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Budgetary institution of higher education Khanty-Mansi Autonomous Okrug-Yugra "Surgut State University"

Approved by Deputy Rector for Academic Affairs

E.V. Konovalova

"13" June 2024, Record No. 5

MODULE OF GENERAL PROFESSIONAL DISCIPLINES Human Anatomy

working program of the discipline (module)

Department	Morphology and physiology	
Curriculum	s310501-ЛечДело-24-1.plx 31.05.01 Лечебное дело Specialty 31.05.01 General Medicine	
Qualification	General Practitioner	
Form of education	Full-time	
Total (in credits)	9	
Total academic hours including:	324	Control: Exams 3 rd term; Credit 1 st ,2 nd term
Classes	192	
Self-study	96	
Control hours	36	

Course outline in terms								
Academic year (Term)	1 (1	1.1)	1(1	.2)	2 (2.1)		2 (2.1) Tota	
Weeks	17	4/6	17	2/6	17	2/6		
Types of classes	Cur	Syl	Cur	Syl	Cur	Cur	Cur	Syl
Lectures	16	16	16	16	16	16	48	48
Practical	48	48	48	48	48	48	144	144
Total classes	64	64	64	64	64	64	192	192
Contact work	64	64	64	64	64	64	192	192
Self-study	44	44	44	44	8	8	96	96
Control hours	-	-	-	-	36	36	36	36
Total	108	108	108	108	108	108	324	324

Course outline in terms

The Syllabus is compiled by: PhD in Morphological Sciences (Morphology), Associate Professor, Stolyarov V.V._____ Lecturer Voronin Y.S. _____

The Syllabus

Human Anatomy

Developed in accordance with Federal State Educational Standard:

Federal State Educational Standard of higher education in the specialty 31.05.01 General medicine (Order of the Ministry of Education and Science of the Russian Federation 12/08/2020 No. 988)

Based on the Curriculum: 31.05.01 GENERAL MEDICINE Specialization: General Medicine Approved by the Academic Council of Surgut State University, "13" <u>june</u> 20<u>24</u>, Record No. 5

The Syllabus was approved by the department **Morphology and physiology**

Head of Department, Doctor of Medicine, Professor Stolyarov V.V..

1. COURSE AIMS
 1.1 The objective of the course "Human anatomy" is to acquire deep knowledge of anatomy and topography of organs and tissues of the human body as a whole, its constituent systems of organs and tissues on the basis of modern achievements of macro - and microscopic anatomy, physiology, biology, taking into account the requirements of the clinic, practical medicine; the ability to use this knowledge in the subsequent study of other fundamental and clinical disciplines, as well as future practice of the doctor. The aim is to study the shape and structure of the human body, the consideration of the laws of this structure in connection with the functions performed and the influence of the environment.
2. COURSE OVERVIEW
Course code (in curriculum) 51.0.04
2.1 Requirements for the preliminary training of the student:
2.1.1 Biology
2.2 Disciplines and practices for which this discipline (module) is necessary as a prior:
2.2.1 Histology, embryology, cytology
2.2.2 Physical Education and sports
2.2.3 Normal physiology
2.2.4 Pharmacology
2.2.5 Pathologic anatomy
2.2.6 Ophthalmology
2.2.7 Neurology, medical genetics, neurosurgery
2.2.8 Otorhinolaryngology
2.2.9 Forensic Medicine
2.2.10 Stomatology
2.2.11 Propedeutics of internal medicine
2.2.12 Topographic anatomy, operative surgery
2.2.13 Obstetrics
2.2.14 General surgery
2.2.15 Traumatology, orthopaedics
2.2.16 Infection diseases
2.2.17 Paediatrics
3. COMPETENCES UPON COMPLETION OF THE COURSE (MODULE)

GPC-5.1: Knows the histological structure of organ tissues - knows how to differentiate them microscopically; the anatomy of the human body - the macroscopic structure and topography of organs and body parts; human physiology - the mechanisms of homeostasis regulation and the functional systems of the body in the normal condition

By the end of the course students must:

3.1	Know:
3.1.1	Methods of anatomical studies and anatomical terms (Russian and Latin).
3.1.2	Anatomy of organs and systems, details of their structure, their main functions.
3.1.3	Interconnection of organs with each other, their projection on the surface of the body.
3.1.4	The main stages of organ development (organogenesis).
3.1.5	The main variants for the structure and malformations of organs.
3.2	be able to:
3.2.1	Use basic anatomical instruments (forceps, scalpel, etc).
3.2.2	Dissect: joints, muscles, blood vessels, nerves.
3.2.3	Palpate the basic bone formations with a view to their topographic characteristics.
3.2.4	Palpate the main superficial arteries and find the place of their pressing to the bone formations.
3.2.5	Palpate the main groups of lymph nodes.
3.2.6	Demonstrate and correctly name the movements in the main joints of the human body.
3.2.7	Find and palpate the main muscular marks of the human body.
3.2.8	Determine the main anthropometric points and lines to describe the constitutional features of the body structure, to determine the boundaries of organs.

4. STRUCTURE AND CONTENTS OF THE COURSE (MODULE)						
Class Code	Topics /Class type	Term / Academic year	Academic hours	Competences	Literature	Notes
	Unit 1. Osteology is the study of bones; arthrology is the study of bones joints.					
1.1	Introductory lecture: subject, goals and methods of studying anatomy, its connection with related disciplines. Basic structure of the human body. Osteology is the study of bones. Skeleton functions. The chemical structure of the bone. Classification of bones. /General arthrology. Types of bone connections. Classification of joints. Biomechanic of movements Anatomy, development and age characteristics of the skull.	1	12	GPC-5.1	L1.2, 1.3, L1.4, L2.1, L2.3, L2.7, L3.1, E1, E2, E3	
1.2	Anatomic nomenclature. Planes, the axes of the body. The structure of the rib. Chestbone. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.3	Bones of free upper limb: Humerus, Radius, Ulna and hand bones	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.5	Pelvis bones. The pelvis as a whole. Sex differences of the pelvis. The size of the pelvis (large and small). Bones of the free lower limb: Femur, Shin bones, Patella, Bones of the foot. /Practice /	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.6	General arthrosyndhesmology. The connection between the vertebrae and the skull. Vertebral column as a whole /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.7	Connection of the ribs to the vertebrae, the sternum, between each other. Thorax /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.8	Joints of the upper limb belt and the shoulder joint. Elbow joint, wrist joint, hand joints. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.9	Connection of pelvic bones. Hip joint. Knee-joint. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.10	Connection of the bones of the lower leg. Vaults of the foot /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.11	Final class on osteology. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.12	General overview of the skull. Scull bones: frontal, parietal, occipital /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
1.13	Ethmoid and sphenoid bone, their structure. The temporal bone and its components. Channels of the temporal bone. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	

1.14	Bones of the facial skull (upper and lower jaws, malar bone, teardrop, nasal bones, nose opener), their structure. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
1.15	Inner skull base. Outer skull base. Fossa of the skull /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
1.16	Structure of the orbit, nasal cavity. Bone basis of the oral cavity. Individual features of the skull. Joint of the skull bones. Temporomandibular joint /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
1.17	The final class on the skull. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
1.18	Preparation for discussion and test. Mastering practical skills /Self- study/	1	22	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
	Unit 2. Myology is the study the muscles.				
2.1	Anatomy, development and age characteristics of the muscles. Muscle classification. Topographic formations of muscles in the	1	4	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.2	Muscles and fascia of the back, abdomen and thorax. The structure of the sheaths of the rectus abdominis muscle. White line of the abdomen. The inguinal canal. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.3	Muscles of neck, their functional anatomy. Fascia of neck. The topography of the triangles of the neck /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.4	Muscles of the head, their functional anatomy. Fascia of the head /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.5	Muscles of the shoulder girdle and shoulder, their functional anatomy. Structure of the Axilla. Shoulder topography /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.6	Functional anatomy of the muscles of the forearm and hand. Forearm topography. Synovial sheaths of the hand tendons. Fasciae and topography of the upper limb. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.7	Muscles of the hip and thigh, their fasciae. Topography of the thigh. Femoral canal. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.8	Muscles and fasciae of the shin and foot, their functional anatomy. Topography of the popliteal fossa, shin and foot /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.9	The final class on the myology. /Practice/	1	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
2.10	Preparation for discussion and test. Mastering practical skills /Self- study/	1	22	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3

2.11	Control /Control/	1	0	GPC-5.1	L1.1., L1.2., L1.3., L1.4.	Essay presentation
2.12	Credit/Credit/	1	0	GPC-5.1	L1.1., L1.2., L1.3., L1.4.	Oral quiz, practical skills checking
	Unit 3. Splanchnology (digestive system).					
3.1	Structure and development of internal organs. Functional anatomy of the digestive system. Functional anatomy and topography of the peritoneum in human ontogenesis. /Lec/	2	4	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
3.2	Anatomy of the digestive system: oral cavity. Lips, cheeks, hard and soft palate, pharynx, tongue. Teeth, large and small salivary glands. Pharynx. Lymphoid pharyngeal ring. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
3.3	Esophagus. Anatomy of the stomach. Spleen. Anatomy of the small and large intestine. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
3.4	Functional anatomy of the liver and pancreas. Peritoneum. Derivatives of the peritoneum. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
3.5	Topography of the peritoneum. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
3.6	The final class on the digestive system. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
3.7	Preparation for discussion and test. Mastering practical skills /Self- study/	2	10	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
	Unit 4. Splanchnology (respiratory system).				L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
4.1	Functional anatomy of the respiratory system. /Lec/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
4.2	The respiratory system. The nasal cavity. Paranasal sinuses. Larynx: topography, cartilage, joints, ligaments. Larynx: muscles, elastic cone, laryngeal cavity. Voice apparatus /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
4.3	Trachea, bronchus, tracheobronchial tree, lungs. Pleura, mediastinum. The borders of the lungs and pleura. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
4.4	The final class on the respiratory system. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
4.5	Preparation for discussion and test. Mastering practical skills /Self- study/	2	6	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
	Unit 5. Splanchnology (urinary system)					
5.1	Functional anatomy of the urinary system. Functional anatomy of the reproductive apparatus /Lec/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	

5.2	Overview of the urinary system. The structure of the kidneys, ureters, bladder. Male genital organs: testicle, epididymis, scrotum, vas deferens, seminal vesicles. Prostate. The ejaculatory ducts. Penis. Bulbourethral glands. Male urethra /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
5.3	Female genitals: uterus, fallopian tubes. Ovary. Vagina. External female genitals. Female urethra. Breast. The perineum: muscle and fascia. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
5.4	The final class on the urinary system. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
5.5	Preparation for discussion and test. Mastering practical skills /Self- study/	2	6	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
	Unit 6. Neurology (Central Nervous System)				
6.1	Introduction to the study of the nervous system. Embryogenesis of the nervous system. Functional anatomy of the spinal cord. The telencephalon. Cyto- and myeloarchitectonics of the cerebral cortex. Localization of functions in the cortex of the hemispheres /Lec/	2	8	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.2	Overview of the nervous system. The external structure of the spinal cord. The internal structure of the spinal cord. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.3	Cerebrum development, cerebral vesicles. Overview of the cerebrum, the output of 12 pairs of cranial nerves on the basis of the brain and from the skull. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.4	Medulla oblongata. Pons. Cerebellum. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.5	Midbrain. Isthmus rhombencephali. Fourth ventricle. Rhomboid fossa, relief. The nuclei of the brain nerves, their localization /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.6	Interbrain (Diencephalon). Third ventricle. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.7	Cerebral hemispheres. The grooves and convolutions of the dorsolateral and basal surfaces of the hemispheres of the cerebrum /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.8	Grooves and convolutions of the medial surface of the hemispheres. Lateral ventricles. /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3
6.9	Basal ganglia, the white substance of the hemispheres of the cerebrum. The internal capsule, the fornix, the olfactory area (rhinencephalon). /Practice/	2	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3

