic growth with characterization of benign and malign features
- Description of metastatic process
- Definition and characterization of oncogenes and oncosuppressor genes
- Description of cancerogenic role of physical and chemical agents
- Definition of cancerogenic role of viruses

## Contents

By the end of the course, the students will have acquired the general concepts and specific knowledge of: ethiopathogenesis of inflammatory, oncological and immunological diseases

## Detailed program

**Etiology and pathogenesis of diseases:** Cellular response to damage; irreversible damage; extrinsic etiology of the diseases: physical etiology (radiation and heat)

**Immunology:** tissue response to damage; immunity response; cells, tissue and organs of immunological system; antibodies and antibody response.

**Immunopathology:** immunodeficiencies; autoimmune diseases; immediate hypersensitivity response; delayed hypersensitivity response.

**Inflammation:** acute inflammation; chronic inflammation; atherosclerosis; systemic effects of inflammation

**Tissue repair and wound healing**

**Cell growth and differentiation pathology.**

**General Oncology:** preneoplastic lesions; cancer; cancerogenesis; oncogenes and oncosuppressors

## **Prerequisites**

## **Teaching form**

During COVID-19 emergency lessons will be performed on-line

## **Textbook and teaching resource**

- G.M. Pontieri ELEMENTI DI PATOLOGIA GENERALE E FISIOPATOLOGIA GENERALE IV° ed. PICCIN
- V. Del Gobbo IMMUNOLOGIA (per le Lauree sanitarie) IV° ed. PICCIN

## **Semester**

Second year, first semester

## **Assessment method**

Written test (multiple choice test) to evaluate global knowledges about course program.

During COVID-19 emergency written test will be performed on-line.

Final judgment of the integrated course is based on the grade point average normalized for credits obtained in each module

## **Office hours**

making an appointment

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