

GENERAL MEDICINE FACULTY
EDUCATIONAL PLAN OF LECTURES ON THE SUBJECT OF "HUMAN ANATOMY
AND MEDICAL TERMINOLOGY"
SPRING SEMESTER

- 1.** General anatomy of the nervous system. Elements of the structure of the nervous system. Reflex arc. Development of the nervous system. Development of the spinal cord and brain. Spinal cord: variations and abnormalities. The membranes of the spinal cord and brain. Cerebrospinal fluid production and flow. – 2h.
- 2.** Parts of the brain. The structure of the cerebral hemispheres. Development of sulci (grooves) and gyri of the brain. Segmentation of the brain. Cyto- and myeloarchitectonics of the cerebral cortex. Dynamic localization of the cerebral cortex functions. Brain variations and abnormalities.- 2h.
- 3.** Pathways of the brain and spinal cord, their classification. Associative pathways. The commissural fiber system. Projection fiber system. Exteroceptive pathways. Proprioceptive pathways. Interoceptive pathways. Efferent (descending) pathways. The conducting tracts of the extrapyramidal system. The pathways of the cerebellum. – 2h.
- 4.** The doctrine of the sense organs – esthesiology. The doctrine of the analyzer. The content of the analyzer and its functional unity. The receptors and their classification. The vision organ, its development, variation, and anomalies. The development and functional anatomy of the smell and taste organs. – 2h.
- 5.** The development, functional anatomy, variation, and anomalies of the vestibulocochlear organ. The development and functional anatomy of the organ of skin sensitivity. General overview of the peripheral nervous system. The classification, development, variation, and anomalies of the cranial nerves. –2 h.
- 6.** The circulatory system. The greater (systemic) and lesser (pulmonary) circulations. The structural features of the blood vessels. Anastomoses and their practical importance. The local circulation – microcirculation. The collateral circulation. The features of the location of the vessels in the organism, the principles of the direction and branching of the vessels. Vascular networks and plexuses. The venous sinuses. – 2h.
- 7.** The heart: structure, topography, development, and age features. The vessels and nerves of the heart. Anomalies of the heart. The development of the blood vessels. The yolk and fetal circulations. The changes happening in the vascular system after birth.–2 h.

- 8.** The structural features, functional anatomy, topography, practical importance, variations, and anomalies of vessels and nerves (plexuses) of the head, trunk, upper and lower extremities. Intersystemic anastomoses of the veins. –2 h.
- 9.** The structural elements of the lymph system. The anatomy of lymph capillaries, lymph vessels, nodes, trunks, and ducts. The ways of the flow of the lymph into the venous system.– 2 h.
- 10.** The structural features of the vegetative nervous system. The central and peripheral parts of the vegetative nervous system. The sympathetic part of the vegetative nervous system. The sympathetic trunk: development, variations, and anomalies. The parasympathetic part of the vegetative nervous system. The head and sacral parts of the parasympathetic nervous system, their development, variations, and anomalies. – 2h.

**1st COURSE, EDUCATIONAL PLAN OF THE PRACTICAL CLASSES ON THE
SUBJECT OF "HUMAN ANATOMY AND MEDICAL TERMINOLOGY"
SPRING SEMESTER**

Topic 1. The structure, age features, and topography of the spinal cord. The formation of the spinal nerves. The repeating and fixation of the pronunciation rules of Latin terms. –2h.

Topic 2. The general overview of the brain. The parts of the brain. The topography of the cranial nerves on the cerebral base. The general information about the meninges of the brain and spinal cord.–2h.

Topic 3. The telencephalon and its derivatives, The structure of the cerebral hemispheres. The anatomy of the sulci, fissures, and gyres of the cerebral hemispheres.–2h.

Topic 4. The structure and function of the cerebral cortex. The general overview on dynamic localization of the functions of cerebral cortex.–2h.

Topic 5. The corpus callosum, fornix, and anterior commissure. The subcortical nuclei and internal capsule. The rhinencephalon and lateral ventricles. – 2h.

Topic 6. The anatomy of the diencephalon. The structure of the III ventricle. The structure of the midbrain and its nuclei. The anatomy of the mesencephalic (Sylvian) aqueduct.–2h.

Topic 7. The isthmus rhombencephali. The structure of the metencephalon: pons, its nuclei, and their anatomy. – 2h.

