UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Gnatologia

1819-5-H4601D024-H4601D068M

Aims

Know the gnathology or the functional anatomy of the stomatognathic apparatus during its functions: swallowing, chewing, speaking and breathing.

Another topic of this course is study the analysis of the relationships between body posture and dental occlusion.

Moreover the student has to know the dysfunctional pathologies of this apparatus: clinical aspects, causes and evolution. The student has to know the different therapies of these pathologies to recreate a good and harmonic function of the system.

Contents

Gnathology is the study of the masticatory function and the whole stomathognathic apparatus, analyzing the structures by a functional point of view.

Detailed program

Cranio-cervico-mandibular anatomy

TMJ anatomy and physiology

Functional anatomy of masticatory muscles

Functional anatomy of the dents-alveolar complex

Cranio-mandibular relationships:

rest position

centric occlusion

protrusion and neuromuscular control

sideshift and neuromuscular control

retruded position

Posselt diagram and gothic arch

The fixed occlusal basics of classical gnathology:

Bennett’s Angle, Bennett’s Movement and Fisher’s Angle

Intercondyle distance

Hinge axys and centric relation

The variable occlusal basics of classical gnathology:

Antero-lateral guidances

The occlusal plane

The Von Spee’s and Wilson’s curves

The height of the cusps

Overjet and overbite

The Frankfurt and Camper planes

The mandibular movements

The masticatory cycle, the swallowing and the concepts of working and balancing side

The occlusal contacts in centric occlusion and during the movements

Analysis of the occlusal contacts and relevations methods (clinical and instrumental)

The distribution and absorbtion of occlusal forces

The mandibular repositioning

The dysfunctional pathologies of stomatognathic apparatus (DCCM)

The joint pathologies

The disc dislocation (with or without reduction)

The neuromuscular pathologies

The gnathologic diagnosis

Anamnesis, examination and differential tests

Functional instrumental exams

Instrumental exams (X-rays, NMR, CT)

Prognosis

Gnathologic therapies

Relationships with other dental fields

Articulators

Body posture analysis

Relationship between body posture and stomatognathic apparatus

Headaches and migraines: clinical aspects and classification

Headache of dental and gnathologic origin

The cervical spine and the cranio-cervical dysfunctional pathologies

Other postural pathologies related to dental occlusion

Other postural therapies

Prerequisites

Completion of the examination in Human Anatomy, Physiology and Basic Pathology

Teaching form

Lectures with clinical samples. Stages in Gnathology department of Dental Clinic of S. Gerardo Hospital (Monza)

Textbook and teaching resource

Peter Dawson

Functional occlusion. From TMJ to smile design.

Mosby Elsiever

Semester

Second semester 5thyear

Assessment method

The oral examination method will be used for the knowledge and skills acquired.

Office hours

By appointment after phone or mailing contacts