UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

## Endodontics

**2122-3-H4601D071-H4601D031M**

### Aims

At the end of the course the student should be able to understand, diagnose, prevent and treat diseases of the pulp and periarticular tissue of endodontic origin in "normal" or "at risk" patients,

### Contents

Physiology of the pulpo-dentinal organ, Anatomy of the endodonto, dental caries complications. Dental pulp iatrogenic damages and periarticular pathology. The diagnosis. The Emergencies in endodontics: diagnosis and treatment * The isolation of the operative field: * The opening of the pulp chamber: * the shape of the root canal system: * cleansing. The filling of root canals: * apicogenesi and apexification. * Direct pulp capping pulp. * Criteria of endodontic healing Follow-ups in endodontics. Complications in Endodonzia. Reconstruction of endodontically treated tooth: endodontic implications. Relations between Conservative, Endodontics, Periodontics,

## Detailed program

Anatomy and histology of dental tissues

Physiology organ pulpo dentinal

Anatomy endodontium

Anatomy of the periodontium

etiopathogenesis, classification anatomo-clinical, prevention, diagnosis

dental caries. *

Complications of dental caries.

iatrogenic damage to the pulp.

The pathology pulp and pathology periradicular

-The defense mechanisms of intrinsic and extrinsic pulp

-Endodontic Microbiology and immune response

-Histopathological classification of diseases of the pulp

-Clinical classification of diseases of the pulp

-Clinical classification of diseases periradicolari

The endo-periodontal relationships: pathology, diagnosis, treatment,

prognosis *

The diagnosis in endodontics *

-The thermal tests

-Percussion

-Palpation

-The periodontal probe

-The test of anesthesia

radiography in endodontics *

-Outline of radiology and radiation protection

-The dental radiographic

-Digital X-ray

-Technique of bisecting

-Parallel Technique

-X-rays below the dam

-The buccal object rule

-The use of the centering

-Development and fixation of radiographic films

-The Darkroom

-Preservation and storage of radiographic film

-The interpretation of radiographs in endodontics

The correct diagnostic path in endodontics *

anesthesia in endodontics *

Endodontic Emergencies: Diagnosis and Treatment *

The isolation of the operating field: *

-The dam

-The pre-treatment

The opening of the pulp chamber: *

-Incisors

-Canines

-Premolars

-Molars

-The timing of the access cavity

The shaping of the root canal system: *

-The mechanical and biological principles of H. Schilder

-The endodontic instruments

-The ISO

-Standardization Profile

-The various types of hand and machine tools

-The correct use of endodontic files

-The working length

-The use of electronic detectors of the apical foramen

-The diameter of the apical foramen

-The step-back instrumentation technique: advantages and limitations

-The technique of instrumentation early coronal enlargement: advantages and limitations

-The alloy Ni-Ti

-The mechanical characteristics of the tools Ni-Ti taper increased

-Instruments Ni-Ti hand taper increased: characteristics and operative techniques.

-Use of endodontic handpieces, preventing fractures of endodontic instruments, iatrogenic injury in endodontics. *

-Sterilization and storage of endodontic instruments. *

The cleansing of root canals: *

-Justification of the biological cleansing of the root canal system.

-The irrigants: tool use and trade sectors.

-Use of ultrasound to enhance the action of irrigants: advantages and limitations.

The medication of root canals: *

-Motivation biological dressing

-Hydroxide Ca: indications, advantages and limitations.

The filling of root canals: *

-Motivation biological obturation

-Ingredient of the systems of filling: gutta-percha, cements, plugger, heating systems of guttapercae injection systems of thermoplastic gutta percha.

-Main canal obturation techniques: lateral and vertical condensation of gutta gutta hot, continuous wave of condensation technique,

thermomechanical condensation of gutta-percha, gutta-percha root filling

with pre-heated. *

Endodontic treatment of immature permanent teeth: apicogenesi and

Apexification. *

direct pulp capping pulp. *

## Prerequisites

Passing the II year examination

## Teaching form

Lessons and seminars

In the emergency period, lessons will be held remotely asynchronously with synchronous videoconferencing events

During the emergency period, oral exams will only be online. They will be carried out using the WebEx platform and on the e-learning page of the course there will be a public link for access to the examination of possible virtual spectators.

## Textbook and teaching resource

PATHWAYS OF THE PULP (SUMMERS.)

## Semester

I semester

## Assessment method

An oral examination is employed to test students' knowledge.

## Office hours

Monday-Friday 800-900

## Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | PARTNERSHIPS FOR THE GOALS