UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinical Sciences

2627-2-I0302D047

Aims

Knowledge and understanding
At the end of the course, the student will be able to know and understand the main systemic and cardiovascular diseases, the basics of Oncology, the main action mechanisms of antineoplastic drugs. The student will also learn basic concepts about diagnosis end treatment and outcome of the main pediatric, hematological, immunological and coagulation systems diseases.

Applying knowledge and understanding
The student will be able to define and classify clinic symptoms and signs of the main systemic and cardiovascular diseases. The student wiill also be able to describe the tests, the correct diagnostic procedures and the guide lines for the treatment of systemic, cardiovascular, neoplastic, pediatric and hematological diseases.

Making judgements
At the end of the course the student will be able to integrate knowledge related to diagnosis, treatment and outcome of the main systemic, cardiovascular, neoplastic, pediatric and hematological diseases.

Communication skills
The student will be able to correctly use the terms related to the main systemic, cardiovascular, neoplastic, pediatric and hematological diseases.

Learning skills
The student will be able to independently deepen and update the acquired knowledge in the fields of Internal Medicine, Cardoivascular Diseases, Oncology, Padiatrics and Hematology

Contents

The aim of the course is to provide students with basic knowledge of:

internal medicine and the main systemic diseases, oncology, pediatrics, pediatric and non pediatric hematology; it also aims to provide students with the basics of the specific terminology of the different subjects, and let them know the diagnostic criteria of the main neoplastic diseases and treatment guidelines.

Detailed program

INTERNAL MEDICINE: General principles of Internal Medicine, the concept of Health and Disease; etiology and pathogenesis, inflammation, immunity, fever and pain, antibiotics, anti-inflammatories, cortisone and other main drugs.

CARDIOVASCULAR DISEASES: fundamentals of anatomy and physiology of cardiovascular hypertension; ischemic heart disease (angina pectoris and myocardial infarction), endocarditis and pericarditis, heart failure.

MEDICAL ONCOLOGY: Cancer terminology, Staging, principles of pharmacology of antineoplastic agents; breast cancer; lung cancer; colorectal cancer; gastric and pancreatic cancer, prostate cancer.

CLINICAL HAEMATOLOGY BLOOD AND MORPHOLOGY OF BLOOD CELLS.
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

PEDIATRICS The physiology of newborn, toddler and child: concepts about growth, growth centiles, pubertal development, dentition, diet and prevention of tooth decay; obesity and rickets.
Pediatric rashes, vaccinations, respiratory disorders, endocrinological diseases and disorders involving the central nervous system
Pediatric leukemias and lymphomas, focus on diagnostic and therapeutical issues. The child with Down syndrome and other syndromic diseases
Non oncological blood disorders (hemoglobinopathies, thrombocytopenia, clotting disorders). Hematopoietic stem cell transplantation: who, what, how, when, why

Prerequisites

Teaching form

Lectures

Textbook and teaching resource

Teachers will provide educational material.

Nelson, testbook of Pediatrics.

Semester

Second semester

Assessment method

The final mark, based on the average score obtained by the students during the different evaluations, is set during an oral interview with the student, during which the written tests are scrolled to check mistakes

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING