Programme of the course of Anatomy for students of 1-st year Medical Faculty in Chair and Department of Anatomy Pomeranian Medical University in Szczecin

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Number of hours:
Total: **240 hours** including:
- Lectures/seminars - **60 hours**
- Practical classes - **180 hours**

*points ECTS: 22*

Teaching aims:
Aim of teaching of anatomy for the 1-st year students of English Programme of Medical Faculty is introduce detailed structure of human body with special emphasis of most important anatomical anomalies and variations to the students.

Types of the classes

Course of Anatomy is lead in 1-st and 2-nd semester. It contains 240 didactic hours in different form: lectures, practical classes, partial tests and final examination. lectures/seminars 60 hours, and practical 180 hours.

1. Lectures/seminars - 60 hours. 30h in winter and 30h in summer semester (1 hour twice a week). Groups no than 30 persons/group.
2. Practical classes. 180 hours. 90h in winter and 90h in summer semester (2 hours three times a week). Classes are divided into theoretical part – explanation based on the atlases, multimedia and presentations and practical part, when students work with cadavers in the dissection room. Some cadavers are prepared by students under assistants supervision and some, earlier prepared, are demonstrated to let the students become familiar with the structure, relations and topography of human body. During the classes the progress of students is controlled.
3. Anatomy course is divided into 10 parts:
   First semester:
   1. Osteology and syndesmology
   2. Upper limb
3. Lower limb
4. Neck
5. Thorax and back
Second semester:
6. Abdomen
7. Pelvis and perineum
8. Head
9. Brain
10. Organs of senses.
After each part, the colloquium evaluating knowledge obtained during lectures and classes is held including the single or multiple choice test and practical skills test. In case of failing, student has opportunity to retake the test twice in written or oral form.

4. Final examination evaluating knowledge of human anatomy is held after passing all partial tests during the summer examination session. It consists of two parts
   1. Theoretical - single or multiple choice question test.
   2. Practical - evaluating the knowledge of anatomical structures on cadavers.
   If examination is failed, it can be retaken twice in different form (written essay or oral answer).

Recommended textbooks:
4. Sobotta Atlas of Human Anatomy (Two Volume Set) Williams & Wilkins

The program of the courses of Human Anatomy for 1-st year students.

Osteology and syndesmology.


Course 2. – The axial skeleton. The vertebral column- description and division. The cervical vertebra. The thoracic vertebra. The lumbar vertebra. The sacrum and coccyx. Articulations (joints and synchondrosis) and ligaments of the vertebral column.

Course 3- The axial skeleton: the ribs- the structure and division. The true, false and floating ribs. The sternum- the structure and division. The thorax cage- general description. Articulations of the thorax- costovertebral and sternocostal joints.

Course 4.- The bones of the upper limb- bones of the shoulder girdle, arm, forearm and hand. Articulations of the upper limb. Detailed description of the shoulder and elbow joints.


Course 7.  Detailed description of the frontal, ethmoidal and sphenoid bones.

Course 8. – The temporal bone- division ( squama, tympanic, mastoid and petrosal parts) detailed structure, canals and its contents. The tympanic cavity.

Course 9. – Bones of the face. Description of the maxilla, palatine, zigomatic, lacrimal, nasal bones, inferior nasal conchae and vomer.

Course 10. – The structure of the mandible and temporo-mandibular joint. Fossas of the skull temporal, infratemporal, pterygopalatine, retromandibular, their borders, connections and contents.

Course 11. The base and roof of the skull. The anterior, middle and posterior cranial fossa- borders and connections. The orbit. The nasal cavity. The paranasal sinuses.

Course 12. Practical and written test.

Upper limb.


Course 2. The brachial plexus- origin, relations, short and long branches. The axillary artery and its branches. The axillary vein and its tributaries. The fascies and muscles of the arm (origin, insertion, innervation and blood supply). The medial and lateral biceptal groove. The brachial artery and its branches.


Course 5. Repetition. Topography of the upper limb. Injuries of the nerves. Pulse detection. Mobility of the upper limb.

Course 6. Practical and written test.
Lower limb


Course 3. Muscles of the leg (groups, innervation, function). The popliteal fossa- limits and contents. The popliteal artery – course and branches. The tibial nerve. The common peroneal nerve (superficial and deep peroneal nerves). The sural nerve.


Course 6. Practical and written test.

Neck

Course 1. General description and topography of the neck (the processus spinosus C7, the hyoid bone, the jugular notch, the pharyngeal eminence, pulse detection). Muscles of the neck. (superficial, infra-and suprathyoid, deep). Fascies and spacies of the neck. Superficial veins and cutaneous nerves.

Course 2. The subclavian artery and its branches (thyro-cervical trunk, costo-cervical trunk, vertebral, internal thoracic arteries).


Course 8. Trachea, the esophageus, the cervical part. Lymph nodes of the neck. Repetition.

Course 9. Practical and written test.

Thorax and back


Course 3. The heart- detailed structure- size, shape and external features; cardiac chambers and internal features; fibrous skeleton of the heart. Epicardium, myocardium, endocardium. Vessels of the heart (coronary arteries and veins). Conduction system. Nerve supply to the heart.


Course 9
Test: practical and written

ABDOMEN

Course 1. Walls of the abdomen, topographic points and lines, muscles of the abdomen, fascias, sheath of rectus, inguinal canal and its content.


Course 3. Peritoneum- development, omental bursa, mesenteries, peritoneal recesses, inter- and extraperitoneal localisation.


Course 5. The esophageus. Stomach, small and large intestine, ileocaecal valve, vermiform appendix- topographic, internal and surface anatomy, nerves, vessels, function.

Course 6. Liver, biliary ducts and gallbladder- topographic, internal and surface anatomy, nerves, vessels, function.

Course 7. Pancreas, spleen- topographic, internal and surface anatomy, nerves, vessels, function. Lymphatic drainage of abdomen.


Course 9.
Practical and theoretical test.

Lesser pelvis and reproductive system


Course 2. Peritoneum in the lesser pelvis; recto-uterine, vesico-uterine and rectovesical pouch. Rectum, anal canal. Internal and external iliac arteries and their branches.

Course 4. Ureter- topography, parts, vessels and nerves. Urinary bladder- shape, localisation, interior and ligaments of the bladder, vessels and nerves. Male and female urethra- parts, sphincters, vessels and nerves.

Course 5. Male reproductive organs. Testes and epididymes, deferent and ejaculatory ducts, spermatic cords - topography, components, anatomy, vessels and nerves. Penis and scrotum, accessory glandular structures - topography, components, anatomy, vessels and nerves.

Course 6. Female reproductive organs. Ovaries, uterine tubes and uterus- topography, components, anatomy, ligaments, vessels and nerves.


Course 8. Scrotal nerve. Sacral part of the parasympathetic system. Repetition.

Course 9. Practical and written test.

Head


Course 2. Facial nerve- nucleus, course, branches, parotid plexus. Intermediates nerve. Trigeminal nerve- division, ganglia.. Superficial temporal, occipital, posterior auricular artery- course and branches.

Course 3. Orbital fossa. Lacrimal gland. Ophtalmic artery. Muscles of the eyeball and their innervation- oculomotor (III), trochlear (IV), abducens (VI) nerves. Ophtalmic nerve (V1)- course, branches. Ciliary ganglion

Course 4. Maxillary (V2) and mandibular (V3) nerves- course and branches. Maxillary artery segments, course and branches. Messenteric muscle-attachments, innervation, function.


Course 9. Cranial nerve: glossopharyngeal (IX), vagus (X), hypoglossal (XII)- course and branches.


Course 11. Topographic spaces, their contents and connections (sublingual, parapharyngeal, retropharyngeal, submandibular, submental).

Course 12. Practical and written test

Brain


Course 2. Medial telencephalon. Rhinoencephalon. The limbic system. The basal nuclei. The extrapiramidal system.

Course 3. Diencephalon- thalamus, hypothalamus (pituary gland and its function)- division, internal and external structure, function. The third ventricle. Mesencephalon division, internal and external structure, function.

Course 4. The hind-brain. Internal and external structure of the pons, medulla oblongata and cerebellum and their function. Nuclei of the cerebellum. The 4-th ventricle- borders and connections.


Course 6. Practical and written test

Organs of senses

Course 1. External, medial and internal ear- structure, contents, function. Vestibulocochlear nerve.


Course 3. Practical and written test

Repetitory classes