

RF Ministry of Education	Form	
F- The guidelines self-study work of students		

APPROVED
by the decision of the Council of department of the human anatomy
Chairman _____
(signature, signature clarification)

The guidelines self-study work of students
of discipline “Anatomy”
Course (speciality) 31.05.01. « General medicine »
The department of the human anatomy

Self-dependent (extra auditorium) work of students is emerged of few categories:

- 1) theoretical self-preparation of students on some educational themes
- 2) acquaintance with supplementary educational literature and other educational methodological materials, consolidating students practical skills
- 3) writing of exam case report.

The main kinds of self-dependent work of students for better preparation to the lectures and practical classes of the definite theme: to read and to learn material in the recommended main and supplementary literature; to answer given questions, to demonstrate practical skills, to prepare or to learn schemes, tables, to prepare oral and/or computer presentation.

PLAN OF SELF-STUDY WORK OF STUDENTS

Self-study work	Total	1 semester	2 semester	3 semester
	108	72	18	18

№	Name of the subject section	Types of SSW	Total number of hours
1	1 semester Section 1. The history of anatomy. Ontogenesis Topic1. Ontogenesis	Work with literature sources and other information resources on studied sections.	7
	Topic 2. Introduction to embryology	Writing a fragment of a case report.	8
2	Section 2. Osteology Topic 3. Development of the bones of the skull	Work with literature sources and other information resources on studied sections.	7
		Writing a fragment of a case report.	
3	Section 3 Arthrology Topic 4. General arthrosyndesmology	Work with literature sources and other information resources on studied sections.	6
	Topic 5. The bones and joints of postnatal ontogenesis	Writing a fragment of a case report.	5
	Topic 6. Join of bones of the trunk and the skull		5
	Topic 7. Introduction to X-ray anatomy		7
	Topic 8. Join of the skull bones and the trunk bones		6



4	Section 4. Miology	Work with literature sources and other information resources on studied sections.	9
	Topic 9. General questions about medicine anthropology		
	Topic 10. Classification of muscles		
	Topic 11. The bone-fascias and intermuscular space of calvarium	Writing a fragment of a case report.	6
			6
5	2 semester	Work with literature sources and other information resources on studied sections.	1
	Section 5. Viscerology		
	Topic 12. Muscles and fasciae of perineum		
	Topic 13. The organs of the oral cavity. Feature of structure of newborn		
	Topic 14. Normal feature and pathology in X-ray anatomy of teeth and jaw in the different view		
	Topic 15. Development, abnormalities of development and X-ray anatomy of the organs of digestive system		
	Topic 16. Upper airways. Features of structure and development of adult and newborn		
	Topic 17. Development, abnormalities of development and X-ray anatomy of the organs of urinary system		
Topic 18. Features of structure and development of genitals.			
6	Section 6. Angiology	Work with literature sources and other information resources on studied sections.	1
	Topic 19. Embryogenesis of the cardiovascular system		
	Topic 20. Development of the cardiovascular system. Features of structure of newborns and children		
	Topic 21. Blood supply of organs of	Writing a fragment of a case report.	1
			1



	head and neck		
	Topic 22. General anatomy of arteries structure. Collateral circulation		1
	Topic 23. Formation of azygos and hemazygos vein		1
	Topic 24. Features of fetal circulation		1
	Topic 25. The outflow of lymph of the organs of pelvis and abdominal cavity		1
	Topic 26. The outflow of lymph of the lungs and the heart. Features of outflow of lymph from thorax part of esophagus		2
	Topic 27. Main lymphatic vessels		2
7	3 semester Section 7. Neuroanatomy Topic 28. Functional anatomy of autonomic nervous system	Work with literature sources and other information resources on studied sections.	3
	Topic 29. Autonomic ganglions, their relations with trigeminal nerve	Writing a fragment of a case report.	4
	Topic 30. Autonomic plexus of the neck and the head , the cavity of thorax and the abdominal cavity.		5
8	Section 7. Esthesiology Topic 34. The integumentary system	Work with literature sources and other information resources on studied sections.	6
		Writing a fragment of a case report.	



Section 1. The history of anatomy. Ontogenesis

Topic1. Ontogenesis

The initial stages of ontogenesis. Characteristics of early stages

Topic 2. Introduction to embryology

Phase of prenatal development. Histogenesis and organogenesis of the main system.

Critical periods of fetal development. Characteristics of retention organs. Periods of postnatal development.

Section 2. Osteology

Topic 3. Development of the bones of the skull

Features of structure of the skull of newborn. Dimorphism of the skull. Abnormalities of development of bones of the skull. X-ray anatomy of skull bones.

Section 3 Arthrology

Topic 4. General arthrosyndesmology

Types of continuous join. Features of structure of joints. The signification about complex and combined joints. Formation of spinal curvature to ontogenesis. Abnormalities of development of backbone and thorax. X-ray anatomy of joints of trunk and limbs .

Topic 5. The bones and joints of postnatal ontogenesis

Features of development of bones and joints of postnatal ontogenesis

Topic 6. Join of bones of the trunk and the skull

Continuous and discontinuous join of bones of the trunk and the skull. Vertebral column. General anatomy of thorax

Topic 7. Introduction to X-ray anatomy

Features of x-ray anatomy of organs and system of human organism. The method of computer tomography and nuclear magnetic resonance

Topic 8. Join of the skull bones and the trunk bones

Features of the structure of the temporomandibular join, continuous connections of the skull. Classification of the joints of the bones of the trunk.

Section 4. Miology

Topic 9.General questions about medicine anthropology

Morphology of human as a section of human science, its principles and ways. Anthropometry as the complex of morphological and functional features

Topic 10. Classification of muscles

Classification of muscles. Auxillary apparatus of muscles

Topic 11. The bone-fascias and intermuscular space of calvarium

The bone-fascias and Intermuscular space of calvarium, temporal area and lateral area of face, its topography, walls, contains and signification.

Section 5. Viscerology

Topic 12. Muscles and fasciae of perineum

Structure of perineum. Differences of structure of male and female perineum. Muscles of urogenital diaphragm and pelvic diaphragm

Topic 13. The organs of the oral cavity. Feature of structure of newborn

Dentoalveolar apparatus of children and adults. Feature of structure of upper and lower row of teeth. Time of cutting out of first and permanent teeth.

Topic 14. Normal feature and pathology in X-ray anatomy of teeth and jaw in the different view

Features of X-ray anatomy of teeth and jaw in the different view

Topic 15. Development, abnormalities of development and X-ray anatomy of the organs of digestive system

Development and features of structure of organs of digestive system of newborns and adults.



Abnormalities of development of digestive system

Topic 16. Upper airways. Features of structure and development of adult and newborn

Paranasal sinuses. Antrum of Highmore, its anatomy, functional significance, binding with dentoalveolar apparatus. Olfactory region of nose

Topic 17 . Development, abnormalities of development and X-ray anatomy of the organs of urinary system

Features of embryogenesis of urinary apparatus. Abnormalities of development of urinary apparatus. Features of x-ray anatomy of kidneys, ureters and urinary bladder

Topic 18. Features of structure and development of genitals.

Features of embryogenesis of urinary apparatus. Abnormalities of development of male and female genitals

Section 6. Angiology

Topic 19. Embryogenesis of the cardiovascular system

Cardiovascular system, its general anatomy, development and functions. Development of the heart. X-ray anatomy of the heart and large vessels

Topic 20. Development of the cardiovascular system. Features of structure of newborns and children

Features of structure of newborns and children. Vessels of various size, their features of structure. Collateral circulation. X-ray anatomy of the heart and large vessels. Anastomosis of trunk and limbs vessels, their clinical significance

Topic 21. Blood supply of organs of head and neck

Blood supply of brain, organ of the vision and tongue

Topic 22. General anatomy of arteries structure. Collateral circulation.

Structure of artery walls. The concept of collateral circulation.

Topic 23. Formation of azygos and hemazygos vein

Binding with venous plexus of spinal column and veins of retroperitoneal space. The ways of outflow of venous blood from venous plexus of cervical, thoracic and lumbar part of the spinal column

Topic 24. Features of fetal circulation

Features of fetal heart and fetal vessels.

Topic 25. The outflow of lymph of the organs of pelvis and abdominal cavity

The ways of outflow of lymph from rectum, uterus and urinary bladder. The ways of outflow of lymph from abdominal part of esophagus, stomach, liver and parts of small and large intestines

Topic 26. The outflow of lymph of the lungs and the heart. Features of outflow of lymph from thorax part of esophagus

Formation and places of inflow of lymphatic ducts and jugular trunk

Topic 27. Main lymphatic vessels

Main lymphatic vessels and nodes of the head, neck, organs of thoracic cavity and upper limbs. Parietal and visceral lymphatic nodes of organs of thorax. Superficial and deep lymphatic vessels and nodes of the head and neck. Superficial and deep lymphatic vessels and nodes of upper limb. The ways of outflow of lymph from mammary gland. Main lymphatic vessels and nodes of lower limbs, organs of pelvis and abdomen. Superficial and deep lymphatic vessels of lower limb. Popliteal and inguinal lymph nodes. Parietal and visceral lymph nodes of pelvis and abdominal cavity. Lymphatic vessels and regional nodes of the stomach, small and large intestines, kidneys, liver, uterus and urinary bladder

Topic 28. Functional anatomy of autonomic nervous system

Structure and functions of autonomic nervous system. Sympathetic and parasympathetic parts. Sympathetic trunk, its topography and nerves. Autonomic nervous plexus of the head, neck, thorax, abdomen and pelvis. Parasympathetic nervous centers of brain and spinal cord. Vagus and splanchnic nerves of the peripheral nervous system

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Topic 29. Autonomic ganglions, their relations with trigeminal nerve

Pterygopalatine ganglion, otic ganglion, sublingual ganglion, submandibular ganglion, their biding with branches of trigeminal nerve

Topic 30. Autonomic plexus of the neck and the head , the cavity of thorax and the abdominal cavity.

Structure and function of the vegetative plexus of the head and the neck. Zones of innervations.

Section 7. Esthesiology

Topic 34. The integumentary system

Development of skin of embryogenesis. Ectoderm and neuroderm. Derivatives of the skin. Features of development of the hairs, nails and glands.

INSTRUCTIONAL AND INFORMATION SUPPORT OF THE SUBJECT

The list of recommended literature

Essential literature:

1) Human anatomy: the textbook in 2 v./M.R.Sapin, L.L.Kolesnikov, D.B.Nikitjuk. – M., New Wave Publisher Ltd, 2013.;

Additional literature:

2) Sobotta. Atlas of human anatomy in 2 v/ R. Putz, R. Pabst ;

3) Human anatomy: the textbook in 2 v./ M.Prives, N.Lysenkov, V.Bushkovich. – M.,Mir Publishers, 1998

Software: 1. *Terminologia anatomica* / <http://www.unifr.ch>

IT software, databases, information and reference systems, search systems

database, information and reference, search systems:

1. URL:<https://www.rosminzdrav.ru/docs>.

2. ЭБС «IPRbooks» (www.iprbookshop.ru).

3. ЭБС «Консультант студента» (www.studmedlib.ru).