

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

### **Paediatric Dentistry Elements**

2021-2-I0301D032-I0301D045M

#### Aims

Prepare the student to deal autonomously with the most common clinical problems connected with odontostomatological diseases, the aspects of prevention, registration of clinical parameters and information processing.

#### Contents

The course aims to lead the student to the knowledge of the dental and skeletal problems related to the growing subject, the basic concepts of caries and pulpary pathologies, together with the operative techniques of restoration and endodontic therapy, also providing knowledge on the materials used.

It aims to provide a basic vision for framing dental problems and correlating them with the hygienist's tasks. It also deals with the clinical use of dental seals and the treatment of dentine hypersensitivity, the isolation of the operative field, problems pertaining to dental hygienists.

#### **Detailed program**

NOTES OF DENTAL ANATOMY. INTRODUCTION: OBJECTIVE OF THE CONSERVATIVE DENTISTRY; BRIEF INTRODUCTION ON THE PROPERTIES OF THE MATERIALS USED IN CONSERVATIVE: PHYSICAL PROPERTIES; CHEMICAL PROPERTIES; MECHANICAL PROPERTIES; TECHNOLOGICAL PROPERTIES; NOTES ON THE CLASSIFICATION OF DENTAL CARIES, DMF and DMFT; DENTAL AMALGAM: HISTORICAL SIGNS; CHEMICAL-PHYSICAL-MECHANICAL features; CLASSIFICATION OF THE AMALGAMES AND

DIFFERENCES ON THE BASIS OF THE PARTICLE; DENTAL CAVITY PREPARATION FOR EXTINGUISHING; DIFFERENCE OF PREPARATION OF THE DENTAL CAVITY WITH THE COMPOSITE; AMALGAMA FILLING (PASSAGES); MERCURY TOXICITY; SATURNISM and TATTOO D'AMALGAMA; AMALGAMA REMOVAL PROTOCOL; CONTROL OF OPTURAZIONI AND POLISHING (TYPES OF RUBBERS AND PRECAUTIONS); STAINS OF THE ENAMEL: DEFINITION; ESTRINSIC and INTRINSICHE; WITHE SPOT; ICON TREATMENT

LESIONS OF THE ENAMEL: Abrasion, EROSION; SEALING: INDICATIONS; MATERIALS (Composition and types of sealants), METHOD (execution procedures); COMPOSITE RESINS: SHORT HISTORICAL SUMMARY; PHYSICAL-CHEMICAL PROPERTIES and CLASSIFICATION OF COMPOSITE RESINS; DENTAL CAVITY PREPARATION FOR COMPOSITE EXCURSION; COMPOSITE SHUTDOWN (PASSAGES); CONSERVATION OF COMPOSITE MATERIAL; ACCOMMODATIONS TO BE FOLLOWED DURING TARTARO ABLATION; INTRODUCTION: OBJECTIVE OF ENDODONTIC DENTISTRY

MATERIALS USED IN ENDODONTICS: GUTTAPERCA; IRRIGANTS - CHELANTI; ENDODONTIC INSTRUMENTS (ENDODONTIC FILES, APICAL INDICATOR, ENDODONTIC HANDPIECE)

BACKGROUND OF ENDODONTIC PREPARATION AND FILLING (GUTTAPERCA - THERMAFIL - ENDODONTIC CEMENTS); Preventive and community dentistry; Symbolism of the mouth and teeth, Dialogue with the patient, Motivation; Example of motivation and education program for oral hygiene; Concept and definition of health; Health and disease; Multifactorial origin of the disease; Historical development of health promotion; Health education; Primary secondary tertiary prevention; International health organization; General epidemiology; Caries: Epidemiology, predisposing factors, multifactorial etiology, oral microflora, diet, saliva; Principles of food hygiene; General principles of caries prevention; Primary prevention of caries; Fluoroprofilaxis, Sealing; periodontal disease; Epidemiology, Etiology, Risk factors, Periodontal indexes; Oral health investigations (WHO provisions); Basic investigations; Index age; Clinical methodology; Selection of subjects at high risk of caries.

