Документ подписан простой электронной подписью Информация о владельце: 400: 9crp Federal STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF HIGHER EDUCATION Должность: Ректор Дата подписания: 04.10.2024 14:01:50 PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE LUMUMBA Уникальный программный ключ: ca953a0120d891083f939673078ef1a989dae18a **RUDN UNIVERSITY**

INSTITUTE OF MEDICINE

educational division (faculty/institute/academy) as higher education programme developer

COURSE SYLLABUS

Topographic anatomy and operative surgery of the head and neck course title

Recommended by the Didactic Council for the Education Field of:

31.05.03 DENTISTRY

field of studies / speciality code and title

The student's internship is implemented within the professional education programme of higher education:

DENTISTRY

higher education programme profile/specialisation title

2024-2025

1. COURSE GOAL(S)

The goal of the course is to equip students with the knowledge of topographic anatomy of specific areas, the clinical anatomy of internal organs, as well as the types, principles and techniques of basic surgical operations. Acquisition of practical skills in general operational techniques.

The purpose of mastering the discipline is the anatomical and surgical training of students necessary for subsequent work in clinical, primarily surgical, departments and subsequent independent activity.

The discipline consists of 3 sections and 12 topics and is aimed at studying the development of the theoretical foundations of topographic anatomy and operative surgery.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) «Topographic anatomy and operative surgery of the head and neck» is aimed at the development of the following competences/competences in part: GPC-7, GPC-9.

COMPETENCE CODE	COMPETENCE DESCRIPTOR	COMPETENCE FORMATION INDICATORS (WITHIN THIS COURSE)
GPC-7	Being able to organize work and take professional decisions in case of emergency conditions, amid emergencies, epidemics, and in the foci of mass destruction	 GPC-7.1. Being able to use the algorithm for providing first aid in emergency conditions, including in extreme conditions and foci of mass destruction. GPC-7.2. Identifying conditions requiring emergency medical care, including clinical signs of sudden cessation of blood circulation and acute respiratory failure. GPC-7.3. Providing emergency medical care to patients with conditions that pose a threat to the patient's life, including clinical death (cessation of the vital bodily functions (blood circulation and (or) breathing). GPC-7.4. Using drugs and medical products when providing emergency medical care.
GPC-9	Being able to assess morpho- functional, physiological conditions and pathological processes in the human body to solve professional tasks	GPC-9.3. Determining morpho- functional, physiological states and pathological processes of the human body.

Table 2.1. List of competences that students acquire during the course study

3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the core/<u>variable</u>/elective* component of (B1) block of the higher educational programme curriculum.

* - Underline whatever applicable.

Within the higher education programme students also master other (modules) and / or internships that contribute to the achievement of the expected learning outcomes as results of the course study.

Table 3.1. The list of the higher education programme components/disciplines that contribute to the achievement of the expected learning outcomes as the course study results

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GPC-7	Being able to organize work and take professional decisions in case of emergency conditions, amid emergencies, epidemics, and in the foci of mass destruction		Diseases of the head and neck; Implantology and reconstructive surgery of the oral cavity; General Surgery; Surgical diseases; Maxillofacial and gnatic surgery; Obstetrics; Disaster Medicine; Epidemiology; Medical rehabilitation; Emergency conditions in outpatient dental practice; Urgent conditions; General medical skills;
GPC-9.3	Determining morpho-functional, physiological states and pathological processes of the human body.	Histology, Embryology, Cytology - Oral Histology; Microbiology, virology - Microbiology of the oral cavity; Normal physiology, physiology of the maxillofacial region; Biological Chemistry - Biochemistry of the oral cavity; Human Anatomy - Anatomy of the head and neck;	Pediatric Dentistry; Diseases of the head and neck; Implantology and reconstructive surgery of the oral cavity; Local anesthesia and anesthesiology in dentistry; Orthodontics and pediatric prosthetics; Oral Surgery; Maxillofacial and gnatic surgery; Obstetrics; Pathophysiology - Pathophysiology of the head and neck; Forensic medicine; Medical rehabilitation; Radiation diagnostics; Pathological anatomy - Pathanatomy of the head and neck; Ophthalmology;

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course **«Topographic anatomy and operative surgery** of the head and neck» is 3 credits (108academic hours).

*Table 4.1. Types of academic activities during the periods of higher education programme mastering (full-time training)**

	TOTAL	SEMESTERS/TRAINING MODULES			
TYPE OF ACADEMIC ACTIVITIES	ACADEMIC HOURS	4			
Contact academic hours	54	54			
INCLUDING:					
LECTURES (LC)					
LAB WORK (LW)	54	54			
SEMINARS (WORKSHOPS/TUTORIALS) (S)	0	0			
Self-studies	36	36			
EVALUATION AND ASSESSMENT (EXAM/PASSING/FAILING GRADE)	18	18			

		TOTAL	SEMESTERS/TRAINING MODULES		
TYPE OF ACADEMIC ACTIVITIES		ACADEMIC HOURS	4		
COURSE WORKLOAD	ACADEMIC HOURS	108	108		
	CREDITS	3	3		

* TO BE FILLED IN REGARDING THE HIGHER EDUCATION PROGRAMME CORRESPONDENCE TRAINING MODE.

5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types			
Course module title	Course module contents (topics)	Academic activities types	
	Topic 1.1. Theoretical foundations of topographic	LW	
Module 1.	anatomy. Topographic anatomy and operative		
Topographic	surgery as an educational discipline and its place in		
anatomy of the	the training of doctors. Applied anatomy and its main		
head	types. Fascias and cellular spaces of the face, and their		
	clinical value.		
	Topic 1.2. Topographic anatomy of the cranial part of	LW	
	the head. Borders, areas and regions. External		
	landmarks. Topographic anatomy of the cerebral part		
	of the head. Fronto-parietal-occipital, temporal		
	regions, the area of the mastoid process. Brain.		
	Meningeas of the brain and intermeningeal spaces.		
	Sinuses of the dura mater. Blood supply to the brain.		
	Features of arterial blood supply and venous outflow		
	of the head.		
	Topic 1.3. Topographic anatomy of the facial part of	LW	
	the head. Borders, division into regions. Layers.		
	Blood vessels and nerves, lymphatic drainage.		
	Anterior face region. The area of the orbit.		
	Infraorbital and zygomatic areas. Nose area. External		
	nose. Nasal cavity. Paranasal (accessorial) sinuses.		
	Pathways of pus spreading at maxillitis and sinusitis.		
	Topic 1.4. Topographic anatomy of the mouth region.	LW	
	Borders and parts of the region. Surgical anatomy of		
	the upper and lower lips. Oral cavity. The vestibule of		
	the mouth. Teeth, periodont, parodont, gums. The		
	hard palate, soft palate, tongue and the sublingual		
	space. The bottom of the oral cavity: the muscles,		
	cellular tissue gaps and spaces. Topographic-		
	anatomical substantiation of anesthesia in maxillo-		
	facial surgery (infiltration, extra- and intraoral,		
	conduction anesthesia during operations on the		
	maxillodental segment, the teeth, formations of the		
	oral cavity).		
	Topic 1.5. Topographic anatomy of the lateral	LW	
	superficial face region. External landmarks. The		
	borders. Layers. Surgical anatomy of the facial nerve		
	and its branches. Buccal region. Fat body of the		
	cheek. Parotid-masseteric region. Surgical anatomy		

Table 5.1. Course contents and academic activities types

	of the parotid gland and its excretory duct. Surgical	
	anatomy of the temporomandibular joint.	
	Topic 1.6. Topographic anatomy of the deep lateral	LW
	region of the face. Borders. Temporo-pterygoid,	
	interpterygoid, parapharyngeal, retropharyngeal	
	spaces and their contents. Pterygoid venous plexus	
	and its connections with the facial veins and	
	cavernous sinus. Maxillary artery and its branches.	
	Mandibular branch of the trigeminal nerve and its	
	branches. Lymph nodes area. Cellular spaces and	
	ways of spreading purulent leaks.	
Module 2.	Тема 2.1. Division into areas, regions and triangles.	LW
Topographic	Fascia and cellular spaces of the neck. Connections of	
anatomy of the	the neck cellular spaces with cellular spaces of the	
neck	head and thorax. The median area of the neck. The	
HUUK	submandibular and carotid triangles. Surgical	
	anatomy of the submandibular salivary gland. The	
	submandibular and omotracheal triangles.	LW
	Topic 2.2. Sterno-claido-mastoid region. Scaleno-	Lvv
	vertebral triangle. The lateral neck region. The	
	topography of the subclavian artery and vein, the	
	brachial plexus. Antescalene and interscalene spaces.	
	Surgical anatomy of: larynx, trachea, pharynx,	
	cervical esophagus and thyroid gland.	
Module 3.	Topic 3.1. Operative surgery: content and methods of	LW
Operative	study. The basics of the doctrine of surgery. Modern	
surgery of the	trends and prospects of operative surgery. Preparation	
head and neck	for surgery and anesthesia. General surgical	
	technique. Surgical instruments. Basic operational	
	techniques: separation of tissues, stop bleeding, put	
	on and removal of skin nodes sutures, tying surgical	
	knots.	
	Topic 3.2. Operations on the head. Primary surgical	LW
	treatment of the head wounds. Trepanation.	
	Trepanation of mastoid procesus. Incisions at	
	parotiditis. Restorative and reconstructive operations	
	in malformations of the lips, palate. Incisions in	
	phlegmon of the mouth floor.	
	Topic 3.3. Operations on the neck. Primary surgical	LW
	treatment of neck wounds. Incisions in phlegmon of	
	the neck. Tracheostomy. Conicotomy. Operations on	
	the thyroid gland.	
		LW
	Topic 3.4. Organ and tissue transplantation. Types of	
	transplantation. Features of organ transplant surgery.	
	The main problems and prospects for the development of transplantology.	

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom equipment and technology support requirements

Type of academic activities	Classroom equipment	Specialized educational/laboratory equipment, software and materials for course study (if necessary)
Lecture	A lecture hall for lecture-type classes, equipped with a set of specialised furniture; board (screen) and technical means of multimedia presentations.	
Lab-work № 2 (234)	Classroom for workshops or lab work, tutorials, interim and mid-term assessment, equipped with a set of professional medical tables, anatomical, plastinated and wet anatomical materials and multimedia projectors.	List of visual anatomical posters, tables, models, bas-reliefs. plastinated materials (preserved (cadaveric) plastinated biomaterial); wet anatomical specimens (preserved (cadaveric) biomaterial in formalin solution in glass containers). Technology support: Epson EMP-S1 multimedia projector; a stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype.
Lab-work № 3 (235)	Classroom for seminars (workshops), group and individual consultations, interim and mid-term assessments, equipped with a set of specialized furniture; whiteboard (screen) and multimedia presentation equipment.	Set of specialized equipment: operating microscope "Carl Zeiss Jena"; endovideosurgical complex "Azimuth"; anatomical table "Anatomage" (interactive 3D-visualization, 3D- visualization table); sets of general and special surgical instruments; visual posters, tables, stands. Technology support: NEC VT59 multimedia projector; stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype. Simulators for operative surgery: human skin, vascular, intestinal simulator, suture kits, surgical instruments.
Seminar № 4, 5	Classroom for seminars (workshops), group and individual consultations, interim and midterm assessments, equipped with a set of specialized furniture; whiteboard (screen) and multimedia presentation equipment.	Set of specialized furniture: desk with faux stone top; portable shadowless lamp. Negatoscope H-48. Technology support: Epson EB-W29 multimedia projector, stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype.

Type of academic activities	Classroom equipment	Specialized educational/laboratory equipment, software and materials for course study (if necessary)
Self-studies	Room for students' self-study (it can	Technology support: Epson
№ 1 (232)	also be used for seminars and consultations), equipped with a set of special furniture and a whiteboard (screen), and multimedia presentation equipment, with access to the E- learning environment.	EMP-S1 multimedia projector, internet access. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype. Simulators for operative surgery: human skin, vascular, intestinal simulator, suture kits, surgical instruments.

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

- 1. Topographic anatomy and operative surgery: textbook/A.V.Nikolaev.-Moscow.-Geotar-Media, 3-rd ed.-2021.-671 p.
- 2. Topographic anatomy and operative surgery: textbook/A.V.Nikolaev.-Moscow.-Geotar-Media/- 2021.-672 p.

https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=497916&idb=0

- 3. Netter's Clinical Anatomy/J.T. Hansen, F.H. Netter. 4th Edition. Philadelphia: Elsevier, 2019. 588 p.
- 4. Gray's Anatomy for Students / R.L. Drake, W.A. Vogl, Mitchell Adam W.M. Third Edition. Philadelphia: Elsevier, 2015. 1161 p.: il.

Additional reading:

Printed publications:

 Topographic and anatomy of the human body: the teaching aid for foreign students/I.I.Kagan, S.N.Lyashchenko, A.O.Mironchev.- Moscow.-Geotar-Media, 2022.-256

https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=508879&idb=0

- 2. Topographic and clinical anatomy the human body/I.I.Kagan, S.N.Lyashchenko, A.O.Mironchev.- Moscow.-Geotar-Media, 2022.-253 p.
- 3. Anatomy for plastic surgery of the Face, Head and Neck/ Koichi Watanabe-Mohammadali M. Shoja, Marios Loukas, R.Shane Tubbs.-2016.-242 p. <u>HTTPS://LIB.RUDN.RU/MEGAPRO/WEB/SEARCHRESULT/TOPAGE/1#:~:TEXT=HTTPS%3A//L</u> <u>IB.RUDN.RU%3A443/MEGAPRO/USERENTRY%3FACTION%3DRUDN_FINDDoc%26ID%3</u> D513494%26IDB%3D0
- 4. Atlas of human anatomy/ F.H. Netter. 6th ed.; International edition. Philadelphia: Saunders: Elsevier, 2014. 591 p.: il

Internet sources

- 1. ELS of RUDN University and third-party ELS, to which university students have access: http://lib.rudn.ru/MegaPro/Web
- http://www.biblioclub.ru
- http://www.biblio-online.ru
- www.studentlibrary.ru

2. Databases and search engines:

http://docs.cntd.ru/

- <u>https://www.yandex.ru/</u>

- <u>https://www.google.ru/</u>

- <u>http://www.elsevierscience.ru/products/scopus/</u>

Training toolkit for self- studies to master the course *:

1. The set of lectures on the course Topographic anatomy and operative surgery of the head and neck».

2. The laboratory workshop (if any) on the course _«Topographic anatomy and operative surgery of the head and neck». _____

3. The guidelines for writing a course paper / project (if any) on the course «Topographic anatomy and operative surgery of the head and neck».

4.

* The training toolkit for self- studies to master the course is placed on the course page in the university telecommunication training and information system under the set procedure.

8. ASSESSMENT TOOLKIT AND GRADING SYSTEM* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION

The assessment toolkit and the grading system* to evaluate the competences formation level (competences in part) upon the course study completion are specified in the Appendix to the course syllabus.

* The assessment toolkit and the grading system are formed on the basis of the requirements of the relevant local normative act of RUDN University (regulations / order).

DEVELOPERS:

Associate Professor of the Department of Operative surgery and Clinical anatomy named for I.D. Kirpatovsky		D.L. Titarov
position, department	signature	name and surname
HEAD OF EDUCATIONAL DEPARTMEN	Т:	
Of Operative surgery and Clinical anatomy named for		
I.D. Kirpatovsky		A.V. Protasov
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HEAD		
OF HIGHER EDUCATION PROGRAMME	2:	
First Deputy Director of Institute		
of Medicine for Academic		S.N.Razumova
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