


APPROVED
Head of Physiology and
Pathophysiology Department
with course of Medical Biology

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Calendar and Thematic plan
PRACTICAL CLASSES OF PHYSIOLOGY
for students of SSU Medical Institute
in speciality 8.222 - "MEDICINE"
(group 205)
for the autumn semester of the 2023-2024 academic years

№	Themes of practical classes	Hours	Data
1.	The subject and tasks of physiology.	2	04.09-08.08
2.	The main stages of the development of physiology. Methods of physiological research.	2	
3.	Functional properties of cell membranes.	2	
4.	Resting potential of nerve and muscle fibers.	2	11.09-15.09
5.	Action potential of nerve and muscle fibers.	2	
6.	Preparation of a neuromuscular preparation.	2	18.09-22.09
7.	Mechanisms of electrical stimulation of excitable structures.	2	
8.	Study of bioelectric phenomena in living tissues.	2	
9.	Conduction of excitation along nerve and muscle fibers.	2	25.09-29.09
10.	Calculation work from the section "Electrophysiology".	2	
11.	Contraction of skeletal and smooth muscles.	2	02.10-06.10
12.	Study of the main characteristics of muscle contraction.	2	
13.	Solving situational tasks from content module 1 "Introduction to physiology. Physiology of excitatory structures".	2	
14.	Final lesson from content module 1 "Introduction to physiology. Physiology of excitatory structures".	2	09.10-13.10
15.	General patterns of nervous regulation of functions.	2	
16.	Analysis of the reflex arc.	2	16.10-20.10
17.	Excitation and inhibition in the central nervous system.	2	
18.	Study of inhibition of spinal reflexes.	2	
19.	The role of the spinal cord in the regulation of body functions.	2	23.10-27.10
20.	Study of clinically important spinal reflexes in humans.	2	
21.	The role of the hindbrain in the regulation of body functions.	2	30.10-03.11
22.	The role of the midbrain and basal nuclei in the regulation of body functions.	2	
23.	The role of the cerebellum, thalamus and hypothalamus in the regulation of body functions.	2	
24.	Determination of functional asymmetry of the cortex of the large hemispheres.	2	06.11-10.11
25.	Nervous regulation of vegetative functions.	2	

26.	Research of autonomic tone and autonomic reactivity in humans.	2	13.11-17.11
27.	Calculation work and solution of situational tasks from content module 2 "Nervous regulation of body functions".	2	
28.	Final lesson from content module 2 "Nervous regulation of body functions" .	2	
29.	General patterns of humoral regulation of vegetative functions.	2	20.11-24.11
30.	Hypothalamic-pituitary system.	2	
31.	The role of hormones in the regulation of physical and mental development.	2	27.11-01.12
32.	The role of hormones in the regulation of sexual development.	2	
33.	The role of hormones in the regulation of homeostasis.	2	
34.	The role of hormones in regulating the body's adaptation to stress factors.	2	04.12-08.12
35.	Solving situational tasks from content module 3 "Humor regulation of body functions".	2	
36.	Final lesson from content module 3 "Humoral regulation of body functions" .	2	11.12-15.12
37.	Sensor systems. Study of the somatosensory analyzer.	2	
38.	Visual analyzer.	2	
39.	Auditory and vestibular analyzers.	2	18.12-22.12
40.	Study of the properties of visual, auditory and vestibular analyzers.	2	
41.	Physiological bases of behavior.	2	25.12-29.12
42.	Higher nervous activity of a person.	2	
43.	Study of cognitive processes and types of higher human nervous activity.	2	
44.	Individual work of students from module 4 "Physiology of analyzers and HNA".	2	01.01-05.01
45.	Final lesson from content module 4 "Physiology of analyzers and HNA " .	2	
Total		90	