Psychology of the pediatric patient; Doctor-patient-family relationships; Development and growth of face bones; Morphology of deciduous and permanent teeth; Teeth eruption times; Lee-way space; Dental development disorders: Amelogenesis imperfect; Imperfect Dentinogenesis; Dentinal dysplasias; Fluorosis; discoloration; Physiological abrasion; parafunctions; erosions; Eruption anomalies; Follicular cyst; Endodontic treatments of decidues; Sovranumeraries; ectopies; Oral pathology in pediatric age: Systemic diseases typical of childhood; Local etiology; Various factors; Benign tumors; cysts; Non-pathological changes; Anomalies of form and number; Inflammatory processes of periodontal tissues; Gingivitis X-ray examination: Intra-oral; Extra-oral; Local anesthesia :: Intraligamentosa, Tronculare; Gel and spray; Field isolation: The dam; Pathophysiology of deciduous teeth: Stage I; Stage II; Stage III; Cary disorders of deciduous teeth: clinical forms; Pulpal and periodontal pulpo disorders: Septal syndrome, Pathology of root bifurcation, Pulpitis; Deciduous tooth therapy: Pulpotomie-technique, Pulpectomie-technique; Filling material for deciduous teeth; Immature permanent tooth therapy: Indirect-technical capping; Direct-technical hooding; Apecification-technique, Materials for filling immature permanents; Traumatism of deciduous and permanent teeth; Interceptive orthodontics; Extraction of deciduous teeth;

Definition of orthodontics. Holistic approach to the orthodontic patient. Cranio-maxillo-dental growth: the research of the biotype. Anatomy and physiology of the stomatognathic apparatus of the subject in developmental age. Occlusion-postural diagnosis. Diagnosis in orthodontics. Clinical examination; instrumental exams. Cephalometric diagnosis; the relief of the prints; the development of plaster models; foundations of orthodontic therapy; the instrumentation in orthodontics; the indirect and direct bandage; characteristics of orthodontic equipment. The indirect and direct bandage; characteristics of fixed orthodontic equipment; the serious extractions in the management of the growing patient: dental dento movement, biological bases; treatment of the adult patient; the treatment of the first classes; the treatment of the second classes; the treatment of the third classes; the containment and recurrence of posturology concepts; genetics in orthodontics; anchoring in orthodontics.

Calculators and Operating Systems; architecture of a computer; functionality of an operating system; general features of Windows and Linux; administration elements in the Windows environment; programming; Computer networks; internet architecture; local networks (Ethernet) and remote connectivity (ADSL); Internetworking; Hubs, Routers and Switches; configuration of a local and remote connection; Electronic calculation sheets; Introduction to

Excel; Calculation formulas with Excel - Simple archives; Charts; Pivot tables; Database; functionality and relational organization of a database - project elements; Access; Introduction to SQL Server; Occlusal semeiotics; Occlusal-postural semeiotics; HLA periodic and constitutionalism; Periodontitis: clinical features; Aphthosis: clinical features; Recurrent aphthous and Helicobacter Pilory; Fluorosis: clinical features.

#### Prerequisites

Knowledge of dento-alveolar anatomy of the adult subject and in developmental age

**Teaching form** 

#### **Teaching form**

Clinical mentoring and oral lessons

#### Textbook and teaching resource

Clinical Periodontology and Oral Implantology. Lindhe. Edi-Ermes; Foundamentals of Operative Dentistry - A contemporary approach SUMMIT-ROBBINS Orthodontics current principles and techniques GRABER -VANARSDAL, D. ROZENCWEIG MASSON dental prevention manual

#### Semester

second semester II° year

#### **Assessment method**

Oral and written examination

#### **Office hours**

Friday 830-900