um shells. Place of ion and outflow pathways of ospinal fluid. /Practice/ ays of the spinal cord and um. Afferent pathways. ce/ nt pathways. Extrapyramidal h. /Practice/ nal class on the central is system. /Practice/ nal class on the 2nd er. /Practice/ ation for tests. Writing of /Practice/ ol /Control/ /Credit/	2		GPC-5.1 GPC-5.1 GPC-5.1 GPC-5.1 GPC-5.1 GPC-5.1 GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3 L1.1., L1.2., L1.3., L1.4, E1, E2, E3	essay
am. Afferent pathways. ce/ nt pathways. Extrapyramidal /Practice/ nal class on the central is system. /Practice/ nal class on the 2nd er. /Practice/ ation for tests. Writing of /Practice/ bl /Control/	2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 0	GPC-5.1 GPC-5.1 GPC-5.1 GPC-5.1	L1.4, E1, E2, E3 L1.1., L1.2., L1.3., L1.4, E1, E2, E3 L1.1., L1.2., L1.3., L1.1., L1.2., L1.3.,	•
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as system. /Practice/ nal class on the 2nd er. /Practice/ ation for tests. Writing of /Practice/ bl /Control/	2 2 2 2 2	2 22 0	GPC-5.1 GPC-5.1	L1.4, E1, E2, E3 L1.1., L1.2., L1.3., L1.4, E1, E2, E3 L1.1., L1.2., L1.3., L1.4, E1, E2, E3 L1.1., L1.2., L1.3.,	•
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/Practice/	2	0		L1.4, E1, E2, E3	•
			GPC-5.1		•
/Credit/	2	0	1		presentation
			GPC-5.1	L1.1., L1.2., L1.3., L1.4.	Oral examination, practical skills testing
. Angiology, the study of ssels					
onal anatomy of the heart. onal anatomy of the arterial a. Collateral circulation. onal anatomy of the venous a. Functional anatomy of the atic system./Lec/	3	8	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
rdium. The conducting and innervation of the heart	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
s of the heart. Places ng valves of the heart.	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
al, internal carotid arteries.	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
	apparatus of the heart. rdium. The conducting	apparatus of the heart. rdium. The conducting n and innervation of the heart ce/3dediastinum. Topography, rs of the heart. Places ng valves of the heart. ce/3and its branches. General, al, internal carotid arteries. ce/3wial, axillary, brachial3	apparatus of the heart. rdium. The conducting n and innervation of the heart ce/32Iediastinum. Topography, rs of the heart. Places ng valves of the heart. ce/32and its branches. General, al, internal carotid arteries. ce/32wial, axillary, brachial32	apparatus of the heart. rdium. The conducting n and innervation of the heart ce/32GPC-5.1Idediastinum. Topography, rs of the heart. Places ng valves of the heart. ce/32GPC-5.1and its branches. General, al, internal carotid arteries. ce/32GPC-5.1wial, axillary, brachial32GPC-5.1	apparatus of the heart. rdium. The conducting n and innervation of the heart ce/32GPC-5.1L1.1., L1.2., L1.3., L1.4, E1, E2, E3Itediastinum. Topography, rs of the heart. Places ng valves of the heart. ce/32GPC-5.1L1.1., L1.2., L1.3., L1.4, E1, E2, E3and its branches. General, al, internal carotid arteries. ce/32GPC-5.1L1.1., L1.2., L1.3., L1.4, E1, E2, E3wial, axillary, brachial32GPC-5.1L1.1., L1.2., L1.3., L1.4, E1, E2, E3

7.6	Arteries of the forearm and hand. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.7	Thoracic and abdominal aorta, its branches. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.8	General, external, internal iliac arteries. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.9	Femoral and popliteal arteries. Artery of the shin and foot. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.10	System of the superior vena cava, its inflows and anastomoses. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.11	Cava-caval and portacaval anastomoses. Fetal blood circulation. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.12	The lymphatic system of the head, neck, chest, upper limb, lower limb, pelvis. Lymphatic ducts, trunks, vessels, nodes. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.13	The final class on angiology. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
7.14	Preparation for discussion and test. Mastering practical skills /Self- study/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
	Unit 8. Neurology (peripheral nervous system)					
8.1	Peripheral nervous system. Spinal nerves. /Lec/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
8.2	Peripheral nervous system. Spinal nerves. Cervical plexus. Brachial plexus, its short branches. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
8.3	Long branches of the brachial plexus, their topography, area of innervation. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
8.4	Intercostal nerves. Topography and areas of innervation of the branches of the lumbar plexus. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
8.5	Topography and areas of innervation of the branches of the sacral plexus. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
8.6	The final class on the peripheral nervous system. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
8.7	Preparation for discussion and test. Mastering practical skills /Self- study/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	

	Unit 9. Neurology (The Cranial Nerves)					
9.1	Peripheral nervous system. Cranial nerves. Vegetative nervous system Features of the autonomic innervation of individual internal organs /Lec/	3	6	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
9.2	Cranial Nerves III, IV,VI and 1st branch of trigeminal nerve /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
9.3	The second, third branches of the trigeminal nerve, the areas of their innervation. Parasympathetic nodes located along the branches of the trigeminal nerve /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
9.4	VII, IX pairs of cranial nerves, their branches, areas of innervation. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4.	
9.5	X, XI, XII pairs of cranial nerves, their branches, areas of innervation. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
9.6	The sympathetic part of the autonomic nervous system. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4, E1, E2, E3	
9.7	Parasympathetic part of the autonomic nervous system. /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4., E1, E2, E3	
.8	Final lesson on cranial nerves and the autonomic nervous system /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4., E1, E2, E3	
9.9	Preparation for discussion and test. Mastering practical skills /Self- study/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4., E1, E2, E3	
	Unit 10. Sense organs.					
10.1	Functional anatomy of the sense organs. Visual pathway. Auditory pathway. Organs of smell and taste. /Lec/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4., E1, E2, E3	
10.2	Preparation for tests. Writing of essays /Practice/	3	2	GPC-5.1	L1.1., L1.2., L1.3., L1.4., E1, E2, E3	
10.3	Control /Control/	3	0	GPC-5.1	L1.1., L1.2., L1.3., L1.4.	essay presentation
10.4	Exam / Exam /	3	36	GPC-5.1	L1.1., L1.2., L1.3., L1.4.	oral exam, practical skill test.
		5. ASSESSI	MENT TOO	DLS		
		materials for cur	rent control a	and interim cert	ification	
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recented	5.2. I l in a separate document	Evaluation mater	als for diagi	nostic testing		
	UCATIONAL, METHODOLOGICA	I. AND INFOR	MATIONA	LSUPPORT	OF THE DISCIPLING	

		6.1. Recommended Literature		
		6.1.1. Core		
	Authors	Title	Publish., year	Quantity
L1.1	Sapin M.R., Nikityuk D.B., Nikolenko V.N., Chava S.V.	Human Anatomy. Vol. II: Vulture of the Ministry of Education and Science of Russia. It is recommended by the I.M. Sechenov First State Medical University as a textbook for students of institutions of higher professional education studying in the specialties 060101.65 "Medical care" and 060103.65 "Pediatrics" for the discipline "Anatomy"; in the specialty 060105.65 "Medical and preventive care" for the discipline "Human Anatomy. Topographic anatomy".	Moscow: GEOTAR- Media, 2015, electronic resources	1
L1.2	Gaivoronsky I.V., Kolesnikov L.L., Nichiporuk G.I., Filimonov V.I., Tsybulkin A.G., Chukbar A.V., Shilkin V.V.	Human anatomy: <div>Ministry of Education and Science of the Russian Federation</div> <div>It is recommended by the I.M. Sechenov First Moscow State Medical University as a textbook for students of institutions of higher professional education studying in the specialties "Medicine", "Pediatrics" in the discipline "Anatomy"</div> <div>Registration number of the review 009 dated January 15, 2014 FSAU "Federal Institute for Education Development"</div>	Moscow: GEOTAR- Media, 2015, electronic resources	2
L1.3	Sapin M.R.,	Human Anatomy: textbook	Moscow: GEOTAR- Media, 2015, electronic resources	1
L1.4	Sapin M.R.,	Human Anatomy: textbook	Moscow: GEOTAR- Media, 2018, electronic resources	1
L1.5	Gaivoronsky I.V., Nichiporuk G.I., Gaivoronsky A.I.	Human anatomy. Volume 1: Textbook	Moscow: GEOTAR- Media, 2018, electronic resources	2
	1	6.1.2. Supplementary		
	Authors	Title	Publish., year	Quantity
2.2.1.	Sapin M. R., Nikityuk D. B., Nikolenko V. N., Chava S. V.	Human anatomy. Vol. 1: textbook : for students of institutions of higher professional education specialty 060101.65 "Medical care" and 060103.65 "Pediatrics" in the discipline "Anatomy"; specialty 060105 "Medical and preventive care" in the discipline "Anatomy a person. Topographic Anatomy" : in 2 volumes	Moscow: GEOTAR- Media, 2012, electronic resources	81
2.2.	Sapin M. R., Nikityuk D. B., Nikolenko V. N., Chava S. V.	Human anatomy. Vol. 2: textbook : for students of institutions of higher professional education specialty 060101.65 "Medical care" and 060103.65 "Pediatrics" in the discipline "Anatomy"; specialty 060105 "Medical and preventive care" in the discipline "Human Anatomy. Topographic anatomy" : in 2 volumes	Moscow: GEOTAR- Media, 2012, electronic resources	79
2.2.3.	Sapin M.R., Bilich G.L.	Human anatomy. Volume 1: Recommended by the Educational and Methodological Association for Medical and Pharmaceutical Education of Russian universities.	Moscow: GEOTAR- Media, 2012, electronic resources	1
2.2.4	Sapin M.R., Bilich G.L.	Human anatomy. Volume 2: Recommended by the Educational and Methodological Association for Medical and Pharmaceutical Education of Russian universities.	Moscow: GEOTAR- Media, 2012, electronic resources	1

higher professional education studying in the specialities of 00103.65 "Medical care", 060103.65 "Pediatrics", encourses 060103.65 "Medical care", 060103.65 "Pediatrics", encourses 070000000000000000000000000000000000	1	Moscow: GEOTAR- Media, 2012, electronic resources	Human anatomy. Volume 3: Recommended by the Educational and Methodological Association for Medical and Pharmaceutical Education of Russian universities.	Sapin M.R., Bilich G.L.	L.2.5
V.A. GEOTAR- Media, 201: electronic resources L.2.8 Bilich G.L., Kryzhanovsky V.A. Human Anatomy: Atlas. Vol. 3: Recommended by the I.M. Sechenov Moscow Medical Academy as a textbook for students of institutions of higher professional education studying in the specialities 060101.65 "Medical and preventive care", 060103.65 "Dentistry" in the discipline "Human Anatomy". L.2.9 Gaivoronsky U.V. Nichiporuk Human anatomy: textbook for students of institutions of GEOTAR- Media, 201: electronic Moscow: GHI Human anatomy: "Human Anatomy". GEOTAR- Media, 201: electronic L.2.9 Gaivoronsky U.V. Nichiporuk GEOTAR- Media, 201: electronic Mathors GEOTAR- Medical business" in the discipline "Human Anatomy" Moscow: GEOTAR- GEOTAR- GEOTAR- GEOTAR- GEOTAR- Media, 201: electronic Mathors Title Publishy L.3.1 Shumilov S. P. Shumilov S. P., Shumilova E. A., Usynin A. F., Klochko N. P., Stolyarov V. V. Anatomy of the central nervous system: textbook for students of psychological specialties Surgut: Publishing House of SurGU, 202 L.3.3 Stolyarov V. V., Usynin A. F., Shumilov S. P., Shumilova E. A. Functional anatomy of central nervous system analyzers: a textbook for students studying in the specialties: 06010165 "General Medicalor", 06010365 "Pediatrics" Surgut: Publishing Center of SurSU, 200 L.3.3 Stolyarov V. V., Usynin A. F., Shumilova E. A.	1	GEOTAR- Media, 2013, electronic	Recommended by the I.M. Sechenov Moscow Medical Academy as a textbook for students of institutions of higher professional education studying in the specialties 060101.65 "Medical care", 060103.65 "Pediatrics", 060105.65 "Medical and preventive care", 060201.65		L.2.6
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	2. The classroom for practical classes, group and individual consultations, current and intermediate control, for independent work is equipped with: a teacher's desk, study tables, electrified stands for myology, tables for all sections of human anatomy, a blackboard, a multimedia installation, a screen for multimedia installation, a computer.
	3. The classroom for practical classes, group and individual consultations, current and intermediate control, for independent work is equipped with: a teacher's desk, study tables, electrified stands for osteology and X-ray anatomy, tables for all sections of human anatomy, a blackboard, a multimedia installation, a screen for multimedia installation.
7.4	Anatomical table for virtual dissection