

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

## **Diseases of Blood and Immune System**

2425-2-I0301D007-I0301D029M

#### **Aims**

The student must be able to:

-Characterize the blood cellular and biochemical composition and describe the principal diseases of the hematological, immunological and coagulation systems

#### Contents

At the end of this course, the students must have learned about the consequences of an altered function of the hematopoietic, immunologic, and coagulation systems.

#### **Detailed program**

BLOOD AND MORPHOLOGY OF BLOOD CELLS. Blood composition and the morphological characteristics of blood cells. Hematopoiesis and hemocatheresis. Pathophysiology of leukocytes, red blood cells, and platelets. Stem cell characteristics and properties. Plasma composition. Mechanisms of blood coagulation activation and inhibition. BLOOD DISEASES. Anemias. Piastrinopenias. Acute and chronic leukemias (definition and diagnostic workup). Myelodysplasias and myeloproliferative diseases (main principles). Lymphoproliferative diseases and plasmacellular discrasias. DISEASES OF THE IMMUNE SYSTEM. Multiple myeloma (focus on the diagnostic process). Lymphomas (general principles). BLOOD COAGULATION DISEASES. The main Thrombotic and hemorrhagic diseases.

Prerequisites
Teaching form
8 frontal lessons of 2 hours in attendance.
Textbook and teaching resource
Reviews
Semester
First
Assessment method
Written Test (Thirty multiple-choice questions) to evaluate a global knowlwdge of the program.
Office hours
By appointment

**Sustainable Development Goals** 

GOOD HEALTH AND WELL-BEING