FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
NAMED AFTER PATRICE LUMUMBA
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

2025

1. COURSE GOAL(S)

The discipline "Topographic anatomy and operative surgery of the head and neck" is included in the program of the specialty "Dentistry" in the direction of 31.05.03 "Dentistry" and is studied in the 4th semester of the 2nd year. The discipline is implemented by the Department of Operative Surgery and Clinical Anatomy named after I.D. Kirpatovsky. The discipline consists of 4 sections and 23 topics and is aimed at studying the mastering the theoretical foundations of topographic anatomy and operative surgery. The goal of the course is to master the layered structure of areas of the human body, as well as the study of surgical, relief, orientation and projection anatomy. The study of the types, principles and techniques of performing basic surgical operations. Receiving practical skills in basic operating 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.

2. REQUIREMENTS FOR LEARNING OUTCOMES

The course **«Topographic anatomy and operative surgery of the head and neck»** is expected to contribute the following competences: GPC-7, GPC-9

TABLE 2.1. LIST OF COMPETENCES THAT STUDENTS ACQUIRE THROUGH THE COURSE STUDY

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.

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

THE COURSE REFERS TO THE CORE/VARIABLE/ELECTIVE* COMPONENT OF (B1) BLOCK OF THE HIGHERE DUCATIONAL 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	Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	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. THE DISCIPLINE WORKLOAD AND ACADEMIC ACTIVITIES

THE TOTAL WORKLOAD OF THE COURSE **" TOPOGRAFIC ANATOMY AND OPERATIVE SURGERY OF HEAD AND NECK"** IS 3 CREDITS (108 ACADEMIC HOURS) .

*TABLE 4.1. TYPES OF ACADEMIC ACTIVITIES DURING THE PERIODS OF HIGHER EDUCATION PROGRAMME MASTERING (**FULL-TIME TRAINING**)**

TYPE OF ACADEMIC ACTIVITIES		TOTAL ACADEMIC HOURS	SEMESTERS/TRAINING MODULES	
			4	
CLASSES (TOTAL) AC.H.		**54**	**54**	-
INCLUDING:				
LECTURES (LC)		-	-	-
LAB WORK (LW)		**54**	**54**	
SEMINARS (WORKSHOPS/TUTORIALS) (S)		-	-	-
SELF-STUDIES		36	36	-
EVALUATION AND ASSESSMENT (EXAM/PASSING/FAILING GRADE)		18	18	-
TOTAL 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
Module 1. Topographic anatomy of the head	**Topic 1.1.** Theoretical foundations of topographic anatomy. Topographic anatomy and operative surgery as an educational discipline and its place in the training of doctors. Applied anatomy and its main types. Fascias and cellular spaces of the face, and their clinical value.	LW
	Topic 1.2. Topographic anatomy of the cranial part of 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.	LW
	Topic 1.3. Topographic anatomy of the facial part of 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	LW

	nose. Nasal cavity. Paranasal (accessorial) sinuses. Pathways of pus spreading at maxillitis and sinusitis.	
	Topic 1.4. Topographic anatomy of the mouth region. 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).	LW
	Topic 1.5. Topographic anatomy of the lateral 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 of the parotid gland and its excretory duct. Surgical anatomy of the temporomandibular joint.	LW
	Topic 1.6. Topographic anatomy of the deep lateral r egion of the face. Borders. Temporo-pterygoid, inter pterygoid, parapharyngeal, retropharyngeal spaces a nd their contents. Pterygoid venous plexus and its co nnections with the facial veins and cavernous sinus. Maxillary artery and its branches. Mandibular branc h of the trigeminal nerve and its branches. Lymph no des area. Cellular spaces and ways of spreading puru lent leaks.	LW
Module 2. Topographic anatomy of the neck	**Тема 2.1.** Division into areas, regions and triangles. Fascia and cellular spaces of the neck. Connections of the neck cellular spaces with cellular spaces of the head and thorax. The median area of the neck. The 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-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.	LW
Module 3. Operative surgery of the head and neck	**Topic 3.1.** Operative surgery: content and methods of study. The basics of the doctrine of surgery. Modern trends and prospects of operative surgery. Preparation 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.	LW
	Topic 3.2. Operations on the head. Primary surgical treatment of the head wounds. Trepanation. Trepanation of mastoid procesus. Incisions at	LW

	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 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 o f transplantation. Features of organ transplant surger y. The main problems and prospects for the develop ment of transplantology.	LW

* - TO BE FILLED IN ONLY FOR **FULL** -TIME TRAINING: *LC - LECTURES; LW - LAB WORK; S - SEMINARS.*

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

TABLE 6.1. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

TYPE OF ACADEMIC ACTIVITIES	CLASSROOM EQUIPMENT	SPECIALISED EDUCATIONAL / LABORATORY EQUIPMENT, SOFTWARE, AND MATERIALS FOR COURSE STUDY (IF NECESSARY)
Lab-work	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.
Lab-work	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. Simulators for operative surgery: human skin, vascular, intestinal simulator, suture kits, surgical instruments.

TYPE OF ACADEMIC ACTIVITIES	CLASSROOM EQUIPMENT	SPECIALISED EDUCATIONAL / LABORATORY EQUIPMENT, SOFTWARE, AND MATERIALS FOR COURSE STUDY (IF NECESSARY)
Seminar	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.
Self-studies	Room for students' self-study (it can 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.	Technology support: Epson EMP-S1 multimedia projector, internet access. 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/- 2021.-672 p. https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=497916&idb=0
2) Topographic and clinicfl anatomy of the human: the teaching aid for foreign students / I. I. Kagan, S. N. Lyashchenko, A. O. Mironchev. - Moscow : GEOTAR-Media, 2022. - 253 p. : il.
3) Topographic and clinical anatomy of the human body: the teaching aid for foreign students / I.I. Kagan, S.N. Lyashchenko, A.O. Mironchev ; I. I. Kagan, S. N. Lyashchenko, A. O. Mironchev. - Moscow : GEOTAR-Media, 2022. - 253. URL:https://mega.rudn.ru/MegaPro/UserEntry?Action=Link_FindDoc&id=518485&idb=0
4) Netter's Clinical Anatomy / J.T. Hansen, F.H. Netter. - 4th Edition. - Philadelphia: Elsevier, 2019. - 588 p.
5) Gray's Anatomy for Students / R.L. Drake, W.A. Vogl, Mitchell Adam W.M. - Third Edition. - Philadelphia: Elsevier, 2015. - 1161 p.: il.

Additional readings:

1) General surgery / V.K. Gostishchev. - Moscow.-Geotar-Media, 5th ed.-2021.-799p.
2) General surgery. The manual/ V.K. Gostishchev. - Moscow.-Geotar-Media.-2020.-220p. https://lib.rudn.ru:443/MegaPro/UserEntry?Action=Link_FindDoc&id=497901&idb=0
3) Anatomy for plastic surgery of the Face, Head and Neck/ Koichi Watanabe-Mohammadali M. Shoja, Marios Loukas, R.Shane Tubbs.-2016.-242. https://lib.rudn.ru/MegaPro/Web/SearchResult/ToPage/1#:~:text=https%3A//lib.rudn.ru%3A443/MegaPro/UserEntry%3FAction%3DRudn_FindDoc%26id%3D513494%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/
- https://www.yandex.ru/
- https://www.google.ru/
- http://www.elsevierscience.ru/products/scopus/

Learning toolkits for self-studies during the development of the discipline

1. Lectures presentations on the themes of workshops
2. Guidelines and visual materials for self-study
3. Toolkits for computer-based test and interim and mid-term assessment preparation

* - All teaching materials for self-studing of students are placed in accordance with the current procedure on the discipline page in the RUDN LMS TUIS.

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

Evaluation materials and point-rating system* for assessing the level of competence formation (GPC-7, GPC-9) based on the results of mastering the discipline "**Physics**" are presented in the Appendix to this Work Program of the discipline.

* THE ASSESSMENT TOOLKIT AND THE GRADING SYSTEM ARE FORMED ON THE BASIS OF THE

REQUIREMENTS OF THE RELEVANTLOCAL 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
JOB TITLE, EDUCATIONAL DEPARTMENT	SIGN	FIRST NAME AND SURNAME

HEAD of the Department:

Of Operative surgery and Clinical anatomy named for I.D. Kirpatovsky		A.V. Protasov
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HEAD of the Higher Education Program:

Deputy Director for International Affairs of Medical Institute of the RUDN University		Y.Sh.Gushchina
Job title, educational department	Sign	First name and Surname