



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Blood and Immune System Disease

2021-2-I0303D007-I0303D033M

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#### 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. Acute and chronic leukemias (definition and diagnostic workup). Myelodysplasias and myeloproliferative diseases (main principles). DISEASES OF THE IMMUNE SYSTEM. Multiple myeloma (focus on the diagnostic process). Lymphomas (general principles). BLOOD COAGULATION DISEASES. Thrombotic and hemorrhagic diseases.

## **Prerequisites**

## **Teaching form**

During COVID emergency lessons will be performed on-line

## **Textbook and teaching resource**

Reviews

## **Semester**

second term

## **Assessment method**

"In itinere" written exam with multiple choice test, to evaluate a global knowledge of the program

During COVID emergency written tests will be performed on-line with proctoring control

Final vote is based on the average grade point normalized for credits obtained in each module

## **Office hours**

By appointment

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