Документ подписан простой электронной подписью

Информация о владельце:

ФИО: Ястребов Олег Александрович Federal State Autonomous Educational Institution of Higher Education

ca953a0120d891083f939673078ef1a989dae18a

Дата подписания: 07.06.2023 15:57:03
PEOPLES FRIENDSHIP UNIVERSITY OF RUSSIA **RUDN University** 

# **Institute of Medicine**

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

## **COURSE SYLLABUS**

# PATHOLOGICAL ANATOMY - PATHOLOGICAL ANATOMY OF THE **HEAD END 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 course instruction is implemented within the professional education programme ofhigher education:

**31.05.03 Dentistry** 

higher education programme profile/specialisation title

# 1. COURSE GOAL(s)

The goal of the course "Pathological Anatomy - Pathological Anatomy of the Head and Neck" is to equip students with the knowledge about the structural foundations of diseases, to study the most typical, characteristic changes at the macroand microscopic levels in order to comprehend the theoretical foundations of medicine, a more in-depth study of the clinic and the use of the acquired knowledge in the work of a doctor wide profile.

# 2. REQUIREMENTS FOR LEARNING OUTCOMES

Possible wording

1) Mastering the course (module) "Pathological Anatomy-Pathological Anatomy of the Head and Neck" is aimed at the development of the following competences /competences in part: GPC-5.8; GPC-5.9.; GPC-9.3; PC-1.5.

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

Competence code	Competence descriptor	Competence formation indicators (within this course)
GPC-5	Able to conduct an examination of the patient in order to establish a	GPC-5.8. Performs differential diagnostics with other diseases/conditions, including urgent ones.
	diagnosis when solving	GPC-5.9. Establishes a diagnosis based on the current international statistical classification of diseases and health-related problems.
GPC-9	Able to assess morphofunctional, physiological states and pathological processes in the human body for solving professional tasks	GPC-9.3. Determines morphofunctional, physiological states and pathological processes of the human body.
PC-1	Capable of conducting a patient examination in order to establish a diagnosis.	PC-1.5. Establishes a preliminary / final diagnosis based on the patient's examination, laboratory and instrumental data.

#### 3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the <u>core/</u>variable/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

Compet ence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GPC-5	Able to conduct an examination of the patient in order to establish a diagnosis when solving professional problems	Internal diseases	Dermatovenereology; Neurology; Ophthalmology; Obstetrics; Pediatrics; Gnathology and functional diagnostics of the temporal mandibular joint; Dental prosthetics (simple prosthetics); Prosthetics in the complete absence of teeth; Dental prosthetics (complex prosthetics); Pediatric maxillofacial surgery; Maxillofacial prosthetics; Children's dentistry; Orthodontics and children's prosthetics; Emergency conditions in outpatient dental practice; Medical genetics in dentistry; Cariesology and diseases of hard tissues of teeth; Endodontics; Modern endodontics; Gerontostomatology and diseases of the oral mucosa; Periodontology.  Practice Assistant dentist (therapist); Assistant dentist (orthopedist); Assistant dentist (children's); State final certification Preparation for and passing the state exam; State exam (computer testing); State exam (interdisciplinary interview)
GPC-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body for solving professional tasks	Biological chemistry - Biochemistry of the oral cavity; Human anatomy - The anatomy of the head and neck. Histology, Embryology, and Cytology - Oral Histology, Normal physiology, physiology of	Ophthalmology; Forensic medicine; Midwifery; Children's dentistry; Orthodontics and children's prosthetics; Medical rehabilitation; Practice Assistant to a dentist (children's); Assistant to a dentist (general

