UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Dental Materials

2223-2-H4601D011

Aims

The course aims to give students the tools for understanding life processes at the molecular level and the basis for identifying the links cause - effect of chemical and physical processes more relevant to the curriculum of studies and the medical profession. Together with the concepts of descriptive statistics acquired during the course, this knowledge will form the primary basis for the interpretation of complex reactions which represent life and will introduce the student to the scientific inductive method.

Contents

Chemical properties. Plasters for dental use: chemical-physical characteristics; handling and properties; applications. Waxes for dental use: characteristics of wax modelling, composition and properties of waxes; application in dentistry: basic metals and alloys steels: composition, physical and mechanical properties; mergers for resin and porcelain. Ceramic materials for dentistry: dental ceramics and chemicalphysical characteristics, classification, types of ceramic crowns; polymers for dental implants, use of acrylic resins: Materials and tools for restorative dentistry: background protective materials, cements and fillings from the background ; cements zinc oxide and eugenol (ZOE); cements acid ortho-etossibenzoico (EBA); cements based on phosphoric acid, polialchnoici acid-based cements; impression materials:

characteristics and requirements of the impression materials; classification

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, classific

Prerequisites

The goals of the previous courses

Teaching form

Lessons, seminars

Textbook and teaching resource

Anastasia M. Calderai G. Materiali dentari. Antonio Delfino Editore Baldoni M. Elementi di clinica Odontoiatrica per il corso di laurea in Odontoiatria e Protesi Dentaria

Semester

I semester

Assessment method

An oral examination is employed to test students’

knowledge.

Office hours

monday830-930

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | PARTNERSHIPS FOR THE GOALS