Topic 8. The cerebellum, its structure. The fixation of the new Latin terms and repeating of the previous terms. –2h.

Topic 9. The medulla oblongata, IV ventricle. The topography of the nuclei located in the rhomboid fossa. –2h.

Topic 10. The general overview of the conducting pathways of the brain and spinal cord. –2h.

Topic 11. The vision organ. The II cranial nerve. The general information of vision analyzer. –2h.

Topic 12. The auxiliary apparatus of the eye. The functional anatomy and innervation zone of the III, IV and VI cranial nerves.–2h.

Topic 13. The vestibulocochlear organ. The external ear and middle ear. –2h.

Topic 14. The inner ear. The VIII cranial nerve. The general overview on the hearing and balance analyzers. –2h.

Topic 15. The smell and taste organs. The I, VII, and IX cranial nerves. The general overview on smell and taste pathways.–2h.

Topic 16. The V cranial nerve. The structure, branches, and innervation zone of the trigeminal nerve. The anatomy of the skin and its derivatives. The anatomy of the mammary glands. The pronunciation of the Latin terms used in the topic.–2h.

Topic 17. The anatomy and innervation zones of the X, XI, and XII cranial nerves. –2h.

Topic 18. The heart and pericardium, their age features. The morphofunctional anatomy of the myocardium. The vascularization and innervation of the heart. –2h.

Topic 19. The topography of the heart, its boundaries, and projection of the valves of the heart onto the anterior wall of the thoracic cage. The tones of the heart. – 2h.

Topic 20. Interim assessment on the central nervous system, sensory organs, and 12 pairs of cranial nerves. Only practical class materials covering topics 1-17 will be included in this colloquium. The colloquium will be held centrally at the University Examination Center.– 2h.

Topic 21. The aorta and its parts. The ascending aorta, arch of the aorta. The anatomy of the common and external carotid arteries.–2s.

Topic 22. The internal carotid artery. The vertebral artery like a branch of the subclavian artery. The cerebral arterial circle.–2h.

Topic 23. The subclavian artery. The arteries of the upper extremities. The superficial and deep palmar arches. The veins of the upper extremities. The fixation of the new Latin terms and repeating of the previous terms.–2h.

Topic 24. The vena cava superior. The brachiocephalic vein. The internal jugular vein. Intracranial and extracranial veins. The external jugular vein. The anterior jugular vein. The subclavian vein. – 2h.

Topic 25. The spinal nerves. The dorsal branches of the spinal nerves. The ventral branches of the spinal nerves. The cervical plexus. – 2h.

Topic 26. The brachial plexus: short and long branches, their topography. The fixation of the new Latin terms and repeating of the previous terms.–2h.

Topic 27. The thoracic part of the aorta and its branches. The veins of the walls and organs of the thoracic cage (the azygos, hemiazygos vein, posterior intercostal veins, vertebral veins). The ventral branches of the thoracic nerves. – 2h.

Topic 28. The abdominal part of the descending aorta and its branches. The topography of these branches. – 2h.

Topic 29. The common, internal, and external iliac arteries. – 2h.

Topic 30. The femoral and popliteal arteries. The arteries of the leg and foot. The vessels taking part in arterial networks of the lower extremities.–2s.

Topic 31. The system of the vena cava inferior. The system of the portal vein. The fixation of the new Latin terms and repeating of the previous terms. The pelvic veins and veins of the lower extremities. The overview on intersystem anastomoses of the veins. –2s.

Topic 32. The lumbar plexus: branches and their innervation zones. –2s.

Topic 33. The short and long branches and topography of the sacral plexus. The innervation zone of the sciatic nerve.–2s.

Topic 34. The general information about the structural elements of the lymph system. The lymph nodes and vessels of the head, neck, upper extremities, and thoracic cage.–2s.

Topic 35. The lymph nodes and vessels of the abdominal cavity, pelvis, and lower extremities. The fixation of the new Latin terms and repeating of the previous terms.–2s.

Topic 36. The general information about the vegetative nervous system. The sympathetic trunk. The cervical part of the sympathetic trunk. The thoracic, lumbar, and pelvic parts of the sympathetic trunk. The vegetative ganglia and plexuses of the abdominal and pelvic cavities. – 2h.

Topic 37. The parasympathetic part of the vegetative nervous system. – 2h.

Topic 38. The parasympathetic ganglia of the head.–2h.

**Head of the Department of
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