UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

General Pathology

2223-2-I0302D007-I0302D023M

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 hypersensibility 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)

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

Immunopathology: immunodeficiencies; autoimmune diseases; immediate hypersensibility response; delayed hypersensibility 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

Lesson in attendance, subject to any ministerial changes following the COVID pandemic situation

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

Oral discussion about different topics belonging to the classroom lessons (teachers' choice) to evaluate scientific communication skills and the ability to establish scientific links among different topics.

Tests in attendance, subject to any ministerial changes following the COVID pandemic situation

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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Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION