UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Human Anatomy and Stomatognathic System I

2425-1-H4601D082-H4601D08202

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

General Anatomy - Anatomic terms; planes, lines and anatomical landmarks; terms related to movement; principles of organization of the human body: cells, tissues, organs, systems; serous cavities and connective spaces, their location and content.

Muscular-skeletal system - Classification of the bones, muscles and joints. The skull: see ANATOMIA 2 and SPECIAL ANATOMY. The vertebral column: general characteristics of the vertebrae and regional differences; atypical cervical vertebrae: atlas and axis; joints of the vertebral column; general features of the muscles of the back. Neck: main characteristics of the muscles of the neck. Chest: bones and cartilages of the thoracic cage; joints of the ribs and costal cartilages; muscles of the thorax, respiratory muscles, in particular diaphragm muscle. Shoulder girdle and upper limb: main characteristics of the different bones; shoulder and elbow joints, main features of the other joints; muscles of the shoulder, the rotator cuff, arm muscles, general features of forearm and hand muscles. Pelvis and lower limb: study of the hip bones in detail, main characteristics of the other bones; joints and ligaments of the pelvis, hip joint, knee joint, main features of the other joints; hip and thigh muscles, muscles of the leg, general features of foot muscles; Scarpa’s triangle and adductor canal. Abdominal wall: anterolateral and

posterior abdominal wall muscles; inguinal ligament; inguinal canal. Pelvic floor:pelvic diaphragm; perineum.

Cardiovascular system - Heart: surface, structure, chambers of the heart, conducting system; heart vessels; pericardium; mediastinum: definition, borders and contents. Blood vessels: vessels structure (arteries, veins and capillaries); pulmonary and systemic vascularization, with major focus on: aorta and its branches; Polygon of Willis; blood supply of the upper and lower limbs; blood supply of the organs; superior and inferior vena cava venous system; portal vein system; anastomosis.

Lymphatic system - General organization of the lymphatic drainage. Thoracic duct. Position, relations, macroscopic and microscopic anatomy of the lymphoid organs: thymus, spleen, lymph nodes and tonsils; main lymph node chains.

Respiratory system - Nose, nasal and paranasal cavities. Position, relations, macroscopic and microscopic anatomy of the organs of the respiratory tract: pharynx, larynx, trachea, bronchi, lungs. Blood supply of the organs. Visceral and parietal pleura.

Digestive System - Oral cavity. Salivary glands. Position, relations, macroscopic and microscopic anatomy of the organs of the gastrointestinal tract: esophagus, stomach, small intestine (duodenum, jejunum, ileum), large intestine (cecum, appendix, colon and rectum). Other organs of the digestive system: liver, bile ducts, gallbladder, pancreas; their position, relations, macroscopic and microscopic anatomy, with focus on the different types of hepatic lobules. Blood supply of the organs. Peritoneum: general arrangement, ligaments, omenta, mesenteries, intraperitoneal and retroperitoneal relationships of the different organs.

Urinary system-Position, relations, macroscopic and microscopic anatomy of the organs of the urinary tract: kidneys, with focus on the structure of the nephron, bladder, ureter, male and female urethra. Blood supply of the organs.

Endocrine system-General characteristics of hormones. Position, relations, macroscopic and microscopic anatomy of the endocrine organs: pituitary gland and its connection with the hypothalamus, thyroid, parathyroid, adrenal gland, endocrine pancreas, pineal gland. Blood supply of the organs. General characteristics of GEP system.

Female reproductive system-Position, relations, macroscopic and microscopic anatomy of the female genital organs: ovary, uterus, fallopian tube, vagina. Blood supply of the organs. External genitalia: morphology, relations and structure. Main characteristics of placenta.

Male reproductive system-Position, relations, macroscopic and microscopic anatomy of the male genital organs: testis, epididymis, vas deferens, prostate, seminal vesicles and bulbourethral glands. Structures of the spermatic cord. Blood supply of the organs. External genitalia: morphology, relations and structure.

Integumentary system-Skin and its appendages. Mammary gland: position, relations, macroscopic and microscopic anatomy. Blood supply of the skin and mammary gland.

Special senses
Eye: the orbit and its contents, basic concepts on the structure of the eye-ball and its muscles. Lacrimal apparatus.
Ear: general structure and components of the outer, middle, inner ear.

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 skeleton

- Upper and Lower limbs
- Heart
- Thorax and Abdomen
- Male and Female Pelvis
- Eye and Ear
- Brain

Prerequisites

College level scientific knowledge

Teaching form

15 Lectures (2h/each) and practical experiences (24h) on anatomical models. Exam simulations will also be performed with multiple choice questions and/or open questions.
Virtual dissection by using the 3D Anatomage Table.

Textbook and teaching resource

For Textbooks and teaching resources see "Anatomia, Istologia ed Embriologia Generali e dell'Apparato Stomatognatico" syllabus

Semester

Annual; this teaching unit during the 1st term.

Assessment method

An extensive mid-course assessment is scheduled for the end of the first semester, for the details see "Anatomia, Istologia ed Embriologia Generali e dell'Apparato Stomatognatico" Syllabus.

Office hours

Mon-Fri by appointment
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Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY