

## UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### SYLLABUS DEL CORSO

## **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 5<sup>th</sup>year

#### Assessment method

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

### Office hours

By appointment after phone or mailing contacts