UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Elements of Dental Materials (clinical Applications)

2425-3-I0301D014-I0301D054M

Aims

- Know the characteristics of the materials used dental hygienist in clinical practice
- Knowledge of tools and methods of prevention of diseases to dentistry
- Understand the workings and areas of application of dental materials
- Be able to make a rational and consistent choise of materials and tools of use

Contents

Description of materials considering the needs of the profession whom they are addressed by defining the parameters of eligibility and assessing the qualitative and quantitative biological effects in the oral cavity

Detailed program

Applications in dental materials: biocompatibility of dental materials, the physical properties of dental materials, chemical properties. Morphology and classification of teeth: structure and morphology of teeth, signs of histochemistry of teeth, physical and mechanical properties of teeth; classification identification of teeth. Gypsum for dental use: chemical and physical characteristics, handling and properties; applications. Waxes for dental use: the characteristics of wax modeling, composition and properties of waxes; application in dentistry: Covers and refractory materials: types of coating materials and their characteristics; bond acidic materials, materials in phosphate binder, gypsum-bonded materials : Gold and gold alloys: structure and properties of alloys, gold alloys

for prosthetic devices. Basic metals and alloy steel: composition, physical and mechanical properties; mergers resin and porcelain. Ceramic materials for dentistry: dental ceramics, and chemical and physical characteristics, classification, types of ceramic crowns, partial denture polymer; use of acrylic resins: materials and tools for implantation: as titanium implant materials, materials for implant procedures. Materials and instruments for orthodontics: for orthodontic wires, bands and racketeering; orthodontic instruments. Materials and tools for prevention and oral health: tools and materials for the prevention of caries, materials and tools for oral hygiene. Materials and tools for periodontics. Materials and tools for conservative dentistry: background protective materials, concrete foundation and fillings, cements and zinc oxide eugenol (ZOE) cements etossibenzoico ortho-acid (EBA) cements phosphoric acid , cements polialchnoici acids, resin composite; classification of composite resins; chemical and physical mechanisms of composite resins, light-cured composite resins, chemical and physical properties of composites; Please use the composites and tool for conservation. Adhesives for dental use: adhesion to enamel, dentin adhesion. Materials and devices for endodontic therapy. Impression Materials: characteristics and requirements of impression materials, impression materials classification.

Prerequisites

The goals of the previous courses

Teaching form

Lectures

Textbook and teaching resource

Teaching material made available on the elearning site (slides)

Semester

First semester

Assessment method

Office hours

Tuesday morning

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION