UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Orthodontics I

2425-5-H4601D070-H4601D066M

Aims

Know the main notions concerning the use and benefits of laser technology in orthodontics. To know the basics of self-ligating appliances in young patients and adults. Know the main notions concerning diagnosis and therapy of maxillary hypoplasias.

Contents

Notions of physics to recognize the wavelengths most suitable for the use of the laser in orthodontics. Notions of biomechanics and merchandise to understand the possibilities of application of the self-ligating system in patients in developmental age and at the end of growth. Notions of anatomy, pathophysiology and therapy to apply the rapid palatal disjunctions correctly.

Detailed program

Laser physics. absorption's spectrum of the different wavelengths in biological molecules. Diode laser. CO2 laser. Laser Erbium: Yag. Laser Nd: Yag. Efficacy of lasers in small orthodontic surgery. Upper and lower labial frenulectomies. Lingual frenulectomies. Disinclusions laser-assisted in bone and mucosal tissues. Treatment of gingival hyperplasia resulting from fixed orthodontic treatment. Self-ligating appliances. Biological bases and biomechanical principles of low friction techniques. Treatment sequences. Extractions vs no extractions. Anchor check. Use of low-force elastics. Laser-assisted biostimulation in orthodontics. Remodeling of the periodontal support with self-ligating appliances and laser-assisted biostimulation. Acceleration methods of orthodontic treatment. Role of laser biostimulation in accelerating orthodontic movement. Role of laser biostimulation in pain control in orthodontics. Presentation of clinical case studies that stimulate the student to formulate autonomously a therapeutic plan. Holistic approach to the orthodontic patient. Cranio-maxillo-dental growth analysis and biotype

research. Anatomy and physiology of the stomatognathic apparatus of the subject

in developmental age. Analysis of primary and secondary maxillary hypoplasia. Indications for the use of ERP. Occlusal-postural and respiratory changes resulting from the use of ERP.

Prerequisites

Completion of the examination in General Dentistry Disciplines

Teaching form

Frontal lessons

Textbook and teaching resource

Orthodontics current principles and techniques

GRABER -VANARSDAL

Semester

1° semester

Assessment method

An oral examination is employed to test students' knowledge.

Office hours

Friday 800-900

Sustainable Development Goals

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