



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

General Pathology

2627-2-I0303D007

Aims

Knowledge and understanding - At the end of the course, the student will have acquired knowledge and understanding of the etiology and molecular and cellular mechanisms underlying human pathologies including genetic diseases. Furthermore, the student will understand the pathogenesis of inflammation, neoplasia. Likewise, the student will acquire knowledge and understanding of microbial genetics and metabolism and of microbial disease pathogenesis, and will understand the physiology of immune defense and of hemopoietic system, and the effects of their dysfunction.

Applying knowledge and understanding: Upon completing the course, student will be able to recognize the causes and pathogenetic mechanisms underlying various genetic, infective and neoplastic pathologies. She/he will also be able to analyze the impact of immune system alterations on its function.

Making judgments -Through the description of pathologies that are frequent among general population, the student will integrate knowledge related to etiology and pathogenesis of neoplastic, inflammatory and microbial diseases developing the ability to evaluate its impact on clinical aspects.

Communication skills - At the end of the course, the student will have gained the ability to clearly explain, with appropriate terminology and scientific rigor, the topics covered during the course.

Learning skills - By the end of the course, students will have received the tools to continue learning and updating autonomously, thanks to constant reference to the described etiopathogenetic processes.

Contents

Exogenous and genetic causes of disease; fundamental pathophysiological and pathogenetic mechanisms underlying the onset and evolution of the inflammatory response and neoplastic transformation; microbial genetics and metabolism and pathogenesis of microbial diseases; physiological defense mechanisms of the organism and

consequences of an altered functioning of the immune and hematopoietic system.

Detailed program

For the extended teaching program, see the extended program of the individual modules.

Prerequisites

Knowledge of histology, anatomy, physiology, genetics and biochemistry

Teaching form

Monza

All lessons in the modules of General Pathology, General Pathophysiology, Clinical Pathology, Genetic Pathology and Blood and Immune System Diseases at the Monza site are held in attendance in frontal modality.

The lessons of the Microbiology module at the Monza campus are held in attendance in both frontal and interactive modes

Bergamo

All lessons are held in attendance in frontal modality.

Textbook and teaching resource

- G.M. Pontieri ELEMENTI DI PATOLOGIA GENERALE E FISIOPATOLOGIA GENERALE IV ed. PICCIN
 - Eudes Lanciotti MICROBIOLOGIA CLINICA - Fifth edition 2021 - Zanichelli
 - Thompson and Thompson, Genetics in medicine, 8th ed. Elsevier
 - Strachan & Reid, Human Molecular Genetics, 4 Ed. Garland Science
- Other teaching material will be provided by the teachers

Semester

Second year- First semester

Assessment method

Written exam with mandatory oral exam.

The written test will consist of:

- ? Closed-answer test (multiple choice) of Microbiology to check preparation on the exam program
- ? Closed-answer test (multiple choice) of Blood and Immune System Diseases to check preparation on the exam

program

? Closed-answer test (multiple choice) of Genetic Pathology to check preparation on the exam programme. For the Bergamo students, the written test will also contain open-ended questions on Genetic Pathology.

The oral test will consist of an interview on the topics of General Pathology, General Pathophysiology and Clinical Pathology carried out in class to check communication skills in the disciplinary field.

The final evaluation will take into account the results obtained in both the written test and the oral test.

Office hours

making an appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION
