UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Human Anatomy and Stomatognathic System II

2122-1-H4601D002-H4601D007M

Aims

Knowledge of the general anatomy and basic of the anatomy of the stomatognathic apparatus

Contents

Knowledge of the general features of the normal anatomy necessary to understand the basis of pathological changes

Detailed program

NERVOUS SYSTEM

General morphologic and functional organization.

Synapses, neurotransmitters and anatomical basis of the reflex arch.

Central nervous system

Basic concepts on nervous system development.

Position, relations, gross morphology, major features concerning microscopic organization and main functions of the following structures:
spinal cord; brain stem (medulla, pons, midbrain), cerebellum, diencephalon, telencephalon. The limbic system.

Ventricular system: cerebral ventricles, their location and relationships, communication with subarachnoid space.

Cerebrospinal fluid (CSF): composition, circulation and functions.

Meninges: architecture and functions.

Basic knowledge of the main sensory and motor pathways: spinal and medial lemniscal tracts ; spinocerebellar tracts; descending motor systems; cerebellar and basal ganglia motor control; olfactory, gustatory, visual, auditory and vestibular systems

Peripheral nervous system

Cranial nerves, spinal nerves (plexuses) and their territory of innervation.

Autonomic nervous system

General architecture and organization of the sympathetic and parasympathetic division and their functions. Innervation of organs.

Laboratories

To deepen and to reinforce the lectures' topics, gross anatomy laboratories will be provided. During this interactive teaching, students will use anatomy models, as well as they will be guided in the solution of quizzes and easy clinical cases, in small groups and under the supervision of the teacher.

In particular, by using anatomy models, students will recognize the main features of skull and brain

Besides that, multimedia sources and 3D virtual models will be used to further improve anatomy knowledge.

Exam simulations will also be performed with multiple choice questions and/or open questions.

Prerequisites

College level scientific knowledge

Teaching form

Frontal lessons and practical experiences. Virtual dissection by using the 3D Anatomage Table.

Lessons in attendance, subject to any ministerial changes following the COVID pandemic situation

Textbook and teaching resource

- G. Barbatelli e altri autori. Anatomia Umana. Fondamenti. Con istituzioni di istologia. Edi-Ermes

- G. Anastasi e altri autori. Trattato di Anatomia Umana (3 volumi). Edi-Ermes (ed), 2009.

- “Prometheus” testo-atlante di Anatomia, II edizione, 3volumi

- S. Standring. Anatomia del Gray – Le basi anatomiche per la pratica clinica – 41° ed. EDRA

- Ellis H, Mahadevan V. Anatomia Clinica - Edizione italiana a cura di F. Cappello - Idelson-Gnocchi (2019)

- Rezzani R, Rodella LF. Anatomia microscopica e diagnosi differenziale d'organo. EdiSES

- Mescher AL. Junqueira, istologia di base: Testo e atlante. Piccin

- Young B. Wheather, istologia e anatomia microscopica. Edra-Masson

Atlanti:

- Netter. Atlante di Anatomia umana, Frank H. Netter, Editore: Edra

- Anatomia umana. Atlante. Curatori: G. Anastasi, C. Tacchetti, Editore: Edi. Ermes

Semester

1st and 2nd terms

Assessment method

A mid-course assessment is scheduled for the end of the first semester, by a multiple choice quiz focused on Citology, Histology, Gross Anatomy. Moreover, the knowledge of microscopic anatomy will be assessed by the identification of a histological slide.

At the end of the course, the assessment will be based on an oral examination focused on Head Anatomy.

Exams in attendance, subject to any ministerial changes following the COVID pandemic situation

Office hours

Mon-Fri by appointment