

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Infectious Diseases 1**

2122-3-H4101D260-H4101D184M

Aims

INFECTIOUS DISEASES:

Etiology of major infectious diseases (bacterial, viral, fungal) and related clinical and laboratory typical signs for diagnosis and therapy.

### Contents

To use the knowledge of Anatomy, Physiology, Biochemistry and others basic disciplines in dealing with organ and/or apparatus pathologies.

To be able to critically evaluate the commonly used diagnostic methods in medical practice.

To recognize the signs and symptoms of major diseases, to understand the results of laboratory and instrumental tests.

To know the pathogenesis and prognosis of the handled diseases.

### **Detailed program**

#### INFECTIVE DISEASES

- Sepsis and septic shock
- Nervous system infections
  - Meningitis (Etiology, Pathogenesis, Clinical manifestations, Diagnosis, Differential Diagnosis, N. meningititidis, S. pneumoniae, H. influenzae, L. monocytogenes)
  - Encephalitis and encephalo-myelitis (Etiology, pathogenesis, clinical manifestations, diagnosis, herpes viruses, enterovirus, Tuscany Virus, West Nile Virus, Tick borne encephalitis virus
  - Rabies
  - Nevrassites mediated by bacterial toxins (tetanus, botulinum)
  - Brain abscess and subdural empyema
- Respiratory system infections
  - Diphtheria
  - pharyngitis / tonsillitis
  - Epiglottitis / laryngitis / tracheitis
  - Bronchitis
  - Viral pneumonia
  - Bacterial pneumonia
  - Flu
  - Tuberculosis
  - COVID-19

- Infections of the cardiovascular system

 Myocarditis and infectious pericarditis (clinical manifestations and complications, principles of diagnosis)

Typhoid fever

- Food poisoning (staphylococcal, botulism, C. perfrigens, V. parahaemoliticus, B. cereus)
- Viral gastroenteritis (Norwalk, Rotavirus, other viruses involved)
- Bacterial gastroenteritis (minor salmonellosis, cholera, E.coli, Shigella, Campylobacter, Listeria, C. difficile)
- Diarrhea due to protozoa (giardiasis, amoebiasis, cryptosporidiosis)
- Diarrhea due to helminths (tapeworm, oxyuriasis, ascaridiasis)
- Malaria (Epidemiology, life cycle, pathogenesis, typical and atypical presentation, complications and prognosis, diagnosis, differential diagnosis between plasmodia)
- Schistosomiasis (Lifecycle, Clinic: acute form, chronic forms, Diagnosis)
- Tropical Arbovirosis (Yellow Fever, Dengue, Chikungunya, West Nile Virus)

- Infections of the tegumentary system and skeletal muscle:

- Cellulitis
- Erysipelas
- Gas gangrene
- Necrotizing fasciitis
- Primitive and prosthetic septic arthritis
- Primitive and prosthetic osteomyelitis
- Spondylodiscitis

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- Epidemiology
- HIV Replication cycle
- Natural history of infection
- Immunopathogenesis
- Main opportunisms, by apparatus
- Diagnosis of acute and chronic infection
- Cystitis
- Pyelonephritis
- Syphilis
- Gonorrhea
- Non-gonococcal urethritis

- Diseases of the reticuloendothelial system
  - Mononucleosis
  - CMV
  - Brucellosis
  - Visceral leishmaniasis
  - Lyme disease
  - Toxoplasmosis
  - Rickettsioses
  - Q fever

#### Prerequisites

See "Patologia medico-chirurgica 3"

## **Teaching form**

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

#### Textbook and teaching resource

Mauro Moroni, Roberto Esposito, Spinello Antinori. Malattie Infettive. Edizione Masson 8° edizione, 2014

#### Semester

second semester

#### **Assessment method**

The assessment of achieved objectives will be verified with written tests and oral exam. 33 single-answer questions with 4 answers of which only one exact (30 points) and oral exam (30 points).

The student who refuses a score >20 cannot participate in the next exam session.

During Covid-19 emergency period, oral exams will be telematic only.

# **Office hours**

Contact the Professor by e-mail