

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

## Scienze Umane Generali

2526-2-H4601D005

#### **Aims**

The course aims to provide students with the foundations for understanding the causes and the pathogenetic and pathophysiological mechanisms of human diseases, with particular focus on oral and maxillofacial pathology. The program integrates concepts of General Pathology, Microbiology, with in-depth study of microbial agents of general and oral relevance and the principles of microbiological diagnostics, and Clinical Pathology, with particular attention to the meaning, clinical significance, and appropriate use of laboratory tests for diagnostic and therapeutic purposes. At the end of the course, students will have achieved the following aims:

#### Knowledge and understanding:

The course will provide a solid foundation for understanding biological phenomena and the functioning mechanisms of organs and systems, as well as the physiopathological elements applicable to various clinical situations, including in relation to diagnostic parameters.

#### Ability to apply knowledge and understanding:

The course will develop the ability to independently apply acquired theoretical knowledge to analyze, interpret, and solve clinical and care-related problems in the field of dentistry. Additionally, it will enhance the ability to critically evaluate the interdisciplinary connections among the various subjects covered in the different modules.

#### Making judgements:

The course will develop the ability to independently evaluate the methodological coherence in problem-solving and critically interpret, among multiple possible options, the most appropriate approach for the specific case. These skills will enable the selection and application of the most suitable care and communication strategies in various clinical and relational situations.

#### Communication skills:

The course will provide the necessary preparation to communicate ideas, problems, and solutions clearly and effectively, both to professionals from the same or other disciplines and to non-specialist users, using appropriate methods and tools suited to different professional and cultural contexts.

#### Learning skills:

The course will provide a solid theoretical foundation and will enable the development of an active and independent study methodology, useful both for future specialized courses and for professional practice..

#### Contents

- MICROBIOLOGY: modules allow students to know the microbial agents responsible for infections and diseases of interest to both general and odontostomatologic and understand the principles of microbiological diagnostics.
- GENERAL PATHOLOGY: knowledge of causes and general mechanisms of pathological processes (etipathogenesis). Appropriate technical/scientific terminology. Pathogenetic and physiopathologic knowledge to appropriately follow the successive clinical courses.
- CLINICAL PATHOLOGY: the contribution of Clinical Pathology -in promoting health at the level of prevention, diagnosis and cure, -defining the etiopathogenesis of the different pathological situations, -evaluating the functional alterations of organs and control mechanisms at the different integration of structures, functions and organism in relation with the knowledge of physiology and pathology acquired during the present year. Basic principles, arising from physiopathological knowledge, for prescription and interpretation of lab test results, hints at differential diagnosis. Knowledge about the methodology of Clinical Pathology lab, hints on collection, transport and storage of biological samples; the key role played by health operators on the efficiency of National Health Service performing appropriate prescription and interpretation of lab tests. These issues will be highlighted in the course of the systematic part described in the extensive program.

## **Detailed program**

Refer to the individual course modules.

## **Prerequisites**

Knowledge concerning the previous preparatory courses.

## **Teaching form**

The lessons are held in presence. For some modules, laboratory activities are carried by interactive mode in person.

## **Textbook and teaching resource**

Textbook are specified in the course modules.

## Semester

Annual course, at the second year.

## **Assessment method**

The assessment method is described in the single modules. The final score will be the weighted mean of the tests.

## Office hours

Request an appointment with the teachers by email.

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY