



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Infectious Diseases

2122-3-H4102D056

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 fasciitis

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
- Gonorrhoea
- Nongonococcal urethritis
- Pelvic inflammatory disease (PID)
- Trichomoniasis

Topics which will be discussed withing the Oncohematological Track

- Vaccinations in the immunocompromised host
- Infections in the immunocompromised host (including febrile neutropenia and infections in asplenic patients)

Topics which will be discussed withing the Woman and Child Track

- **Infections in pregnancy**
- **Vertically Transmitted Infections**

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.

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

Office hours

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

- paolo.bonfanti@unimib.it
 - marco.rizzi@unimib.it; mrizzi@asst-pg23.it
 - giuseppe.lapadula@unimib.it
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