



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Infectious Diseases

2021-3-H4102D056

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#### Aims

By the end of the course, the student will be able to:

- Describe the etiology, the epidemiology (including the route of transmission), the clinical picture and the natural course of the principal infectious diseases and infective syndromes
- Integrate such knowledges with the choice of the appropriate diagnostic path for each disease or syndrome (including anamnesis, identification of relevant symptoms and signs, laboratory assessment, radiological tests, diagnosis of complication and differential diagnosis)
- Describe the therapeutic and preventive measures for the principal infectious diseases and infective syndromes
- Know the fundamentals of antimicrobial chemotherapy of the most important infectious diseases

#### Contents

Principles of epidemiology, diagnosis, treatment and prevention of Infectious Diseases

#### Detailed program

Ø **Systemic Infectious Diseases**

- Sepsis and septic shock
- Typhoid fever and brucellosis
- Lyme disease
- Rickettsial diseases
- Systemic Viral Infections (EBV, CMV)
- COVID-19 and other emerging infectious diseases

#### Ø Central Nervous System Infections

- Meningitis
- Encephalitis and myelitis
- Brain abscesses, epidural abscesses

#### Ø Respiratory Infections

- Upper respiratory tract infections
- Lower respiratory tract infections (including basic concepts on Community Acquired Pneumonia, Health Care Associated Pneumonia, Ventilator Associated Pneumonia)
- Influenza
- Tuberculosis (including Latent Tuberculosis and basic notions on extra-pulmonary tuberculosis)

#### Ø Cardiovascular Infections

- Infective endocarditis (including Cardiovascular Implantable Electronic Devices Infections)
- Catheter-related infections
- Myocarditis and infectious pericarditis (basic notions)

#### Ø Gastrointestinal and Hepatobiliary Infections\*

- Infectious diarrhea & gastroenteritis
- Antibiotic-associated diarrhea and *Clostridium difficile* infection
- Intra-abdominal infections (including appendicitis, colecystitis, peritonitis)

\*Note: viral hepatitis and *Helicobacter pylori* are discussed in the gastroenterology course.

#### Ø Tropical Diseases & Parasitic Infections

- Malaria
- Schistosomiasis
- Arbovirosis (Yellow Fever, Dengue, Chikungunya, West Nile Virus)

#### Ø Skin and Soft Tissues Infections

- Cellulitis
- Erysipelas
- Gangrene
- Necrotizing fascitis

#### Ø Musculoskeletal Infections

- Spondylodiscitis
- Osteomyelitis

- Arthritis (including prosthetic joint infections)

#### Ø HIV disease

- Epidemiology
- Pathogenesis
- Natural history & main opportunisms
- Principles of antiretroviral therapy
- Vertical transmission
- Pre and post-exposure prophylaxis

#### Ø Urinary Tract infections

- Cystitis
- Pyelonephritis
- Prostatitis

#### Ø Sexually Transmitted Diseases

- A general introduction to epidemiology and prevention
- Syphilis
- Gonorrhea
- Nongonococcal urethritis
- Pelvic inflammatory disease (PID)
- Trichomoniasis

### Prerequisites

Knowledge of the introductory courses indicated in the degree course regulations

### Teaching form

Frontal lessons with audio-visual aids and open discussion in the classroom, clinical case discussions.

It should be noted that, in the event - also in the second half of the year - of an emergency state of COVID19 or other, the lessons will be recorded and available online, with some live events on on-line platforms (e.g. Webex, Zoom, Google Meet) that will be planned and communicated on e-learning course website

### Textbook and teaching resource

Frederick Southwic – Infectious Diseases. A clinical short course. Mc Graw Hill. Fourth edition

### Semester

Second semester

## **Assessment method**

Final oral examination with open questions to assess general knowledge on infectious diseases

In case of extension of the pandemic emergency COVID19 and official restrictions also in the second semester, the oral exams will be exclusively through on-line platforms (e.g. WebEx platform).

## **Office hours**

To get an appointment, please contact the teachers by e-mail:

- [paolo.bonfanti@unimib.it](mailto:paolo.bonfanti@unimib.it)
  - [marco.rizzi@unimib.it](mailto:marco.rizzi@unimib.it); [mrizzi@asst-pg23.it](mailto:mrizzi@asst-pg23.it)
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