Compet ence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
		the maxillofacial region; Microbiology, virology - Oral microbiology. Pathophysiology - Pathophysiology of the head and neck. Medical Elementology; Bioelements in medicine; Topographic anatomy and operative surgery of the head and neck	practitioner), including research work  State final certification Preparation for and passing the state exam; State exam (computer testing); State exam (interdisciplinary interview)
PC-1	Capable of conducting a patient examination in order to establish a diagnosis.	Immunology, clinical immunology; Radiation diagnostics; Life safety	Gnatology and functional diagnostics of the temporal mandibular joint; Prosthetics (simple prosthetics); Prosthetics in the complete absence of teeth; Dental prosthetics (complex prosthetics); Children's maxillofacial surgery; Maxillofacial prosthetics; Children's dentistry; Orthodontics and children's prosthetics; Medical genetics in dentistry; Medical rehabilitation; Oncostomatology and radiation therapy Practice Assistant to a dentist (therapist); Assistant to a dentist (orthopedic surgeon); Assistant dentist (children's); Assistant to a dentist (general practitioner), including research work  State final certification Preparation for and passing the state exam; State exam (computer testing); State exam (interdisciplinary interview)

<sup>\*</sup> To be filled in according to the competence matrix of the higher education programme.

# 4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course is 4 credits (144 academic hours).

Table 4.1. Types of academic activities during the periods of higher education

programme mastering (full-time training)\*

Type of academic work		TOTAL,	Semester (s)	
		academic hours	5	6
Contact academic hours		105	51	54
including:				
Lectures (LC)		-	-	-
Lab work (LW)		105	51	54
Seminars (workshops/tutorials) (S)		-	-	-
Self-studies		21	21	
Evaluation and assessment (exam/passing/failing grade)		18		18
Course workload	academic hours_	144	72	72
	credits	4	2	2

<sup>\*</sup> 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	<b>Topic 1.1.</b> Reversible cell damage. Pathology of	LW
Pathanatomy of cells and	protein metabolism. Pathology of fat and mineral	
tissues.	metabolism.	
	<b>Topic 1.2.</b> Violation of pigment metabolism.	LW
	<b>Topic 1.3.</b> Irreversible cell damage. Necrosis.	LW
	Apoptosis.	
Module 2	<b>Topic 2.1.</b> Circulatory disorders. Shock.	LW
Pathanatomy of typical	Thrombosis. Embolism.	
pathological processes.	<b>Topic 2.2.</b> Atrophy. Hypertrophy. Regeneration.	LW
	Types of tissue healing. Immune damage to organs.	
	<b>Topic 2.3.</b> Exudative inflammation. Productive	LW
	inflammation.	
Module 3	<b>Topic 3.1.</b> Tumors from the epithelium.	LW
Pathanatomy of tumors.	<b>Topic 3.2.</b> Tumors of mesenchymal and	LW
-	mesodermal origin.	
Module 4	Topic 4.1. Hemoblastosis.	LW
Pathanatomy of blood	Topic 4.2. Anemia.	LW
and bone marrow cells.	_	
Module 5	<b>Topic 5.1.</b> Atherosclerosis. Coronary heart disease.	LW
Pathanatomy of diseases	Hypertension.	
of the cardiovascular	<b>Topic 5.2.</b> Rheumatic diseases. Heart defects.	LW
system.		
Module 6	Topic 6.1. Kidney diseases.	LW

Course module title	Course module contents (topics)	Academic activities types
Pathanatomy of diseases	<b>Topic 6.2.</b> Liver diseases. Diseases of the	LW
of internal organs.	gastrointestinal tract.	
Module 7 Pathanatomy of	<b>Topic 7.1.</b> Viral infections (influenza, measles, HIV).	LW
infectious diseases.	<b>Topic 7.2.</b> Bacterial infections (diphtheria, scarlet fever, bronchitis, pneumonia).	LW
	<b>Topic 7.3.</b> Specific diseases (tuberculosis, sarcoidosis, syphilis, leprosy, scleroma) and mycoses.	LW
	<b>Topic 7.4.</b> Quarantine infections (plague, smallpox, cholera, anthrax).	LW
	<b>Topic 7.5.</b> Sepsis.	LW
Module 8	<b>Topic 8.1.</b> Tumors and tumour-like formations of	LW
Pathanatomy of orofacial	the scalp and neck.	
pathology.	<b>Topic 8.2.</b> Pathology of the oral mucosa and lips.	LW
	<b>Topic 8.3.</b> Non-tumor lesions of the salivary glands.	LW
	<b>Topic 8.4.</b> Tumors of the salivary glands.	LW
	<b>Topic 8.5.</b> Pathology of hard tooth tissues, pulp and periapical tooth tissues.	LW
	<b>Topic 8.6.</b> Periodontal diseases.	LW
	<b>Topic 8.7.</b> Diseases of the jawbones.	LW
	Topic 8.8. Odontogenic infection.	LW

