



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Preventive Medicine

2627-4-H4102D059-H4102D116M

Aims

The aim of the Preventive Medicine teaching unit is to provide students with the fundamental principles, concepts, and methods of preventive medicine and public health. In particular, the teaching unit aims to provide students with the tools to understand the field of study and application of preventive medicine, recognize major health problems in living and working environments and healthcare settings, describe the principles of epidemiology, surveillance, and prevention of infectious and non-communicable diseases, and deepen their knowledge of major global health issues affecting health and access to prevention and treatment.

Expected learning outcomes according to the Dublin Descriptors

Knowledge and understanding

By the end of the teaching unit, students will know the principles of preventive medicine and public health, the main determinants of health, the concepts of epidemiology and prevention of infectious and non-communicable diseases, surveillance systems, vaccinations, screening programs, environmental health, food hygiene, and the prevention of healthcare-associated infections.

Applying knowledge and understanding

Students will be able to apply preventive medicine concepts to the identification and management of public health problems, the evaluation of preventive measures, the understanding of vaccination strategies, screening interventions, infectious disease control measures, and major prevention actions in environmental, food-related, healthcare, and community settings.

Making judgements

Students will develop the ability to critically assess prevention and public health issues by interpreting epidemiological data, prevention priorities, health risks, and possible intervention strategies at individual, community, and population levels.

Communication skills

Students will be able to clearly describe the main issues in preventive medicine and public health, using

appropriate terminology to communicate concepts related to risk, prevention, surveillance, vaccinations, screening, and infection control.

Learning skills

Students will acquire the foundations needed to independently update their knowledge on prevention, health promotion, infectious and chronic diseases, global health, and prevention in healthcare and community settings.

Contents

The teaching unit will provide students with knowledge of the following topics: introduction to preventive medicine and public health; epidemiology and control of communicable diseases, including vaccines and vaccinations; surveillance systems; epidemiology and prevention of non-communicable diseases; screening; environmental health; food hygiene; hygiene in healthcare facilities; healthcare-associated infections; and health problems of global interest.

Detailed program

Introduction to Preventive Medicine and Public Health

Epidemiology and prevention of infectious diseases

- Sources and reservoirs of infection
- Modes and chain of transmission
- Epidemiological patterns
- Surveillance and reporting
- Disinfection, sterilization, asepsis, antisepsis, pest control, and decontamination
- Vaccines and vaccinations
- Passive immunoprophylaxis and chemoprophylaxis
- Diseases of global health interest

Epidemiology and prevention of non-communicable diseases

- Chronic degenerative diseases: main epidemiological patterns and social and healthcare impact
- Health promotion
- Secondary prevention and screening programs

Environmental health

- Traditional and emerging environmental issues
- Indoor environments, microclimate, and indoor pollution

Food hygiene

- Foodborne infections and intoxications
- Food production, preservation, and handling

Hygiene in healthcare facilities

- Hygienic and organizational issues in healthcare facilities

- Epidemiology and prevention of healthcare-associated infections

Prerequisites

No specific prerequisites are required.

Teaching form

The lectures will be held in English. A blended teaching approach will be used. In particular, the teaching unit will include: 4 two-hour lectures, and 1 two-hour interactive session, during which students will participate in a practical case study related to the topics of the teaching unit.

Textbook and teaching resource

Slides, scientific papers, and other teaching resources will be made available on the e-learning platform.

Semester

Second semester.

Assessment method

The assessment will consist of a written exam, aimed at extensively evaluating students' knowledge of the teaching unit topics and their ability to apply the main concepts of preventive medicine and public health.

Office hours

Upon request by e-mail. Meetings may also take place via the teacher's Webex room.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING
