

MINISTRY OF HEALTH OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Human Anatomy

Academic year 2021-2022

SYLLABUS OF THE COURSE

"Human Anatomy"

(name of educational component)

Normative or selective educational component \_\_\_\_\_ normative \_\_\_\_\_

The format of the educational component \_\_\_\_\_ full-time  
\_\_\_\_\_ (full-time; mixed; remote)

Field of knowledge \_\_\_\_\_ 22 "Health care" \_\_\_\_\_  
(code and name of the field of knowledge)

Specialty \_\_\_\_\_ 222 "Medicine", the second (master's) level \_\_\_\_\_  
(code and name of the specialty)

Educational and professional program (educational and scientific program) \_\_\_\_\_  
"Medicine" \_\_\_\_\_

Course \_\_\_\_\_ first \_\_\_\_\_

The syllabus of the discipline was considered

at a meeting of the Department of Human

Anatomy

Protocol from

"\_30\_" August 2021 №\_13\_

Head of Department



\_\_\_\_\_ prof. Vovk O.Yu.

(signature) (surname and initials)

Approved by the methodical commission of

KhNMU on general pre-professional training

Protocol from

"\_31\_" August 2021 № 1

Chairman of the methodical commission of

KhNMU

general pre-professional training



\_\_\_\_\_ prof. Vovk O.Yu. (signature)

(surname and initials)

**SILABUS DEVELOPERS:**

Head of the Department of Human Anatomy, Doctor of Medicine, Professor O.Yu. Vovk,

Associate Professor of Human Anatomy, Ph.D. V.B. Ikramov,

Associate Professor of Human Anatomy, Ph.D. O.O. Shevtsov

### Data on the teacher who teaches the discipline

Last name, first name, patronymic	Shevtsov Olexander Olexandrovich
Scientific degree	Candidate of Medical Sciences
Academic status	Associate Professor
Position	Associate Professor of Human Anatomy
Contact phone	+380509690459
Corporate mail	<a href="mailto:oo.shevtsov@knu.edu.ua">oo.shevtsov@knu.edu.ua</a>
Timetable	According to the schedule for the I-II semester

Professional interests, links to the teacher's profile (on the website of the university, department, in the Moodle system, etc. : <http://distance.knu.edu.ua/user/profile.php?id=10550>

**Contact phone and E-mail of the department:** tel.(057) 700-36-26,, [knu\\_anatomy@ukr.net](mailto:knu_anatomy@ukr.net)

**Eye consultations:** schedule and venue according to the schedule of the department.

**Online consultations:** schedule and venue by prior arrangement with the teacher.

**Location:** classes are held at: 12 Nezalezhnosti Avenue

## INTRODUCTION

**The program of study of the discipline "Human Anatomy"** is compiled in accordance with the Educational and Professional Program "Medicine" and the draft Standard of Higher Education of Ukraine (hereinafter - the Standard), the second (master's) level, field of knowledge 22 "Health", specialty 222 "Medicine".

### **Description of the discipline (abstract).**

The study of the discipline "Human Anatomy" for physicians is a classic model of university course adapted to the needs of medicine, which involves the acquisition of each knowledge seeker in the world of natural science ideas about the structure and function of the human body as a whole, the ability to use acquired knowledge in other basic sciences medicine, and in the practice of the doctor.

**The subject** study of the discipline "human anatomy": the science of shape, structure, origin and development of organs, systems and the human body as a whole.

### **Interdisciplinary links:**

#### **Human anatomy as a discipline:**

a) is based on the study of medical biology, histology, cytology and embryology, biophysics, Latin, ethics, philosophy, ecology and integrates with these disciplines;

b) lays the foundations for the study of normal and pathological physiology, pathological anatomy, operative surgery and topographic anatomy, deontology, propaedeutics of clinical disciplines and the formation of skills to apply knowledge of human anatomy in the further study of all clinical disciplines and future professional activities.

### **Link to the discipline page in MOODLE**

<http://31.128.79.157:8083/course/view.php?id=496>

## 1. PURPOSE AND TASKS OF STUDYING THE COURSE

**1.1. The purpose of studying the discipline** is the acquisition by each applicant of knowledge of anatomy in the world of natural science ideas about the structure and function of the human body as a whole, the ability to use the acquired knowledge in further study of other basic sciences of medicine, and in the practice of medicine.

The purpose of studying human anatomy - the ultimate goals are set on the basis of OPP training of a doctor in the specialty in accordance with the block of its content module (natural science

training) and is the basis for building the content of the discipline. The description of goals is formulated through skills in the form of target tasks (actions). On the basis of the ultimate goals for each module or content module, specific goals are formulated in the form of certain skills (actions), target tasks that ensure the achievement of the ultimate goal of the discipline.

**The ultimate goals of the discipline:**

- *Analyze information about the structure of the human body, its constituent systems, organs and tissues;*
- *To determine the topographic and anatomical relationships of human organs and systems;*
- *To interpret the patterns of prenatal and early postnatal development of human organs, variants of organ variability, malformations;*
- *Interpret sexual, age and individual features of the structure of the human body;*
- *To predict the interdependence and unity of structures and functions of human organs and their variability under the influence of environmental factors;*
- *Determine the impact of social conditions and work on the development and structure of the human body;*
- *Demonstrate mastery morally-ethical principles of attitude to a living person and his body as an object of anatomical and clinical research.*

**1.2. The main tasks of studying the discipline** "Human anatomy" as a science is a systematic approach to the description of the shape, structure of organs, position (topography) of parts and organs of the body in unity with the functions performed, taking into account age, gender and individual characteristics.

**1.3. Competences and learning outcomes**, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the OPP and Standard).

**1.3.1.** The study of the discipline provides the acquisition of competencies by applicants:

**- integrated:**ability to solve typical and complex specialized tasks and practical problems in the process of training for future professional activity in the field of health care, or in the process of training, which involves research, innovation and is characterized by complexity and uncertainty of conditions and requirements.

**- general:**

1. Ability to apply knowledge in practical situations. profession
2. Knowledge and understanding of the subject area and understanding of the profession. situations.
3. Ability to exercise self-regulation, lead a healthy lifestyle, ability to adapt and act in a new situation.
4. Ability to choose a communication strategy; ability to work in a team; skills between personal

interaction.

5. Ability to communicate in the native language both orally and in writing; ability to communicate in a second language.
  6. Skills in the use of information and communication technologies.
  7. Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.
  8. Ability to evaluate and ensure the quality of work performed.
  9. Definiteness and persistence in terms of tasks and responsibilities.
  10. Ability to act in a socially responsible and social consciousness.
  11. The desire to preserve the environment.
- **special** (professional, subject): the ability to evaluate the results of laboratory and instrumental research

**1.3.2.** The study of the discipline ensures the acquisition by applicants of the following program learning outcomes:

1. Acquisition by a person of general and special fundamental and professionally-oriented knowledge, skills, abilities, competencies necessary for the performance of typical professional tasks related to his / her activity in the medical field in the relevant position.
2. Knowledge of human psychophysiological features, human health, health support, disease prevention, human treatment, public health.
3. Evaluation of survey results, physical examination, laboratory and instrumental research data.
4. Formation of a specialist with appropriate personal qualities, who adheres to the code of ethics of the doctor.

**1.3.3.** The study of the discipline provides the acquisition of the following social skills (Soft skills):

- communication;
- literate written and oral language;
- ability to speak in public;
- analytical mind;
- ability to see and solve a problem;
- good memory;
- creativity;
- result orientation;
- persistence;
- stress resistance;

- willingness to perform routine work;
- ability to make decisions;
- responsibility.

## 2. INFORMATION SCOPE OF THE COURSE

### 2.1. Description of the discipline

Name of indicators	Field of knowledge, specialty, educational and qualification level	Characteristics of the discipline full-time education	
		Number of loans - 7.5	Branch of knowledge 22 - "Health care"
the total number of hours - 225	Specialty: 222 - "Medicine"	Year of preparation:	
		1	1
		Semester	
		1	2
Hours for full-time study: classroom -140 (62%) of independent work of the applicant - 85 (38%)	Educational degree: the second (master's) level	Lectures	
		10	10
		Practical training	
	EPP: "Medicine"	Individual work	
		40	80
		type of control	
Current control	Test.		

#### 2.2.1. LECTURES

№	LECTURE TOPICS	Number hours	Type of lectures
1.	Human anatomy - as a science. World, Ukrainian and Kharkiv anatomical schools. Functional osteology. The doctrine of the connection of bones. Functional arthrology.	2	Lecture-presentation
2.	Functional myology.	2	Lecture-presentation
3.	Functional anatomy of the digestive system. Peritoneum.	2	Lecture-presentation
4.	Functional anatomy of the respiratory system. Pleura. Mediastinum. General anatomy of the endocrine and immune systems.	2	Lecture-presentation
5.	Functional anatomy of the cardiovascular system. Fetal circulation. Functional anatomy of the lymphatic system.	2	Lecture-presentation

6.	General and functional anatomy of the urinary organs. General and functional anatomy of the male and female genital systems. Perineum.	2	Lecture-presentation
7.	The doctrine of the nervous system. Functional anatomy of the spinal cord. Obolon.	2	Lecture-presentation
8.	Functional anatomy of the brain. Obolon.	2	Lecture-presentation
9.	Leading pathways of the brain and spinal cord.	2	Lecture-presentation
10.	Cranial nerves and anatomy of the senses	2	Lecture-presentation
Total		20	

### 2.2.2. SEMINAR CLASSES

Does not have

### 2.2.3. PRACTICAL TRAINING

№ 3.П.	Name topics	Number of hours	Teaching methods	Forms of control
1.	Organization of the educational process at the Department of Human Anatomy. Subject and tasks of anatomy. Research methods in anatomy. The main modern directions of anatomy development. Anatomical nomenclature. Axes and planes of the human body. Bone as an organ. Classification of bones. Test and situational tasks on the topic.	4	Narrative-explanation, demonstration on anatomical preparations, presentation, use of corpse material; work at the virtual anatomical table Anatomage Table; work with the synthetic corpse SynDaver; preparation for the licensed integrated exam KROK-1, solving situational problems, assessment of age, gender and individual characteristics of human organs.	Oral questioning, written questioning, test control, creative tasks, individual tasks, abstracts, reports.
2.	General characteristics of the spine. General signs of vertebrae. Features of the structure of the cervical, thoracic, lumbar vertebrae, sacrum, coccyx. The spinal column as a whole. Vertebral malformations. Classification of edges. The structure of the ribs and sternum. Chest as a whole. Test and situational tasks on the topic.	4	- // - // -	- // - // -



3.	Upper limb girdle bones. Bones of the free part of the upper limb. Lower limb girdle bones. The pelvis as a whole (holes, diameters, conjugates, etc.). Bones of the free part of the lower limb. Test and situational tasks on the topic.	4	- // - // -	- // - // -
4.	Skull anatomy I. Frontal, parietal, occipital, wedge-shaped, temporal bones. Temporal bone canals. The concept of the skull (Neurocranium). Test and situational tasks on the topic.	4	- // - // -	- // - // -
5.	Anatomy of the skull II. Lattice bone, upper and lower jaws, ploughshare, chin, palatine, lacrimal, sublingual bones. The concept of the facial skull (Viscerocranium). Eye socket, bony nasal cavity, paranasal sinuses, bony palate. Test and situational tasks on the topic.	4	- // - // -	- // - // -
6.	Anatomy of the skull III. External and internal bases of the skull. Anterior, middle and posterior cranial fossae and their combinations. Temporal, subtemporal, pterygopalatine fossa. Age and sex features of the skull structure. Variants and anomalies of skull bone development. Test and situational tasks on the topic.	4	- // - // -	- // - // -
7.	The doctrine of the connection of bones. Classification of bone joints. General arthrology. The concept of the joint. Classifications of joints. Mandatory and auxiliary elements of joints. Biomechanics of joints. Development and age features of bone joints. Test and situational tasks on the topic.	4	- // - // -	- // - // -
8.	Connection of skull bones. Age features of connection of skull bones: temples, their types, structure, terms of ossification. Atlanto-occipital joint. Connection of the spine. <b>Chest connection. Chest belt connection. Pelvic girdle connection. Test and situational tasks on the topic.</b>	4	- // - // -	- // - // -
9.	The connection of the bones of the free part of the upper limb. Connection of bones of a free part of the lower extremity. Test and situational tasks on the topic.	4	- // - // -	- // - // -
10.	<b>Final lesson: "Osteology. The doctrine of the connection of bones.</b>	4	Poll	Solving a package of tasks on the content of educational material. Assessment of the development of practical skills
11.	Introduction to myology. Muscle as an organ. Muscle classifications. Auxiliary muscle apparatus. Muscles and fascia of the chest. Diaphragm. Test and situational tasks on the topic.	4	- // - // -	- // - // -

12.	Muscles and fascia of the back. Test and situational tasks on the topic.	4	- // - // -	- // - // -
13.	Abdominal muscles and fascia. White line of the abdomen. Topography of the abdomen. The vagina of the rectus abdominis. Inguinal canal. Test and situational tasks on the topic.	4	- // - // -	- // - // -
14.	Muscles of the head. Fascia and topography of the head. Test and situational tasks on the topic.	4	- // - // -	- // - // -
15.	Neck muscles. Fascia and topography of the neck (classification of fascia, triangles of the neck, parts of the neck, interscapular space). Test and situational tasks on the topic.	4	- // - // -	- // - // -
16.	Muscles of the upper extremity. Fascia and topography of the upper limb (axillary and ulnar fossa, canals, furrows). Test and situational tasks on the topic.	4	- // - // -	- // - // -
17.	Muscles of the lower extremity. Fascia and topography of the lower limb (femoral triangle, popliteal fossa, canals). Test and situational tasks on the topic.	4	- // - // -	- // - // -
18.	<b>Final lesson "Myology".</b>	4	Poll	Solving a package of tasks on the content of educational material. Assessment of the development of practical skills
19.	Anatomy of the oral cavity and its derivatives: tongue, palate, teeth, pharynx, salivary glands. Anatomy of the pharynx. Test and situational tasks on the topic.	4	- // - // -	- // - // -
20.	Anatomy of the digestive tract (esophagus, stomach, small and large intestine). Test and situational tasks on the topic.	4	- // - // -	- // - // -
21.	Anatomy of large digestive glands (liver and pancreas). Anatomy of the gallbladder and bile ducts. Test and situational tasks on the topic.	4	- // - // -	- // - // -
22.	Areas of the anterior abdominal wall. Projection of abdominal organs on areas of the abdominal wall. Anatomy of the peritoneum and its derivatives. Test and situational tasks on the topic.	4	- // - // -	- // - // -
23.	Anatomy of the external nose, nasal cavity, larynx. Test and situational tasks on the topic.	4	- // - // -	- // - // -
24.	Anatomy of the trachea, main bronchi. Anatomy of the lungs and pleura. The mediastinum (classifications, boundaries, content). Test and situational tasks on the topic.	4	- // - // -	- // - // -
25.	Anatomy of the urinary system (kidneys, ureters, bladder, urethra). Test and situational tasks on the topic.	4	- // - // -	- // - // -

26.	Anatomy of the male genitalia. Male perineum (boundaries, layered structure). Test and situational tasks on the topic.	4	- // - // -	- // - // -
27.	Anatomy of the breast. Anatomy of female genitals. Female perineum (borders, layered structure). Test and situational tasks on the topic.	4	- // - // -	- // - // -
28.	Anatomy of the heart: Topography of the heart. General structure of the heart. Large and small circles of blood circulation, structure of a wall of heart, anatomy of chambers of heart, valves, blood supply of heart, nerves of heart. Leading system of the heart. Core (structure, cavity, contents, sinuses). Fetal circulation. Test and situational tasks on the topic.	4	- // - // -	- // - // -
29.	Anatomy of the endocrine system: thyroid, parathyroid, adrenal glands. Endocrine part of the pancreas, pituitary gland, pineal gland. Anatomy of organs and formations of the immune system: thoracic gland - thymus, bone marrow, spleen, tonsils. Lymphatic system. General plan of the structure. The main lymphatic ducts. Test and situational tasks on the topic.	4	- // - // -	- // - // -
30.	<b>Final lesson "Splanchnology. Anatomy of the endocrine and immune systems. Lymphatic system ". Computer testing on the basis of STEP-I (on the material of I and II semesters).</b>	4	Poll. passing computer testing on the basis of STEP-1	Solving a package of tasks on the content of educational material. Assessment of the development of practical skills

#### 2.2.4. LABORATORY CLASSES

Does not have

#### 2.2.5. INDIVIDUAL WORK

№	Topic	Number of hours	Teaching methods	Forms of control
1.	Describe the main stages of anatomy: history of anatomy development in ancient times; history of anatomy development in the Renaissance; history of development of Ukrainian anatomical schools up to the XX century; history of development of Ukrainian anatomical schools in the XX - XXI centuries.	7	Demonstration on anatomical preparations, presentation, use of corpse material; work with a virtual anatomical table Anatomage Table; work with the synthetic corpse SynDaver.	PC, software in accordance with KTP.

2.	Master the skill - apply planes and axes to describe anatomical objects.	7	- // - // -	- // - // -
3.	Master the basics of anthropometric description of the skull - describe the sexual and individual features of the structure of the skull; - describe the age features of the structure of the skull	7	- // - // -	- // - // -
4.	Master the ability to draw - to demonstrate the structure of the bones of the vertebrae, ribs, sternum, the structure of the bones of the upper and lower extremities	7	- // - // -	- // - // -
5.	Master the ability to draw patterns of connection of bones: skull, vertebrae, ribs, upper and lower extremities.	7	- // - // -	- // - // -
6.	Master the skill - to demonstrate on preparations connections between bones	7	- // - // -	- // - // -
7.	Master the ability to demonstrate on drugs: torso muscles; heads; neck; upper and lower extremities.	7	- // - // -	- // - // -
8.	Preparing a review of the scientific literature or conducting research (optional) Skull development in ontogenesis. Variants and anomalies of skull development. Development of bone joints in phylogeny and ontogenesis. Variants and anomalies of development of the upper and lower limbs. Variants and anomalies of skeletal muscle development.	7	- // - // -	- // - // -
9.	Master the ability to demonstrate the structure of drugs: organs of the digestive system; esophagus, stomach, liver, pancreas, small and large intestine	7	- // - // -	- // - // -
10.	Master the skill - draw the course of the peritoneum in the abdominal cavity and pelvic cavity.	7	- // - // -	- // - // -
11.	Master the basics of anthropometric description - the external structure of the respiratory system.	3	- // - // -	- // - // -

12.	Master the skill - read radiographs of the digestive and respiratory systems.	6	- // - // -	- // - // -
13.	Master the ability to demonstrate the structure of the heart, walls of the heart, chambers, blood vessels, leading pathways of the heart on drugs	6	- // - // -	- // - // -
	Together	85		

### 3. EVALUATION CRITERIA

**3.1.** Evaluation of the success of education of students is carried out on the basis of the current "Instructions for evaluating the educational activities of students of KhNMU"

#### Evaluation of current learning activities (IPA)

When assessing the mastery of each subject of the discipline (PND) and the final lesson (PZ), the applicant is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".

Annex 4  
to item 3.2.2 of the  
Instruction,  
approved  
by order of KhNMU  
from 21.08.2021 № 181

Table 4

#### Criteria for evaluating the results of educational activities students in disciplines

Rating	Evaluation criteria
"Perfectly"	The student shows special creative abilities, is able to acquire knowledge independently, without the help of the teacher finds and processes the necessary information, is able to use the acquired knowledge and skills for decision-making in unusual situations, convincingly argues answers, independently reveals own talents and inclinations.
"Very good"	The student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects mistakes, the number of which is insignificant
"Fine"	The student is able to compare, summarize, systematize information under the guidance of the teacher; as a whole to apply it independently in practice; control their own activities; to correct mistakes, among which there are significant ones, to choose arguments to confirm opinions

"Satisfactorily"	The student reproduces a significant part of the theoretical material, shows knowledge and understanding of the basic principles; with the help of the teacher can analyze the educational material, correct mistakes, among which there are a significant number of significant ones
"Enough"	The student has the study material at a level higher than the initial, a significant part of it is reproduced at the reproductive level
"Unsatisfactorily" with the possibility of re-assembling the semester control	The student has the material at the level of individual fragments that make up a small part of the study material
"Unsatisfactorily" with mandatory re-examination of the credit	The student has the material at the level of elementary recognition and reproduction of individual facts, elements, objects
In particular, criteria for assessing practical skills in disciplines	
"Perfectly"	The student corresponds to a high (creative) level of competence: the student shows special creative abilities, without mistakes independently demonstrates the implementation of practical skills and has systematic theoretical knowledge (knows the methods of practical skills, indications and contraindications, possible complications, etc.) and has the ability to accept solutions in non-standard situations.
"Fine"	The student independently demonstrates the implementation of practical skills, admitting some inaccuracies, which he quickly corrects, has theoretical knowledge (knows the method of performing practical skills, indications and contraindications, possible complications, etc.).
"Satisfactorily"	The student demonstrates the implementation of practical skills, making some mistakes that can be corrected by their teacher, has satisfactory theoretical knowledge (knows the basic principles of methods of practical skills, indications and contraindications, possible complications, etc.).
"Unsatisfactorily"	The student can not independently demonstrate practical skills (performs them, making gross errors), does not have a sufficient level of theoretical knowledge (does not know the methods of performing practical skills, indications and contraindications, possible complications, etc.).

Final score for (IPA) and final classes (SO) is defined as the arithmetic mean of traditional grades for each lesson and software, rounded to 2 decimal places and listed in a multi-point scale according to Tables 1.

Appendix 1  
to item 2.6 of the Instruction,  
approved  
by order of KhNMU  
from 21.08.2021 № 181

Table 1

**Recalculation of the average score for the current control in a multi-point scale**

4-point scale	120-point scale	4-point scale	120-point scale
5	120	3.91-3.94	94
4.95-4.99	119	3.87-3.9	93
4.91-4.94	118	3.83- 3.86	92
4.87-4.9	117	3.79- 3.82	91
4.83-4.86	116	3.74-3.78	90
4.79-4.82	115	3.7- 3.73	89
4.75-4.78	114	3.66- 3.69	88
4.7-4.74	113	3.62- 3.65	87
4.66-4.69	112	3.58-3.61	86
4.62-4.65	111	3.54- 3.57	85
4.58-4.61	110	3.49- 3.53	84
4.54-4.57	109	3.45-3.48	83
4.5-4.53	108	3.41-3.44	82
4.45-4.49	107	3.37-3.4	81
4.41-4.44	106	3.33- 3.36	80
4.37-4.4	105	3.29-3.32	79
4.33-4.36	104	3.25-3.28	78
4.29-4.32	103	3.21-3.24	77
4.25- 4.28	102	3.18-3.2	76
4.2- 4.24	101	3.15- 3.17	75
4.16- 4.19	100	3.13- 3.14	74
4.12- 4.15	99	3.1- 3.12	73
4.08- 4.11	98	3.07- 3.09	72
4.04- 4.07	97	3.04-3.06	71
3.99-4.03	96	3.0-3.03	70
3.95- 3.98	95	Less 3	Not enough

### **Evaluation of the applicant's independent work**

The material for independent work of applicants, which is provided in the topic of practical training simultaneously with the classroom work, is evaluated during the current control.

Assessment of topics that are submitted only for independent work and are not included in the topics of classroom classes, are controlled during the final lesson.

### **Evaluation of the individual work of the applicant**

The list of individual tasks was approved at the meeting of the department (participation with reports in student conferences, profile Olympiads, preparation of analytical reviews with presentations with determination of the number of points for their performance, which can be added as incentives) (not more than 10).

**Points for individual tasks are awarded to the applicant only once as a commission (commission - head of the department, head teacher, group teacher) only if they are successfully completed and defended. In no case may the total amount of points for IPA exceed 120 points.**

### **Final lesson**

**Final lesson** (*hereinafter - the software*) must be conducted in accordance with the working curriculum of the discipline (*hereinafter - RNPД*) during the semester on schedule, during classes.

The software is received by the teacher of the academic group or the exchange of related groups between teachers is carried out.

The department provided the following materials for preparation for the software on the information stand:

- list of theoretical questions (including questions on independent work);
- list of practical skills;
- criteria for assessing the knowledge and skills of applicants;
- schedule of completion of missed classes by applicants during the semester.

### **Recommendations for the final lesson:**

1. Solving a package of tasks on the content of educational material, which includes the following:

2. Assessment of the development of practical skills (assessment criteria - "performed" or "failed");

3. During the assessment of the applicant's knowledge on theoretical issues included in this final lesson (SO), the applicant is given a traditional assessment, which is converted into a multi-point scale together with the assessments of the IPA (Table 1).

## **3.2. LIST OF PRACTICAL SKILLS**

### **222- "medicine" - masters**

#### **"Anatomy of the musculoskeletal system"**

- |                                 |  |  |
|---------------------------------|--|--|
| 1. Vertebra                     | 14. - Furrow of the vertebral artery         | 25. - Lower rib fossa                  |
| 2. - The body of the vertebra   | 15. "The back arc of Atlanta." process       | 26. - Rib fossa of the transverse      |
| 3. - Vertebral arch             | 16. - The lateral mass of the atlas          | 27. Lumbar vertebrae                   |
| 4. - Upper vertebral notch      | 17. - Axial vertebra tooth                   | 28. - Additional appendix              |
| 5. - Lower vertebral notch      | 18. - Sleepy tubercle (VI cervical vertebra) | 29. - Nipple-like process              |
| 6. - Vertebral foramen          | 19. - Transverse hole                        | 30. Sacrum                             |
| 7. - Spiny process              | 20. - Anterior hump                          | 31. - The base of the sacrum           |
| 8. - Transverse process         | 21. - Rear hump                              | 32. - Ear-shaped surface of the sacrum |
| 9. - Upper articular process    | 22. - Furrow of the spinal nerve             | 33. - The top of the sacrum            |
| 10. - Lower articular process   | 23. Thoracic vertebrae                       | 34. - Mountainousness of the sacrum    |
| 11. Cervical vertebrae          | 24. - Upper rib fossa                        | 35. - Pelvic surface                   |
| 12. - The front arch of Atlanta |  |  |
| 13. - The pit of the tooth      |  |  |



36.	- Transverse lines	80.	- Nasal spine	125.	- Small wing of a wedge-shaped bone
37.	- Anterior sacral openings	81.	- Lattice cutting	126.	- Large wing of a wedge-shaped bone
38.	- Dorsal surface	82.	- Frontal sinus	127.	- The cerebral surface of the great wing
39.	- Posterior sacral openings	83.	Parietal bone	128.	- Temporal surface of the large wing
40.	- Middle sacral crest	84.	- Occipital edge	129.	- Temporal surface of the large wing
41.	- Medial sacral ridge	85.	- Scaly edge	130.	- The maxillary surface of the large wing
42.	- Lateral sacral crest	86.	- Boom edge	131.	- Orbital surface of the large wing
43.	- The sacral canal	87.	- Frontal edge	132.	- The upper orbital fissure
44.	- Cruciate ligament	88.	- Frontal angle	133.	- Visual canal
45.	-Edge	89.	- Occipital angle	134.	- Round hole
46.	- Rib head	90.	- Wedge-shaped angle	135.	- Oval hole
47.	- Articular surface of the rib head	91.	- Nipple angle	136.	- Spiny hole
48.	- The crest of the rib head	92.	- Parietal opening	137.	- Pterygoid process
49.	- Neck ribs	93.	- Furrow of the upper arrow sinus	138.	- Side plate
50.	- The body of the rib	94.	- Parietal hump	139.	- Medium plate
51.	- Bump ribs	95.	- Upper temporal line	140.	- Wing-shaped channel
52.	- Rib angle	96.	Occipital bone	141.	- Pterygoid fossa
53.	- Furrowed ribs	97.	- Big hole	142.	- Wing-shaped notch
54.	- Bump of the anterior laddermuscle (on the first rib)	98.	- Main part	143.	Temporal
55.	- Furrow of the subclavian artery (on the first rib)	99.	- Pharyngeal tubercle	144.	- Stony part of the temporal bone
56.	- Furrow of the subclavian vein (on the first rib)	100.	- Slope	145.	- The upper edge of the rocky part
57.	- Hilness of the anterior dentary muscle	101.	-Side part	146.	--- Furrow of the upper stony sinus
58.	Sternum	102.	- Occipital condyle	147.	- The back edge of the stony part
59.	- Stern handle	103.	- Outgrowth canal	148.	--- Furrow of the lower stony sinus
60.	- Jugular notch (sternum)	104.	- Outgrowth fossa	149.	- The leading edge of the stony part
61.	- Key clipping	105.	- Yoke notch	150.	--- Furrow of the lower stony sinus
62.	- The body of the sternum	106.	- Jugular process	151.	- The front surface of the stony part
63.	- Rib cuts	107.	--Sublingual nerve canal	152.	--- The roof of the tympanic cavity
64.	- Sword-shaped process	108.	- Occipital scales	153.	---- Triple indentation
65.	- Angle of the sternum	109.	- External occipital protrusion	154.	--- Solution of the canal of the great stony nerve
66.	Frontal bone	110.	- Upper neck line	155.	---- Furrow of a large stony nerve
67.	- Frontal scales	111.	- Lower neck line	156.	--- Solution of the canal of the small stony nerve
68.	- Frontal hump	112.	- Internal occipital protrusion		
69.	- Eyebrow arch	113.	- Cross-shaped increase		
70.	- Overweight	114.	- Furrow of the transverse sinus		
71.	- Furrow of the upper arrow sinus	115.	- Furrow of the sigmoid sinus		
72.	- Frontal crest	116.	- Furrow of the transverse sinus		
73.	- Blind hole	117.	Wedge-shaped bone		
74.	- Supraorbital edge	118.	- The body of the wedge-shaped bone		
75.	- Supraorbital foramen	119.	- Turkish saddle		
76.	- Chin appendage	120.	- Pituitary fossa		
77.	- Ocular fossa	121.	--Bump saddle		
78.	--The pit of the lacrimal gland	122.	- Saddle back		
79.	- Nose	123.	- Sleepy furrow		
		124.	- Wedge-shaped sinus		

157. ---- Furrow of a small stony nerve	197. - Temporal surface of the body of the upper jaw	235. <b>Nasal</b>
158. - The back surface of the stony part	198. --- The hump of the upper jaw	236. Ploughshare
159. --- Internal ear canal	199. --- Cell openings	237. Palate
160. --- Internal auditory canal	200. - Nasal surface of the upper jaw	238. - Perpendicular plate
161. --- Arc fossa	201. --- Tear furrow	239. - Wedge-palatal notch
162. - The lower surface of the stony part	202. - Upper maxillary solution	240. - Pyramidal process
163. --- The jugular fossa	203. - Frontal process of the upper jaw	241. - Horizontal plate
164. --- Acute process	204. - Chin process of the upper jaw	Chin bone
165. --- Awl-mammary hole	205. - The palatine process of the upper jaw	242. - Side surface
166. --- Rocky dimple	206. - Cell process	243. - Temporal surface
167. --- External opening of the carotid canal	207. - Dental cells	244. - Orbital surface
168. --- Internal opening of the carotid canal	208. mandible	245. - Frontal process
169. - Nipple (temporal bone)	209. - The body of the lower jaw	246. - Temporal process
170. --- Furrow of the sigmoid sinus	210. - Cell part	247. - Chin-orbital foramen
171. --- Nipple-shaped notch	211. - Cellular arch of the lower jaw	248. - Chisel-frontal opening
172. --- Nipple-shaped hole	212. --- Dental cells	249. - Chin-temporal opening
173. - Drum part	213. - The base of the lower jaw fossa	Sublingual bone
174. - The scaly part	214. --- Chin protrusion of the lower jaw	250. - The body of the hyoid bone
175. --- Chin appendage	215. --- Chin tubercle	251. - Small horn
176. --- Articular tubercle	216. --- Chin hole	252. - The Great Horn
177. --- Mandibular fossa	217. --- Double ventral fossa of the lower jaw	253. The vault of the skull
178. - External ear canal	218. --- Maxillofacial line of the lower jaw	254. Temporal fossa
179. - External auditory canal	219. --- Sublingual fossa	255. - The walls of the temporal
180. Lattice bone	220. --- Submandibular fossa	256. - Jaw arch
181. - <i>Perforated plate</i>	221. - Branch of the lower jaw sinus (skull)	257. Temporal fossa
182. - Hole holes	222. - The angle of the lower jaw	258. - The walls of the temporal
183. - Perpendicular plate	223. - Chewing hilly	259. - Jaw arch
184. - Lattice maze	224. - Winged hilly	260. Temporal fossa
185. - Ocular fossa plate	225. - Clipping of the lower jaw	261. - The walls of the temporal
186. - Upper nasal conch	226. - The condylar process of the mandible	262. Wing-palate fossa
187. - Middle nasal conch	227. --- Head of the lower jaw	263. - Walls of the
188. Maxilla	228. --- The neck of the lower jaw	264. Anterior cranial fossa
189. - The body of the upper jaw	229. --- Pterygoid fossa of the mandible	265. Middle cranial fossa
190. - Orbital surface	230. - Coronal process of (skull)	266. Posterior cranial fossa
191. --- Suborbital sulcus of the upper jaw	231. - Hole of the lower jaw	267. Furrow of the upper arrow
192. --- Suborbital canal of the upper jaw	232. - Channel of the lower jaw	268. Furrow of the transverse
193. - Suborbital margin of the body of the upper jaw	233. <b>Lower nasal concha</b>	269. Furrow of the sigmoid sinus
194. - Anterior surface of the upper jaw	234. Tear bone	270. The outer base of the skull
195. --- Suborbital foramen of the upper jaw		271. - Torn hole (skull)
196. --- Nasal notch		272. - Jugular opening (skull)
		273. - Carotid canal (skull)
		274. - Musculoskeletal canal
		275. Bone palate
		276. - Large palatal canal
		277. - Small palatal openings
		278. - Cutter channel
		279. Eye socket
		- Orbital entrance

280.	- Supraorbital edge (skull)	329.	- Furrow of the radial nerve	373.	- The metacarpal bones
281.	- Suborbital margin (skull)	330.	- The condyle of the humerus	374.	- The base of the metacarpal
282.	- The walls of the orbit	331.	- The head of the humerus	375.	- The body of the metacarpal
283.	- Front lattice hole	332.	- Block of the humerus	376.	- The head of the metacarpal
284.	- Rear lattice hole	333.	- Elbow fossa	377.	- Bones of the fingers of the hand (phalanges of the fingers)
285.	- Lower orbital fissure	334.	- Coronary fossa	378.	- Proximal phalanx
286.	Bone nasal cavity	335.	- Lateral appendix	379.	- Middle phalanx
287.	- The walls of the nasal bone cavity	336.	- Beam pit	380.	- The final phalanx
288.	- Hoani	337.	- Medium epiphysis	381.	Hip bone
289.	- Upper nasal passage	338.	- Furrow of the ulnar nerve	382.	- Kulshova depression
290.	- Middle nasal passage	339.	Radius	383.	- The hole of the acetabulum
291.	- Lower nasal passage	340.	- The head of the radial bone	384.	- Crescent surface of the acetabulum
292.	- Joint nasal passage	341.	- Joint circumference	385.	- Cutting of the acetabulum
293.	Shoulder	342.	- Articular fossa	386.	- Covered hole
294.	- Rib surface	343.	- The neck of the radial bone	387.	- Large buttocks
295.	- Subscapular fossa	344.	- The body of the radial bone	388.	Ileal bone
296.	- Rear surface	345.	- Hilly radial bone	389.	- The body of the iliac bone
297.	- The axis of the scapula	346.	- The surface of the body of the radial bone	390.	- <i>The wing of the iliac bone</i>
298.	-Supra humeral process (acromion)	347.	--The edge of the body of the radial bone	391.	--Club crest
299.	-Supraspinatus fossa	348.	- Acute process of the radial bone	392.	--- Upper anterior iliac spine
300.	--Portal fossa	349.	- Cutting of the ulna	393.	---- Lower anterior iliac
301.	- The middle edge	350.	- Carpal joint surface	394.	--- Lower posterior iliac
302.	- Side edge	351.	Ulna	395.	--- Upper posterior iliac
303.	- The upper edge	352.	- Elbow process	396.	--- Outer lip
304.	- Beak-like process	353.	- Block clipping	397.	--- Intermediate line
305.	- Cutting the scapula	354.	- Coronal process	398.	--- Inner lip
306.	- Upper corner	355.	- Hilness of the ulna	399.	- Club pit
307.	- Lower corner	356.	- Clipping of the radial bone	400.	- Buttock surface
308.	- Side angle	357.	- The body of the ulna	401.	- Ear-shaped surface
309.	--Articular cavity	358.	- The surface of the body of the ulna	402.	- Club hump
310.	- Supraarticular tubercle	359.	- The edges of the body of the ulna	403.	Buttock
311.	- Subarticular tubercle	360.	- The head of the ulna	404.	- The body of the sciatic
312.	- The neck of the shoulder blade	361.	- Acute process of the ulna	405.	- Branch of the sciatic bone
<b>313.</b>	<b>Collarbone</b>	362.	- Joint circumference	406.	- Buttock hump
314.	- Sternal end	363.	Bone bones	407.	- Buttock
315.	- The body of the clavicle	364.	- Carpal bones	408.	- Small buttocks
316.	- Over the shoulder end	365.	- Boat-shaped bone	<b>409.</b>	<b>Pubis</b>
317.	Humerus	366.	- Crescent bone	410.	- The body of the pubic bone
318.	- The head of the humerus	367.	- Triangular bone	411.	- The upper branch of the pubic bone
319.	- Anatomical neck	368.	- Pea-shaped bone	412.	--Pubic tubercle
320.	- Big bump	369.	- Trapezoidal bone	413.	- Ileo-pubic increase
321.	- A small mound	370.	- Trapezoidal bone	414.	--Symphysis surface
322.	- The crest of a large mound	371.	- Head bone		
323.	- The crest of a small mound	372.	--The hook bone		
324.	- Hilly furrow				
325.	- Surgical neck				
326.	- The body of the humerus				
327.	- Body surfaces				
328.	- Delta-shaped hilly				

415.	- The lower branch of the pubic bone	460.	- Tibial tenderloin	502.	- Posterior longitudinal ligament (spine)
416.	- Covered furrow	461.	- Lower articular surface	503.	- Intercostal ligament (spine)
417.	Pelvis	462.	Splint bone	504.	- Yellow ligament (spine)
418.	- Pelvic cavity	463.	- The head of the tibia	505.	- supraspinatus ligament (spine)
419.	- Large pelvis	464.	- The body of the tibia	506.	- Transverse ligament (spine)
420.	- Small pelvis	465.	- Lateral bone	507.	- The arcuate joint
421.	- Boundary line	466.	Foot bones	508.	- Middle atlanto-axial joint
422.	- Pubic arch	467.	- Mold bones	509.	- Lateral atlanto-axial joint
423.	- The upper hole of the pelvis	468.	- Heel bone	510.	- sacrococcygeal joint
424.	- The lower opening of the pelvis	469.	--- Head of the calcaneus	511.	Chest connection
425.	Thigh	470.	--- The neck of the calcaneus	512.	- Rib-sternal synchondrosis
426.	- The head of the femur	471.	--- The body of the calcaneus	513.	- Thoracic-rib joint
427.	- The neck of the femur	472.	- Heel bone	514.	- Joint of the head of the rib
428.	- Small swivel of the femur	473.	--- Heel hump	515.	- Rib-transverse joint
429.	- Large acetabulum of the femur	474.	--- Support of the calcaneus	516.	Connection of the upper limb
430.	- Intervertebral crest	475.	--- Boat-shaped bone	517.	- Supracoccygeal joint
431.	- Inter-swivel line	476.	- Medium wedge-shaped bone	518.	- Thoracic-clavicular joint
432.	- The body of the femur	477.	- Intermediate wedge-shaped bone	519.	- Interclavicular ligament
433.	- Body surfaces	478.	- Lateral wedge-shaped bone	520.	- Rib-clavicular ligament
434.	- Rough line of the femur	479.	- Cube-shaped bone	521.	- Front sternoclavicular ligament
435.	--- Lateral lip	480.	- Mold bones	522.	- Back sternoclavicular ligament
436.	--- Medium lip	481.	- The base of the metatarsals	523.	- Shoulder joint
437.	--- Comb line	482.	- The body of the metatarsals	524.	- Lip of the articular cavity (shoulder joint)
438.	--- Buttock hump	483.	- The head of the metatarsals	525.	- Beak-shoulder ligament
439.	--- Knee surface	484.	- Finger bones (Phalanges)	526.	- Elbow joint
440.	- Medium condyle	485.	- Proximal phalanx	527.	- Shoulder-elbow joint
441.	- The epiphysis of the femur	486.	- Middle phalanx	528.	- Shoulder-radial joint
442.	- Lateral condyle	487.	- The final phalanx	529.	- Proximal radial-elbow joint
443.	- The epiphysis of the femur	488.	Skull connection	530.	- Bypass elbow ligament
444.	- Knee surface	489.	- Skull stitches	531.	- Bypass beam connection
445.	- Intergrowth fossa	490.	- Crown seam of the skull	532.	- Interosseous membrane of the forearm
446.	Patella	491.	- Skull suture	533.	- Distal radial-elbow joint
447.	Tibia	492.	- Lambdo-like seam of the skull	534.	- Radial-carpal joint
448.	- Lateral condyle	493.	- The skull cap	535.	- Posterior radial-carpal joint
449.	- Tibial articular surface	494.	- Synchondrosis of the skull	536.	- Palmar radial-carpal ligament
450.	- Medium condyle	495.	- Temporomandibular joint	537.	- Elbow bypass ligament of the wrist
451.	- The upper articular surface	496.	- Atlanto-occipital joint	538.	- Radial bypass ligament of the wrist
452.	- Front intergrowth field	497.	Connection of the spine	539.	- Intercarpal joints
453.	- Posterior intercostal field	498.	- Intervertebral disc	540.	- Middle wrist joint
454.	- Intergrowth	499.	- Fibrous ring	541.	- Pea-shaped joint
455.	- The body of the tibia	500.	- Gem core		
456.	- The surface of the body of the tibia	501.	- Anterior longitudinal ligament (spine)		
457.	- Hilness of the tibia				
458.	- The edges of the tibia				
459.	- The medial bone				

542.	- Wrist canal	589.	- Trapezius muscle	628.	- Square lumbar muscle
543.	- Carpometacarpal joints	590.	- The widest muscle of the	629.	Facial muscles
544.	- Intercarpal joints	back		630.	-Scranial muscle
545.	- metacarpophalangeal joints	591.	- Large rhomboid muscle	631.	- Forehead abdomen
546.	- Interphalangeal joints of	592.	- Scapula lifting muscle	632.	- Occipital abdomen
the hand		593.	- Lower posterior dentary	633.	- Aponeurotic helmet
547.	- Bypass connections	muscle		(supracranial aponeurosis)	
548.	Connection of the lower	594.	- Upper posterior dentary	634.	- Circular muscle of the eye
extremity		muscle		635.	- Large chin muscle
549.	- Costal membrane	595.	- Muscle - a rectifier of the	636.	- Lifting muscle of the upper
550.	- Covered channel	spine		lip	
551.	- Large buttocks	596.	Chest muscles	637.	- Muscle-lifting angle of the
552.	- Small buttocks	597.	- Large pectoral muscle	mouth	
553.	- Pubic symphysis	598.	- Small pectoral muscle	638.	- Cheek muscle
554.	- sacroiliac joint	599.	- Subclavian muscle	639.	- The lowering muscle of the
555.	- Hip joint	600.	- Anterior dentary muscle	corner of the mouth	
556.	- Lip of the acetabulum	601.	- Internal intercostal muscle	640.	- Lower lip lowering muscle
557.	- Ligament of the femoral	602.	- External intercostal	641.	- Circular muscle of the
head		muscles		mouth	
558.	- Ileo-femoral ligament	603.	Diaphragm	642.	Chewing muscles
559.	- Butto-femoral ligament	604.	- Lumbar part of the	643.	- Temporal muscle
560.	- Pubic-femoral ligament	diaphragm		644.	- Chewing muscle
561.	- Knee joint	605.	- Aortic solution	645.	- Lateral pterygoid muscle
562.	--The knee ligament	606.	- Esophageal solution	646.	- Medial pterygoid muscle
563.	- Lateral meniscus	607.	- Sternal part of the	647.	Neck muscles
564.	- Medial meniscus	diaphragm		648.	- Subcutaneous muscle of
565.	- Anterior cruciate ligament	608.	- Rib part of the diaphragm	the neck	
566.	- Posterior cruciate ligament	609.	- Tendon center	649.	- sternocleidomastoid muscle
567.	- Bypass tibial ligament	610.	- The opening of the vena	650.	- Biceps muscle
568.	- Bypass tibial ligament	cava		651.	- Anterior abdomen
569.	- Knee ligament	611.	- Thoracic-rib	652.	- Hind abdomen
570.	- Interosseous membrane of	triangle		653.	- Awl sublingual muscle
the tibia		612.	- Lumbar-rib triangle	654.	- Maxillofacial muscle
571.	- The tibia	613.	Abdominal muscles	655.	- Pectoral-sublingual muscle
572.	- Ankle joint	614.	- The rectus abdominis	656.	- Scapular-sublingual muscle
573.	- Medium bypass connection	615.	- <i>Tendon alterations</i>	657.	- Thoracic-thyroid muscle
574.	- Lateral bypass	616.	- The vagina of the rectus	658.	- Thyroid-sublingual muscle
575.	- Ankle joint	abdominis		659.	- Anterior ladder muscle
576.	- Heel-heel-boat joint	617.	- External oblique muscle	660.	- Middle ladder muscle
577.	- Transverse joint mold	the abdomen		661.	- Posterior ladder muscle
578.	- Forked ligament	618.	--Inguinal ligament	662.	- Anterior cervical region
579.	- Heel-cuboid joint	619.	- Internal oblique muscle of	663.	- Submandibular triangle
580.	- Wedge-boat joint	the abdomen		664.	- Sleepy triangle
581.	- Inter-wedge joints	620.	- Transverse abdominal	665.	- Scapular-tracheal triangle
582.	- Long sole ligament	muscle		666.	- Thoracic-clavicular-
583.	- Mold-mold joints	621.	- White line	mammary area	
584.	- Interstitial joints	622.	--Umbilical ring	667.	- Lateral cervical region
585.	- Interosseous mold spaces	623.	- Inguinal canal	668.	--Scapular-clavicular triangle
586.	- Mold-phalangeal joints	624.	-Walls of the inguinal canal	669.	- Posterior cervical region
587.	- Interphalangeal joints of	625.	- Superficial inguinal ring	670.	Muscles of the upper
the foot		626.	- Medium leg	extremity	
<b>588. Back muscles</b>		627.	- Side leg	671.	- Deltoid muscle

672.	- The supraspinatus muscle	707.	- The driving muscle of the	752.	- Long extensor muscle of
673.	- The metacarpal muscle	thumb		the toes	
674.	- Small round muscle	708.	- The abductor muscle of the	753.	- Anterior tibialis muscle
675.	- Large round muscle	little finger		754.	- Long extensor muscle of
676.	- Subscapular muscle	709.	- Short flexor muscle of the	the big toe (foot)	
677.	- Biceps muscle of the	little finger		755.	- Long tibialis muscle
shoulder		710.	- Opposite muscle of the	756.	- Short tibialis muscle
678.	- Long head of the biceps	little finger		757.	- Triceps calves
brachii		711.	- Worm-like muscles	758.	- Calf muscle
679.	- Short head of the biceps	712.	- Armpit fossa	759.	- Flounder muscle
brachii		713.	- The walls of the axilla	760.	- Long flexor muscle of the
680.	- Beak-shoulder muscle	714.	- Quadrilateral hole	toes (feet)	
681.	- Shoulder muscle	715.	- Triangular hole	761.	- Posterior tibialis muscle
682.	- Triceps	716.	- Lateral two-headed furrow	762.	- Long flexor muscle of the
683.	- Long head of the triceps	717.	- Medium two-headed	big toe (foot)	
684.	- The medial head of the	furrow		763.	- Short extensor muscle of
triceps		718.	- Elbow fossa	the fingers	
685.	- Lateral head of the triceps	719.	- Holder of extensor muscle	764.	- Short flexor muscle of the
686.	- Radial flexor muscle of the	wrist		thumb	
wrist		720.	- Flexor muscle holder	765.	- Square soleus muscle
687.	- Round muscle-attractor	721.	- Palmar aponeurosis	766.	- Short flexor muscle of the
688.	- Elbow flexor wrist	722.	- Wrist canal	fingers	
689.	- Superficial flexor muscle	723.	Muscles of the lower	767.	- Worm-like muscles
of the fingers		724.	- Ileo-lumbar muscle	768.	- The abductor muscle of the
690.	- Long palmar muscle	725.	--Large lumbar muscle	thumb	
691.	- Long flexor muscle of the	726.	- Club muscle	769.	- Short flexor muscle of the
thumb		727.	- Large gluteal muscle	thumb	
692.	- Deep flexor muscle of the	728.	- Middle gluteal muscle	770.	- The driving muscle of the
fingers		729.	- Small gluteal muscle	thumb	
693.	- Square muscle-attractor	730.	- Pear-shaped muscle	771.	- The abductor muscle of the
694.	- Shoulder-radius muscle	731.	- Internal occlusal muscle	little finger	
695.	- Long radial wrist extensor	732.	- Upper twin muscle	772.	- Short flexor muscle of the
muscle		733.	- Lower twin muscle	little finger	
696.	- Short radial wrist extensor	734.	- Square thigh muscle	773.	- Pear-shaped hole
muscle		735.	- External occlusal muscle	774.	- Pear-shaped hole
697.	- Finger extensor muscle	736.	- Tailor's muscle	775.	- Muscular Bay
698.	- Finger extensor muscle	737.	- Quadriceps femoris	776.	"Vascular Gulf."
699.	- Elbow extensor wrist	738.	- Rectus femoris	777.	- Wide fascia
700.	- Screwdriver muscle	739.	- Lateral broad muscle	778.	- Club-leg strand
701.	- Long abductor muscle of	740.	- Medium broad muscle	779.	- Subcutaneous solution
the thumb		741.	- Intermediate broad muscle	780.	- Sickle-shaped edge
702.	- Short extensor muscle of	742.	- Comb muscle	781.	- Perforated fascia
the thumb		743.	- Thin muscle	782.	- Femoral canal
703.	- Long extensor muscle of	744.	- Long drive muscle	783.	- Femoral ring
the thumb		745.	- Short drive muscle	784.	- Drive channel
704.	- Short abductor muscle of	746.	- Large adductor muscle	785.	- The walls of the drive
the thumb		747.	- Biceps femoris	channel	
705.	- Short flexor muscle of the	748.	- Long head	786.	- Drive solution
thumb		749.	- Short head	787.	- Knee fossa
706.	- Opposite muscle of the	750.	- Semi-membranous muscle	788.	- Upper extensor muscle
thumb		751.	- Semi-tendon muscle	holder	

789.	- Lower extensor muscle holder -	830.	--- Parotid duct	872.	- The mucous membrane of the small intestine
790.	- Flexor muscle holder	831.	- Ziv	873.	- Circular folds of the small intestine
791.	- Upper tibialis muscle holder	832.	- Palate tongue	874.	- The duodenum
792.	- Lower tibialis muscle holder	833.	- Palatine pharyngeal bracket	875.	- The upper part of the duodenum
793.	- Plantar aponeurosis	834.	- The palatine tonsil	876.	- Descending part of the duodenum
	“Splanchnology. Central nervous system and sense organs ”	835.	- Almond fossa	877.	--- Large papilla of the duodenum
794.	Mouth	836.	Pharynx	878.	--- Small papilla of the duodenum
795.	<i>Mouth</i>	837.	- Nasal part of the pharynx	879.	- The horizontal part of the duodenum
796.	- <i>Drooling of the mouth</i>	838.	--The vault of the pharynx	880.	- Ascending part of the duodenum
797.	- Upper lip	839.	- Pharyngeal tonsil	881.	- Duodenal flexion
798.	- Lower lip	840.	- Pharyngeal opening of the ear canal	882.	Empty intestine
799.	- Corner of the company	841.	- Pipe roll	883.	- Ileum
800.	- Cheek	842.	- Oral part of the pharynx	884.	Colon
801.	- Actually the oral cavity	843.	- Laryngeal part of the pharynx	885.	- The mucous membrane of the colon
802.	- The palate	844.	- Pharyngeal cavity	886.	- Crescent folds of the colon
803.	- Hard palate	845.	- The mucous membrane of the pharynx	887.	- Protrusions of the colon
804.	- Soft palate	846.	- Muscles of the pharynx	888.	- Tapes of the colon
805.	- Clear	847.	Esophagus	889.	- Serosus membrane of the colon
806.	- Teeth	848.	- The neck	890.	- Omental appendages of the colon
807.	- Tooth crown	849.	- Chest	891.	- The cecum
808.	- The neck of the tooth	850.	- Abdominal part	892.	--- Club hole
809.	- The root of the tooth	851.	- Mucous membrane	893.	--- Worm-shaped appendix
810.	- Cutters	852.	Stomach	894.	- Colon
811.	- Fang	853.	- The anterior wall of the stomach	895.	- Ascending colon
812.	- Small canines	854.	- The back wall of the stomach	896.	- Right bend of the colon
813.	- Large canines	855.	- Great curvature of the stomach	897.	- Transverse colon
814.	- Language	856.	- Small curvature of the stomach	898.	- Left bend of the colon
815.	- The body of the tongue	857.	- Cardiac opening	899.	- Descending colon
816.	- The root of the tongue	858.	- Cardiac part of the stomach	900.	- Sigmoid colon
817.	- The back of the tongue	859.	- The bottom of the stomach	901.	- Rectum
818.	"By the tongue."	860.	- Cardiac cutting	902.	- Cross flexion
819.	- The tip of the tongue	861.	- The body of the stomach	903.	- Ampoule of the rectum
820.	- The mucous membrane of the tongue	862.	- The portal part of the stomach	904.	- Waste channel
821.	--- Mushroom-shaped papillae of the tongue	863.	- Gate Cave	905.	- Waste columns
822.	--- Grooved papillae of the tongue	864.	- Gateway channel	906.	- Tracheal sinuses
823.	--- Leaf-shaped papillae of the tongue	865.	- Goalkeeper muscle-switch	907.	- Retreat
824.	- Blind hole of the tongue	866.	- Gate opening	908.	Liver
825.	- Tongue tonsil	867.	- The gastric mucosa	909.	- The right lobe of the liver
826.	- Oral glands	868.	- Stomach folds		
827.	- Sublingual gland	869.	- Gastric fields		
828.	- Submandibular gland	870.	Small intestine		
829.	- Parotid gland	871.	- Serous membrane of the small intestine		

910. - Left lobe of the liver  
911. - Aperture surface  
912. - The lower edge  
913. - Internal surface  
914. - Gallbladder fossa  
915. - Liver gate  
916. - Furrow of a vena cava  
917. - The gap of the venous ligament  
918. - Round ligament of the liver  
919. - Slit of the round ligament of the liver  
920. - Square lobe of the liver  
921. - The caudate lobe of the liver  
922. - Common hepatic duct  
923. - Right hepatic duct  
924. - Left hepatic duct  
925. Gallbladder  
926. - The bottom of the gallbladder  
927. - The body of the gallbladder  
928. - The neck of the gallbladder  
929. - Bladder duct  
930. - Common bile duct  
931. Pancreas  
932. - The head of the pancreas  
933. - The body of the pancreas  
934. - Body surfaces  
935. - The edges of the body  
936. - The tail of the pancreas  
937. Peritoneum  
938. - Mesentery of the small intestine  
939. - The root of the mesentery  
940. - Mesentery of the transverse colon  
941. - Mesentery of the appendix  
942. - Mesentery of the sigmoid colon  
943. - Big cap  
944. - Little cap  
945. - Liver ligaments  
946. - Coronal ligament  
947. - Sickle ligament  
948. - Right triangular connection  
949. - Left triangular ligament  
950. - Omental bag  
951. - Omental hole  
952. - Liver bag  
953. - Pancreatic sac  
954. - Right mesenteric sinus  
955. - Left mesenteric sinus  
956. - Left side channel  
957. - Right side channel  
958. - Upper iliac-appendix  
959. - Lower iliac-appendix  
960. - Rectal-uterine cavity  
961. - Bladder-uterine depth  
962. - Rectal-bladder cavity  
963. - Middle umbilical fold  
964. - Medium umbilical fold  
965. - Medial inguinal fossa  
966. - Lateral umbilical fold  
967. - Lateral inguinal fossa  
968. Nose  
969. - The root of the nose  
970. - Back of the nose  
971. - The tip of the nose  
972. - Wings of the nose  
973. Nasal cavity  
974. - Nostrils  
975. - Hoani  
976. - Nasal septum  
977. - Upper nasal conch  
978. - Middle nasal conch  
979. - Lower nasal conch  
980. - Nasal dorsum  
981. - Upper nasal passage  
982. - Middle nasal passage  
983. - Lower nasal passage  
984. - Joint nasal passage  
985. - The paranasal sinuses  
986. - Maxillary sinus  
987. - Wedge-shaped sinus  
988. - Frontal sinus  
989. - Lattice cells  
990. - Mucous membrane  
991. - Olfactory part  
992. - Respiratory part  
993. Larynx  
994. - Larynx (on the corpse)  
995. - Thyroid cartilage  
996. - The upper horn of the thyroid cartilage  
997. - The lower horn of the thyroid cartilage  
998. - Annular cartilage  
999. - Arc of the annular cartilage  
1000. - Plate of annular cartilage  
1001. - Ladle cartilage  
1002. - The basis of scoop cartilage  
1003. - Muscular process of scoop cartilage  
1004. - Vocal process of scoop cartilage  
1005. - The tip of the ladle cartilage  
1006. - Epiglottis  
1007. - Ring-thyroid joint  
1008. - Ring-scoop joint  
1009. - Thyroid sublingual membrane  
1010. - The middle annular-thyroid ligament  
1011. - Ring-tracheal ligament  
1012. - The cavity of the larynx  
1013. - Entrance to the larynx  
1014. - Dorsion of the larynx  
1015. --- Dorsal fold  
1016. --- Parietal slit  
1017. - Loudspeaker  
1018. --- Voice fold  
1019. --- Ventricular larynx  
1020. --- Voice gap  
1021. ---- Intercostal part of the glottis  
1022. ---- Intercartilaginous part of the glottis  
1023. - Consonant cavity  
1024. - Mucous membrane  
1025. - Elastic cone of the larynx  
1026. - Voice communication  
1027. - Square plate  
1028. - Parietal ligament  
1029. - Muscles of the larynx  
**1030. Trachea**  
1031. - The neck  
1032. - Chest  
1033. - Bifurcation of the trachea  
1034. - Tracheal cartilage  
1035. - Annular (tracheal) ligaments  
1036. - Membrane wall  
1037. Bronchi  
1038. - Right main bronchus  
1039. - Left main bronchus  
1040. - Bronch tree  
1041. Lungs  
1042. - Right lung  
1043. - Left lung  
1044. - The basis of the lungs



1045.	- The top of the lung	1087.	- Kidney pyramids	1136.	- Share (right, left) of the prostate
1046.	- Rib surface and	1088.	- Renal papillae	1137.	- The isthmus of the prostate
1047.	- The spinal part of the rib surface of the lung	1089.	- Kidney columns	1138.	Penis
1048.	- Medial wall surface	1090.	- Kidney bowl	1139.	- The root of the penis
1049.	- Aperture surface	1091.	- Large renal calyx	1140.	- The body of the penis
1050.	- Interparticle surface	1092.	- A small kidney cup	1141.	- The back of the penis
1051.	- The front edge of the lung	1093.	Ureter (right, left)	1142.	- The head of the penis
1052.	- The tongue of the left lung	1094.	- Abdominal part	1143.	- Cavernous body of the penis
1053.	- Heart incision of the left lung	1095.	- Pelvic part	1144.	- Spongy body of the penis
1054.	- The tongue of the left lung	1096.	- Intrawall part	1145.	Male urethra
1055.	- The lower edge of the lung	1097.	Bladder	1146.	- The prostatic part
1056.	- Lung gate	1098.	- The top of the bubble	1147.	- Membrane (intermediate) part
1057.	- The root of the lung	1099.	- The body of the bubble	1148.	- Spongy part
1058.	- Oblique slit of the lung	1100.	- The bottom of the bubble	1149.	- The inner eye of the urethra
1059.	- Horizontal slit of the right lung	1101.	- The neck of the bladder	1150.	- The outer eye of the urethra
1060.	- Upper lobe of the lung (left, right)	1102.	- The triangle of the bubble	1151.	Wicket
1061.	- The middle lobe of the right lung	1103.	- The ureter's eye	<b>1152.</b>	<b>Ovary</b>
1062.	- Lower lobe of the lung (left, right)	1104.	- The inner eye of the urethra	1153.	- Free land
1063.	Pleura	1105.	- Mucous membrane	1154.	- The mesenteric edge
1064.	- Nutroscheva (pulmonary) pleura	1106.	Testicle	1155.	- Medium surface
1065.	- Parietal pleura	1107.	- Medium surface	1156.	- Side surface
1066.	- Pleural dome	1108.	- Side surface	1157.	- Pipe end
1067.	- Rib part	1109.	- Upper end (pole)	1158.	- Uterine end
1068.	- The mediastinal part	1110.	- Lower end (pole)	1159.	- Protein shell
1069.	- Aperture part	1111.	- The leading edge	1160.	- Ovarian cortex
1070.	- Pleural cavity	1112.	- The back edge	1161.	- The cerebral substance of the ovary
1071.	- Rib-diaphragm nook	1113.	- Protein shell	1162.	- Own ovarian ligament
1072.	- Rib-mediastinal nook	1114.	- The mediastinum of the testicle	1163.	Uterus
1073.	Kidney	1115.	- Testicular septa	1164.	- Front surface
1074.	- Kidneys (right, left)	1116.	- Testicular particles	1165.	- Rear surface
1075.	- Side edge	1117.	- Testicular parenchyma	1166.	- The body of the uterus
1076.	- The middle edge	1118.	Nadezhda	1167.	- The bottom of the uterus
1077.	--- Kidney gate	1119.	- The head of the nipple	1168.	- Cervix
1078.	--- Renal sinus	1120.	- The body of the little girl	1169.	- Supravaginal part of the neck
1079.	- Front surface	1121.	- The tail of the little girl	1170.	- Vaginal part of the neck
1080.	- Rear surface	1122.	Family rope	1171.	- The uterine cavity
1081.	- Upper end (pole)	1123.	- Components	1172.	- The eye of the uterus
1082.	- Lower end (pole)	1124.	The vas deferens	1173.	- Cervical canal
1083.	- Kidney fat capsule	1125.	- Gate part	1174.	- Wide uterine ligament
1084.	- Fibrous capsule of the kidney	1126.	- Rope part	1175.	- Round uterine ligament
1085.	- Cortical substance of the kidney	1127.	- Inguinal part	1176.	Uterine tube
1086.	- Kidney substance of the kidney	1128.	- Pelvic part	1177.	- Uterine part
		1129.	- Ampoule of the vas deferens	1178.	- Isthmus of the fallopian tube
		1130.	Family blister	1179.	- Ampoule of the fallopian tube
		1131.	Prostate	1180.	- Funnel of the fallopian tube
		1132.	- The basis of the prostate gland		
		1133.	- The top of the prostate		
		1134.	- Front surface		
		1135.	- Rear surface		

1181.	--Totors of the fallopian tube	1216.	- Pulmonary trunk (on the heart)	1254.	- Dorsum of the aorta
1182.	- Uterine eye of the fallopian tube	1217.	- pulmonary artery (right, left)	1255.	- Aortic opening
1183.	- Abdominal opening of the fallopian tube	1218.	- Right pulmonary veins (on the heart)	1256.	- Aortic valve
1184.	Vagina	1219.	- Left pulmonary veins (heart)	1257.	- Right crescent valve
1185.	- Vault of the vagina	1220.	Right atrium	1258.	- Left crescent valve
1186.	- The front wall of the vagina	1221.	"Right ear."	1259.	- Rear crescent valve
1187.	- The back wall of the vagina	1222.	- Comb muscles	1260.	- Aortic sinuses
1188.	External female genitals	1223.	- The opening of the superior vena cava	1261.	- Anterior mammary muscle
1189.	- Pubic elevation	1224.	- The opening of the inferior vena cava	1262.	- Posterior papillary muscle
1190.	- Big shy lip	1225.	- The opening of the coronary sinus	1263.	- Tendon strings
1191.	- Shameful slit	1226.	Left atrium	1264.	- Meaty translations
1192.	- Little shy lip	1227.	- Left ear	1265.	Ventricular septum
1193.	- Dorsum of the vagina	1228.	- Comb muscles	1266.	Endocardium
1194.	- Vaginal opening	1229.	- Open the pulmonary veins	1267.	Myocardium
1195.	- The clitoris	1230.	Atrial septum	1268.	Epicardium
1196.	Female urethra	1231.	- Oval hole	1269.	Pericardium (core)
1197.	Perineum	1232.	Right ventricle	1270.	- Absolute transverse sinus
1198.	- Buttock-vaginal fossa	1233.	- Right atrioventricular foramen	1271.	- Absolutely slanted hair
1199.	- Bulb-spongy muscle	1234.	- Right atrioventricular valve	<b>1272. Right coronary artery of the heart</b>	
1200.	- Bulb-cavernous muscle	1235.	- Front sash	1273.	- Posterior interventricular branch
1201.	- Superficial transverse muscle of the perineum	1236.	- Rear sash	1274.	Left coronary artery of the heart
1202.	- Deep transverse muscle of the perineum	1237.	- Partition sash	1275.	- Anterior interventricular branch
1203.	- The external muscle is a circuit breaker	1238.	- Arterial cone	1276.	- Oginal branch
<b>1204. Heart</b>		1239.	- The opening of the pulmonary trunk	1277.	Coronary sinus
1205.	- The basis of the heart	1240.	- Pulmonary trunk valve	1278.	- Large cardiac vein
1206.	- The top of the heart	1241.	- Right crescent valve	1279.	- Middle heart vein
1207.	- Thoracic-rib surface of the heart	1242.	- Left crescent valve	1280.	- Small heart vein
1208.	- Diaphragmatic surface of the heart	1243.	- Front crescent valve	1281.	Thyroid gland
1209.	- Pulmonary surface (right, left)	1244.	- Anterior mammary muscle	1282.	- The share of the thyroid gland
1210.	- Crown furrow	1245.	- Posterior papillary muscle	1283.	- Isthmus of the thyroid gland
1211.	- Anterior interventricular sulcus	1246.	- Septal papillary muscle	1284.	
1212.	- Posterior interventricular sulcus	1247.	- Tendon strings	1285.	Adrenal gland (right, left)
1213.	- Aorta (on the heart)	1248.	- Meaty translations	1286.	Pituitary
1214.	- Upper vena cava (on the heart)	1249.	Left ventricle of the heart	1287.	Cone-shaped gland
1215.	- Lower vena cava (on the heart)	1250.	- Left atrioventricular foramen	1288.	The bone marrow
		1251.	- Left atrioventricular valve	1289.	Thoracic gland (thymus)
		1252.	--Front sash	1290.	Spleen
		1253.	- Rear sash	1291.	- The gate of the spleen
				1292.	Palate tonsils
				1293.	Worm-shaped appendix

### 3.3. Test tasks for independent work

#### Topics of abstracts

**Topic 1.** Andreas Vesalius and the beginning of scientific anatomy

**Topic 2.** Leonardo da Vinci - a great painter, one of the founders of plastic anatomy

**Topic 3.** Stages of embryogenesis. Embryonic leaves - the development of tissues and organs.

1. Development of the human embryo
2. Histogenesis
3. Organogenesis

**Topic 4.** Physiological curves of the spine

The structure of the spine and changes in the spine in scoliosis

**Topic 5** Determining the type of posture depending on the severity of the curves of the spine

Types of posture with increasing and decreasing curvature of the spine

**Topic 6.**

1. The structure of the bone
3. Age features of the periosteum

**Topic 7.** Study of the features of skeletal bones in the age aspect.

Features of skeletal bones in children, adults and the elderly

**Topic 8.** Structures that strengthen the joint and limit its movements

1. Auxiliary apparatus of the joint
2. The purpose of the joint ligament

**Topic 9.** Blood supply and innervation of torso muscles

1. Blood supply to the muscles of the torso
2. Innervation of the muscles of the torso

**Topic 10.** Muscles are antagonists and muscles are synergists

1. Muscles - antagonists
2. Muscles - synergists

**Topic 11.** Abdominal press and its functional significance.

1. The diaphragm of the human body
2. The walls of the abdominal press
3. Functional purpose of the abdominal press

**Topic 12.** The structure of the teeth

1. Features of deciduous teeth and the time of their development
2. The formula of permanent teeth.
3. Features of incisors, canines, molars. The turn of their appearance.
4. Prevention

**Topic 13.** Spleen, its location, external and internal structure.

1. The structure and function of the spleen
2. The role of the spleen in blood circulation

### **3.4. Individual tasks**

Individual training and research (UDRS) or research (NDRS) work of applicants (optional) involves:

- preparation of a review of scientific literature (abstract);
- preparation of illustrative material on these topics (multimedia presentation, a set of tables, diagrams, figures, etc.);
- production of educational and museum preparations, models;

### **3.5. Other incentives**

- conducting research within the student research group of the department;
- participation in the scientific state budget of the department;
- participation in anatomical olympiads, etc.

### **3.6. Rules for appealing the assessment**

The appeal is assessed in accordance with the provision "On the appeal of the results of the final control of students of the Kharkiv National Medical University", the order of 30.09.2020. №252.

[http://www.knmu.kharkov.ua/index.php?option=com\\_content&view=article&id=1226%3A2013-03-25-12-07-55&catid=4%3A2011-05-04-07-20-12&Itemid=19&lang=uk](http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=1226%3A2013-03-25-12-07-55&catid=4%3A2011-05-04-07-20-12&Itemid=19&lang=uk)

## **4. DISCIPLINE POLICY**

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and receive it when you need it.

Applicants can discuss different tasks, but their performance is strictly individual. It is not allowed to write off, use various software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Applicants are not allowed to be late for practical classes.

Visiting patients during hospitalization is possible provided that applicants have appropriate clothing, a health book with a diphtheria vaccination note, the results of a measles immune test (or a vaccination mark), or other infectious diseases according to the current epidemic situation.

Applicants with special needs can meet with the teacher or warn him before the start of classes, at the request of the applicant, this can be done by the head of the group. If you have any questions, please contact the teacher.

Applicants are encouraged to participate in research and conferences on this topic.

All KNMU applicants are protected by the Regulations on the Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to define an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. This Regulation is developed on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men"; Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to Article 4, paragraph 1, of the Convention on the Elimination of All Forms of Discrimination against Women; General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights; UN Committee on Economic, Social and Cultural Rights); in the spirit of international mutual understanding, cooperation and peace and education in the spirit of respect for human rights and fundamental freedoms (UNESCO), the Concept of the State Social Program for Equal Rights and Opportunities for Women and Men until 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans' offices, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential about those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure and / or when disclosure by the University is necessary to protect the safety of others).

KhNMU creates a space of equal opportunities, free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to applicants or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

## 5. ACADEMIC INTEGRITY

**The Department of Human Anatomy maintains zero tolerance for plagiarism.** Applicants are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

## 6. RECOMMENDED BOOKS

1. Human anatomy: textbook. way. for students. higher honey. textbook institutions of the IV level of accreditation / VG Cherkasov, S. Yu. Kravchuk; Nat. honey. Univ. O.O. Bogomolets, Bukovynian state. honey. un-t. - Vinnytsia: New book, 2011.
2. Anatomy of a child (with the basics of embryology and developmental defects): educational and methodical manual for students of higher medical (pharmaceutical) educational institutions / II Bobryk, VS Shkolnikov, SD Maksimenko, Yu. Y. Guminsky. - Luhansk: Virtual Reality, 2012.
3. AS Golovatsky, VG Cherkasov, MR Human anatomy: in 3 volumes 2015, Vinnytsia. New Book
4. Gaivoronsky IV, Nichiporuk Sh.N. Anatomy of the digestive system: Textbook. Allowance for honey. University. - СПб: ЭлбИ, 2007.
5. Netter Frank H. (ed.) Atlas of Human Anatomy: 7th edition. - Elsevier, 2018. - 791 p.
6. Atlas of Human Anatomy, 6th Edition Enhanced International Edition. Netter Frank H. Elsevier - health sciences division, 2015
7. Sinelnikov RD, Sinelnikov Ya.R., Sinelnikov A.Ya. Atlas of human anatomy: Textbook. allowance: In 4 vols. Vol. 2. - 7th ed., reworked. - M.: RIA "New Wave": Publisher Umerenkov, 2007. - 248 p.

### Supporting literature:

1. Human anatomy: a textbook in 2 volumes. / Ed. M.R. Sapina. Volume 1: GEOTAR-Media. 2012.- 456 p.
2. Human anatomy: a textbook in 2 volumes. / Ed. M.R. Sapina. Volume 2: GEOTAR-Media. 2012. - 528 p.
3. Atlas of human anatomy. Publisher: Ripol-Classic. 2012. - 576 p.
4. Bilich GL, Kryzhanovsky VA Human anatomy: Russian-Latin atlas Publisher: Exmo. 2012. - 704 p.
5. Bilich GL Popular medical encyclopedia. Publisher: Veche. 2012.- 400 p.
6. Bleshchunova EN Workshop on human morphology: Textbook. Kharkiv, 2013. - 74 p.
7. Boyanovich Yu. V., Balakirev NP Human anatomy. Atlas. Publisher: Phoenix. Series :: Medicine. 2011. - 736 p.
8. Budanova OL Human anatomy. Lecture notes. Phoenix Publishing House. 2007. - 285 p.
9. Grigorenko VG Theory and methods of PV of the disabled / Sermeev BV - Odessa, 1991. - 98 p.
10. Goncharov NI, Krayushkin AI. Splanchnology (in tables). - Volgograd, 2000.
11. Sapin MR, Nikityuk DB, Shvetsov EV Atlas of normal human anatomy. Textbook. MedPress.2009.

**7. INFORMATION RESOURCES**

<http://31.128.79.157:8083/course/view.php?id=496>