COURSE PROGRAMME
Nervous system and sensory organs
1st year medical students – 2nd semester 2026

WEEK	LECTURES – 2 HRS.	PRACTICAL EXERCISES 2 X 2 HRS.
I 09.02.-13.02	Introduction to morphology of nervous system. Development of nervous system. Spinal cord. Spinal nerves.	1. Cranium. Frontal, parietal and occipital bones. Vault. Skull of a newborn. 2. Skull. Temporal bone and ethmoid bones. Cavities and canals in the temporal bone.
II 16.02.-20.02.	Brain. General description. Medulla oblongata.	1. Skull. Sphenoid bone. Facial bones – maxilla, mandible, zygomatic, palatine, nasal, lacrimal, inferior nasal concha, vomer and hyoid bone. 2. Skull. Nasal cavity. Paranasal sinuses. Orbit. Temporal, infratemporal and pterygopalatine fossae.
III 23.02.-27.02.	Pons. Rhomboid fossa. Midbrain.	1. Skull. External and internal cranial base. Openings and elements that pass through them. 2. Spinal cord. External and internal structure. Spinal meninges and blood supply.
IV 02.03.-06.03. **/03.03. National holiday/**	Cerebellum.	1. Spinal cord. Spinal cord, spinal ganglion, autonomic ganglion and peripheral nerve – ***microscopic structure.*** 2. Medulla oblongata. External and internal structure.
V 09.03.-13.03.	Diencephalon. Thalamus, epithalamus, metathalamus.	1. Pons. External and internal structure. Rhomboid fossa. 2. Midbrain. External and internal structure.
VI 16.03.-20.03.	Diencephalon. Hypothalamus, subthalamus.	1. Cerebellum. Fourth ventricle. Cerebellar cortex, choroid plexus – ***microscopic structure.*** 2. Revision.
VII 23.03.-27.03.	Forebrain – general description. Brain cortex.	1. **Practical and theoretical quiz.** 2. Diencephalon. Thalamus, epithalamus, metathalamus.
VIII 30.03.-03.04.	Forebrain – white matter. Basal ganglia.	1. Diencephalon. Hypothalamus, subthalamus. Third ventricle. 2. Telencephalon. Gross brain. Brodmann's areas. Cerebral cortex – ***microscopic structure.***
IX 06.04.-10.04.	**Easter Holiday**	**Easter Holiday**
X 13.04.-17.04. **/13.04. Easter holiday/**	Rhinencephalon. Limbic system.	1. Telencephalon – white matter, basal ganglia. Lateral ventricles. 2. Rhinencephalon. Limbic system.

XI 20.04.-24.04.	Eye.	1. Meninges. Blood supply of CNS. 2. Eye. Eyeball and accessory ocular organs. Visual system.
XII 27.04.-01.05. **/01.05. National holiday/**	Ear.	1. Ear. External and middle ear. Inner ear. Osseous labyrinth. Auditory and vestibular systems. 2. Eye and ear – ***microscopic structure.***
XIII 04.05.-08.05. **/06.05. National holiday/**	Cranial nerves I.	1. Cranial nerves – general remarks. III, IV, VI, XII. 2. Cranial nerves – V.
XIV 11.05.-15.05.	Cranial nerves II.	1. Cranial nerves – VII, IX. 2. Cranial nerves – X, XI.
XV 18.05-22.05.	Autonomic nervous system.	1. Revision. 2. **Practical and theoretical quiz.**
XVI 25.05.-29.05. **/25.05. National holiday/**	Pathways in CNS.	1. Pathways in the brain. Autonomic nervous system – ***microscopic structure of autonomic ganglion – revision.*** 2. Sensory organs. Receptors of general sensation – taste buds, Pacinian and Meissner's corpuscles - ***microscopic structure.***

Semestrial exams: Theoretical quiz 2 x 30 pts.
Practical quiz 2 x 20 pts.
Total **100** pts.

Evaluation:
0 – 59p. – 2.00
60 – 64p. – 3.00
65 – 69p. – 3.50
70 – 74p. – 4.00
75 – 79p. – 4.50
80 – 84p. – 5.00
85 – 89p. – 5.50
90 – 100p. – 6.00

Exemption:
Students with an overall score from both semesters over 80% (≥160 points) of the total score (200 points) will exempt the practical part of the final exam.

Students with an overall score from both tests this semester over 90% (≥90 points) of the total score (100 points) will exempt the MCQ part and the practical on Nervous System and Sensory organs of the final exam.

Literature

Textbooks

1. Human Anatomy, Textbook for medical and dental students, Volume I and II, Vladimir Ovcharov, ARSO Medical Publishing House, First Edition 2023
2. Anatomy of the Central Nervous System.V. Vankov, M. Vankova. STENO publ.house, Varna, 2012-2015-2017 and 2021.
3. Sobotta Anatomy Textbook: English Edition with Latin Nomenclature. Jens Waschke, Tobias M. Böckers, Friederich Paulsen eds., 1st edition, Urban & Fischer, 2019. https://www.elsevier.com/books/sobotta-anatomy-textbook/paulsen/978-0-7020-6760-0
4. Gray's Anatomy for Students, Richard L. Drake, A. Wayne Vogl, Adam W. M. Mitchell, Fourth edition, Elsevier 2019-2020
5. High-Yield Neuroanatomy (High-Yield Series) by James D. Fix (Sep 2, 2008)
6. Functional Neuroanatomy: Text and Atlas, 2nd Edition (LANGE Basic Science) by Adel Afifi and Ronald Bergman (Jan 28, 2005)
7. Baltadjiev A., Popova F., Grozlekova L., Petleshkova Ts., Harizanova Z. Topographic anatomy of the head, Lax book, 2024, Plovdiv.
8. Baltadjiev A., Popova F., Grozlekova L., Petleshkova Ts., Harizanova Z. Human osteology, Lax book, 2025, Plovdiv.

Manuals

1. A Practicum of Organ Histology - Atanassova P, Koeva Y, Petrova E, Penkova N, Trichkova V.
2. MCQ in anatomy. A self-testing supplement to human anatomy. Locomotory & Central Nervous System. S.T. Sivkov, S.S. Novakov. 2012.

Atlases

1. Delchev S., Novakov S., Ivanova R. Photographic atlas of human anatomy, ed. S.Sivkov, Lax book, 2024, Plovdiv.
2. Sobotta. Atlas of Human anatomy, 15th edition, Urban & Fisher, 2011.
→Sobotta Atlas of Human Anatomy, Volume 3: Head, Neck and Neuroanatomy, 2020 Edition Elsevier Limited, Oxford, 2018.

Prepared by:
Asistant prof. Z.Todorova, DMD

Revised by:
Assoc. prof. F. Popova, DMD, PhD