<sup>\* -</sup> 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 (208)	An auditorium for conducting laboratory work, individual consultations, routine monitoring and intermediate certification, equipped with a whiteboard, a set of specialized furniture and equipment (Dell Optiplex 3080 Micro Mini PC, LG 49UK6200 TV). Software: Microsoft products (OS, office suite, including Office 365).	Museum of macro-preparations for various types of human pathology; A set of micro-preparations for various types of pathology; Binocular microscopes for studying micro-preparations; Tables for various types of pathology.
Seminar (214)	An auditorium for conducting seminar- type classes, group and individual consultations, ongoing monitoring and intermediate certification, equipped with a graphite board, a set of specialized furniture and technical multimedia presentation tools (NEC	

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	NP210 projector, Asus P-M740 laptop).	
	Software: Microsoft products (OS,	
	office suite, including Office 365).	
Seminar	An auditorium for conducting seminar-	
(216)	type classes, group and individual	
	consultations, ongoing monitoring and	
	intermediate certification, equipped	
	with a graphite board, a set of	
	specialized furniture and technical	
	multimedia presentation tools (NEC	
	VT45 1000 ANSI multimedia	
	projector).	
Seminar	An auditorium for conducting seminar-	
(218)	type classes, group and individual	
	consultations, ongoing monitoring and	
	intermediate certification, equipped	
	with a set of specialized furniture and	
	technical multimedia presentation tools	
	(NEC VT59 projector).	
Self-studies	Classroom for self-study of students	
	(can be used for consultations),	
	equipped with a set of specialized	
	furniture and a graphite board.	

<sup>\*</sup> The premises for students' self-studies are subject to **MANDATORY** mention

#### 7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

- 1. Babichenko I. I., Ivina A. A., Vasiliev A.V., Tsymbalist N. S. Guide to laboratory classes in pathological anatomy in the specialty "Dentistry". Moscow: RUDN University, 2020. 293 p.
- Ivina A. A., Kudryavtseva L. V., Kudryavtsev G. Yu. Private forms of cancer: cancer of lungs, stomach, uterus, ovaries, breast [Electronic resource]: Educational and methodical manual for practical training in pathological anatomy. Moscow: RUDN Publishing House, 2019. 40 p. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn\_FindDoc&id=478309&idb=0
- Ivina A. A., Kudryavtseva L. V., Kudryavtsev G. Yu. Parasitic diseases: malaria, amoebiasis, schistosomiasis, leishmaniasis, trypanosomiasis, echinococcosis [Electronic resource]: Educational and methodical manual for practical training in pathological anatomy. Moscow: RUDN Publishing House, 2019. 28 p. ISBN 978-5-209-08941-4.

http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn\_FindDoc&id=478308&idb=0

4. Ivina A. A., Kudryavtseva L. V., Kudryavtsev G. Yu. Immunopathological processes [Electronic resource]: Educational and methodical manual for practical training in pathological anatomy. Moscow: RUDN Publishing House, 2019. - 32 p.

http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn\_FindDoc&id=478307&idb=0

# Additional readings:

# Electronic full-text materials:

1. Pathologic anatomy [Electronic resource]: Textbook / A. I. Strukov, V. V. Serov; Edited by V. S. Paukov. - 6th ed., reprint. Moscow: GEOTAR-Media, 2015, 880 p. (in Russian).

http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn\_FindDoc&id=456496&idb=0

# **Printed publications:**

- 1. Chernobay G.N. pathological anatomy of the orofacial region of the head and neck. Textbook / GBOU VPO KemGMA of the Ministry of Health and Social Development of Russia. KemGMA, 2011. 118 p.
- 2. Chumakov A.A. Orofacial pathology. Textbook / Edited by prof. O.V. Zairati. M.: MGMSU, 2004. 340 p.: ill.
- 3. Babichenko I.I., Ivina A.A., Kharchenko N.M. Brief description of the main pathological processes. Specialty "Medicine". M.: Publishing House of RUDN University, 2014. 47 p.
- 4. Babichenko I.I., Ivina A.A. Dictionary of basic pathoanatomical terms. Specialty "Medicine". M.: Publishing House of RUDN University, 2014. 48 p.
- 5. Gribunov Yu.P., Rogov K.A., Shestakova I.N., Ivina A.A. Basic principles of registration of the final clinical and pathoanatomical diagnoses. M .: Publishing house of RUDN University, 2015.- 19 p.
- 6. Babichenko I.I., Vladimirtseva A.L., Kovyazin V.A., Kharchenko N.M. Guide to laboratory studies in pathological anatomy. M.: RUDN, 2008. 249 p.
- 7. Vladimirtseva A.L. parasitic diseases. Educational and methodical manual for a practical lesson in pathological anatomy. M.: RUDN, 2009. 31 p.
- 8. Gribunov Yu.P., Shestakova I.N., Babichenko I.I. immunopathological processes. Educational and methodical manual for a practical lesson in pathological anatomy. M.: RUDN, 2009. 23 p.
- 9. Zayratyants O.V. and others. Pathological anatomy: Atlas. M: GEOTAR-Media, 2009. 472 p.
- 10. Zairatyants O.V., Kaktursky L.V. Formulation and comparison of clinical and pathoanatomical diagnoses. Handbook. 2nd ed., revised. and add. M .: LLC Medical Information Agency, 2011.-576s.
- 11. Microscopic technique: Guide / Ed. D.S. Sarkisov and Yu.L. Perov. M.: Medicine, 1996. 544 p.
- 12. Pathological diagnostics of human tumors: A guide in 2 volumes / Ed. N.A. Kraevsky, A.V. Smolyannikov, D.S. Sarkisov. M.: Medicine, 1993.
- 13. Sapozhnikov A.G., Dorosevich A.E. Histological and microscopic technique: A guide. Smolensk: SAU, 2000. 476s.

- 14. Serov V. Methods for verifying a morphological diagnosis // Vrach. 2000. No. 12. P.22-23.
- 15. M. A. Paltsev, V. L. Kovalenko, and N. M. Anichkov, Russ. Guide to the biopsy-sectional course. M.: Medicine, 2002. 256 p.: ill.
- 16. Brandwein, M. S. (2017). Textbook of Head and Neck Pathology: Volume 1: Nose, Paranasal Sinuses, and Nasopharynx (1st ed. 2016 ed.). Springer. https://doi.org/10.1007/978-3-319-33323-6
- 17. Brandwein-Weber, M. S. (2018). Textbook of Head and Neck Pathology: Volume 2: Mouth, Oropharynx, and Larynx (1st ed. 2018 ed.). Springer. https://doi.org/10.1007/978-3-319-76106-0
- 18. Cardesa, A., Slootweg, P. J., Gale, N., & Franchi, A. (2017). Pathology of the Head and Neck (2nd ed. 2016 ed.). Springer. https://doi.org/10.1007/978-3-662-49672-5
- 19. Range, E. D., & Jiang, ".X. (2019). Practical Head and Neck Pathology: Frequently Asked Questions (Practical Anatomic Pathology) (1st ed. 2019 ed.). Springer. https://doi.org/10.1007/978-3-030-10623-2
- 20. Volavšek, M. (2016). Head and Neck Pathology (Encyclopedia of Pathology) (1st ed. 2016 ed.). Springer. <a href="https://doi.org/10.1007/978-3-319-28618-1">https://doi.org/10.1007/978-3-319-28618-1</a>

#### *Internet-(based) sources:*

# 1. Electronic libraries with access for RUDN students

- 1. -RUDN University Electronic Library System-RUDN <u>University Electronic Library System http://lib.rudn.ru/MegaPro/Web</u>
  - EBS "University Library online" <a href="http://www.biblioclub.ru">http://www.biblioclub.ru</a>
  - EBS Urite <a href="http://www.biblio-online.ru">http://www.biblio-online.ru</a>
  - EBS "Student's consultant" www.studentlibrary.ru
  - EBS "Lan" http://e.lanbook.com/
  - EBS "Troitsky Bridge"
  - Full collection of Cambridge University Press journals https://www.cambridge.org/core
  - Journals, published by Nature Publishing Group http://www.nature.com/siteindex/index.html
  - Oxford Journals, a complete collection of journals https://academic.oup.com/journals/
  - Archive of scientific journals published by SAGE Publications
     <a href="http://arch.neicon.ru/xmlui/handle/123456789/2757634/browse?type=source">http://arch.neicon.ru/xmlui/handle/123456789/2757634/browse?type=source</a>
     e
  - Science online, American Association for the Advancement of Science
  - (AAAS) <a href="http://science.sciencemag.org/content/by/year">http://science.sciencemag.org/content/by/year</a>
  - ScienceDirect (ESD), «FreedomCollection», ИД "Elsevier" http://www.sciencedirect.com/
  - Electronic resources of Springer publishing house https://rd.springer.com/
  - Taylor & Francis journals https://www.tandfonline.com/
  - Thieme <a href="https://science-of-synthesis.thieme.com/">https://science-of-synthesis.thieme.com/</a>
  - Wiley Online Library a multidisciplinary collection of journals http://www.wileyonlinelibrary.com/
- 2. Databases and search engines:

- Discipline page in TUIS RUDN University: https://esystem.rudn.ru/course/view.php?id=2079
- U.S. National Library of Medicine National Institutes of Health: http://www.ncbi.nlm.nih.gov/pubmed/
- Scientific electronic library: http://elibrary.ru/defaultx.asp
- Website of the Russian Society of Pathologists http://patholog.ru
- Website of the Royal College of Pathologists <a href="https://www.rcpath.org/">https://www.rcpath.org/</a>
- Pathological Anatomy Information Database <a href="https://www.pathologyoutlines.com/">https://www.pathologyoutlines.com/</a>
- Online courses archive of video lectures on pathological anatomy Medical School Pathology https://www.medicalschoolpathology.com/
- Online Pathological Anatomy Laboratory of the University of Utah <a href="https://webpath.med.utah.edu/">https://webpath.med.utah.edu/</a>
- Information online resource on pathological anatomy <a href="http://www.pathguy.com/">http://www.pathguy.com/</a>
- WebPathology Slides Database <a href="https://www.webpathology.com/">https://www.webpathology.com/</a>
- Micropreparations Juan Rosai's Collection <a href="https://www.rosaicollection.org/">https://www.rosaicollection.org/</a>

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

- 1. The set of lectures on the course Pathological Anatomy Pathological Anatomy of the Head and Neck"
- 2. The laboratory workshop (if any).on the course Pathological Anatomy Pathological Anatomy of the Head and Neck"
- 3. The guidelines for writing a course paper / project (if any) on the course Pathological Anatomy Pathological Anatomy of the Head and Neck"

\* 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 (**GPC-5.8**; **GPC-5.9.**; **GPC-9.3**; **PC-1.5**) upon the course study completion are specified in the Appendix to the course syllabus.

<sup>\*</sup> 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).

<b>DEVELOPERS:</b>		
Head of the Department of		I. I. Babichenko
pathological Anatomy of MI		1. 1. Baulchenko
position, department	signature	name and surname
HEAD OF EDUCATIONAL DEP.	ARTMENT:	
of Pathological Anatomy		I. I. Babichenko
name of department	signature	name and surname
HEAD		
OF HIGHER EDUCATION PRO	GRAMME:	
First Deputy Director of MI for		C.N. Damumaua
Academic Affairs		S.N. Razumova
position, department	signature	name and surname