UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

# Periodontology I

**2021-5-H4601D023-H4601D062M**

## Aims

Prepare the student to diagnose and treat the most common clinical problems associated with periodontal disease, and its correlations with other dental branches and the most important systemic and metabolic diseases.

## Contents

The course aims to lead the student to the knowledge of the anatomical aspects of the periodontium, of the correlated pathophysiology, of the diagnostic and therapeutic aspects able to adequately diagnose and treat all the pathologies of the periodontium, in its purely medical and surgical aspects.
Particular importance is given to the correlation of periodontal disease with the main systemic diseases related to it.
Remarkable emphasis is given to the most modern therapeutic procedures that use advanced technologies, in order to reduce the invalidity of therapeutic protocols.
The student will understand the importance of laser-assisted techniques in the treatment of periodontal disease.

## Detailed program

Functional anatomy of periodontium, oral cavity and stomatognathic apparatus. Biological aspects of the periodontium and the oral cavity. Definition of the classification, history and natural history of periodontal disease (gingivitis, gingival volume increases, aggressive periodontitis, chronic adult parodontitis, necrotizing periodontitis, periodontitis during systemic diseases). Overview of periodontal disease Epidemiology: diagnostic periodontal indexes and treatment needs, prevalence (age, social status, etc.), risk factors for periodontal disease, periodontal disease as a risk factor for other diseases. Analysis of local etiological factors ( dental plaque and tartar): formation, structure and localization of the mucobacterial plaque, mineralization, composition and structure of tartar, conditions favoring the accumulation of local etiological factors. Periodontal disease microbiology: periodontal infections and their peculiarities, determination of pathogenic species in the various forms of periodontal disease, acute manifestations, gingivitis, periodontitis. Pathogenesis: host defense processes, nonspecific immune response (PMN, macrophages, inflammation), specific immune response (humoral and cellular lymphocyte), histopathology

of the lesion, initial, early, stabilized, advanced lesion. Host susceptibility: individual response, risk factors.
Periodontal disease clinic: gingivitis, gingival volume increases,
clinical manifestations of periodontitis (pockets, gingival recessions, injuries of furcations, mobility, migrations, abscesses), early and aggressive onset periodontitis, chronic periodontitis, necrotizing periodontitis, periodontitis during systemic diseases. Occlusal trauma: definition and terminology,
relationships between occlusal trauma and periodontitis. Relationships between periodontology and endodontics: primary endodontic lesions, endo-parodontal lesions, endodontic lesions secondary to disease and / or periodontal treatment.
Relationship between periodontal disease and systemic diseases 13. Periodontal manifestations of dermatological diseases. Reactive hyperplasias, cyst and periodontal neoplasms. Basic and advanced periodontal diagnosis: medical history, clinical examination, survey, Rx examination, immunological and biochemical laboratory tests, microbiological tests, genetic tests. Periodontal therapy: principles and purposes. Preliminary treatment plan. Aetiological periodontal therapy: Antiseptics in periodontal therapy, Chemical control of supragingival plaque, Evaluation of agents and chemical products, Clinical use of chlorhexidine, Objectives of etiological therapy. Etiological therapy toolkit Patient information and oral hygiene techniques. Scaling Root planing. Laser-assisted approach to periodontal therapy. Elimination of factors favoring plaque accumulation. Elimination and control of systemic diseases and risk factors. Chemical control of subgingival plaque. Antibiotics in periodontal therapy: Principles of antibiotic therapy, Choice of route of administration, Systemic antibiotic therapy. Topical antibiotic therapy. Revaluation after etiologic therapy and definitive treatment plan.

## Prerequisites

Completion of the examination in General Dentistry Disciplines

## Teaching form

Frontal lessons

## Textbook and teaching resource

Parodontologia Clinica e Implantologia Orale. Lindhe. Edi-Ermes

## Semester

First semester fifth year

## Assessment method

An oral examination is employed to test students’ knowledge.

## Office hours

Friday, 8,30-9,00