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Информация о владельце:

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Дата подписания: 05.06.2024 15:35:45 **PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA RUDN University** 

### **Medical Institute**

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 of higher education:

#### **DENTISTRY**

higher education programme profile/specialisation title

### 1. COURSE GOAL(s)

The aim of the course "Pathological Anatomy - Pathological Anatomy of the Head and Neck" is to acquire knowledge about the structural foundations of diseases, to study the most typical characteristic changes at the macro- and 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 THE LEARNING OUTCOMES OF THE COURSE

The mastering of the discipline "Pathological Anatomy-Pathological Anatomy of the Head and Neck» is aimed at the formation of the following competencies of students: GPC-5.8; GPC-5.9.; GPC-9.3; PC-1.5

(in accordance with the Federal State Educational Standard for Higher Education (FSES) 3++ 31.05.03 Dentistry).

Table 2.1. List of competencies formed by students during the development of the

discipline (learning outcomes of the discipline)

Competence code	Competence descriptor	Indicators of competence achievement (within the framework of this discipline)
GPC-5	Being able to examine patients to determine a diagnosis when solving professional tasks.	GPC-5.8. Conducting differential diagnosis with other diseases/conditions, including the urgent ones.  GPC-5.9. Making a diagnosis based on the current international statistical classification of diseases and health problems.
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.
PC-1	Being able to make an examination of a patient in order to determine a diagnosis	PC-1.5. Making a preliminary/final diagnosis based on the patient examination; laboratory and instrumental examinations.

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

The course "Pathological Anatomy-Pathological Anatomy of the Head and Neck" refers to the Mandatory Disciplines of block B1 of the Higher Education Program.

As part of the Higher Education Program, students also master other disciplines and/or practices that contribute to expected learning outcomes of the course "Pathological anatomy – Pathological Anatomy of the Head and Neck".

Table 3.1. List of Higher Education Program components that contribute to the expected learning outcome:

Code	Name of the competence	Previous disciplines/modules, practices*	Subsequent discipline/modules practices*
GPC-5	Being able to examine patients to determine a diagnosis when solving professional tasks.	Cariology and diseases of hard tissues of teeth; Propaedeutics of dental diseases;	Dental Assistant (orthopedist); Gnatology and functional diagnostics of the temporal mandibular joint; Dermatovenerology; Pediatric Dentistry; Pediatric Maxillofacial surgery; Diseases of the head and neck; Medical genetics in dentistry; Orthodontics and pediatric prosthetics; Dental prosthetics (complex prosthetics); Oral Surgery; Maxillofacial and gnathic surgery; Maxillofacial prosthetics; Internal diseases; Geriatric dentistry and diseases of the oral mucosa; Neurology; Periodontics; Psychiatry and narcology; Implantology and reconstructive surgery oral cavity; Ophthalmology; Emergency conditions in outpatient dental practice; Obstetrics; Pediatrics;
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;	Pediatric dentistry; Head and neck diseases; Implantology and reconstructive surgery oral cavity; Orthodontics and pediatric prosthetics; Oral surgery; Maxillofacial and gnathic surgery; Obstetrics; Forensic medicine; Medical rehabilitation; Ophthalmology.

Code	Name of the competence	Previous disciplines/modules,	Subsequent discipline/modules
PC-1		disciplines/modules, practices*  Human Anatomy - Anatomy of the head and neck; Topographic anatomy and operative surgery of the head and neck; Immunology, clinical immunology; Cariology and diseases of hard tissues of teeth; Propaedeutics of dental diseases; The basics of military training. Life safety; Three-dimensional X-ray diagnostic methods in dentistry**; Three-dimensional-computer modeling of teeth**; Chemistry of biogenic elements**; Dental modeling of teeth**;	Dental Assistant (therapist); Assistant to a dentist (surgeon); Dentist's Assistant (children's); Dental Assistant (orthopedist); Dental assistant (general practitioner), including research work; Gnathology and functional diagnostics of the temporo-mandibular joint; Pediatric Dentistry; Pediatric Maxillofacial surgery; Diseases of the head and neck; Implantology and reconstructive surgery oral cavity; Medical genetics in dentistry; Orthodontics and pediatric prosthetics; Otorhinolaryngology; Dental prosthetics (complex prosthetics); Oral Surgery; Maxillofacial and gnathic surgery; Maxillofacial prosthetics; Obstetrics; Geriatric dentistry and diseases of the oral mucosa; Periodontics; Modern endodontics**; Aesthetic restoration of teeth**;
			Medical rehabilitation; Ophthalmology; Cone-beam computed tomography in

Code	Name of the competence	Previous disciplines/modules, practices*	Subsequent discipline/modules practices*
			the diagnosis, planning and evaluation of the
			effectiveness of dental
			solutions;
			Onco-dentistry and radiation
			therapy;

<sup>\* -</sup> filled in in accordance with the matrix of competencies and Stable curriculum of the educational program of higher education

### 4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course "Pathological Anatomy-Pathological Anatomy of the Head and Neck" is equal to 5 credits.

Table 4.1. Types of academic activity by periods of development of Educational

Program of higher education for Full-time education

Type of academic activity		TOTAL,	Semester (s)	
		academic hours	5	6
Classroom learning academic hours		122	68	54
Lectures (Lec)		0	0	0
Laboratory work (Lab)		122	68	54
Seminars (Practice/tutorials)		-	-	-
Self-studies, academic hours		31	31	0
Evaluation and assessment (exam or pass/fail grading)		27	9	18
Course workload	Academic hours	180	108	72
	Credits	5	3	2

### 5. COURSE MODULES AND CONTENTS

Table 5.1. Content of the discipline (module) by type of academic activity

<b>Modules and Topics</b>	Section content (topics)	Type of academic activity*
Module 1 Pathoanatomy of cells	<b>Topic 1.1.</b> Reversible cell damage. Pathology of protein metabolism.	Lab
and tissues.	<b>Topic 1.2.</b> Pathology of fat and mineral metabolism.	Lab
	<b>Topic 1.3.</b> Disorders of pigment metabolism.	Lab
	<b>Topic 1.4.</b> Irreversible cell damage. Necrosis. Apoptosis.	Lab
Module 2	<b>Topic 2.1.</b> Circulatory disorders. Shock.	Lab
Pathoanatomy of typical	Thrombosis. Embolism.	

<sup>\*\* -</sup> elective disciplines/practices

<b>Modules and Topics</b>	Section content (topics)	Type of academic activity*
pathological processes.	<b>Topic 2.2.</b> Atrophy. Hypertrophy. Regeneration. Types of tissue healing. Immune damage to organs.	Lab
	<b>Topic 2.3.</b> Exudative inflammation. Productive inflammation.	Lab
Module 3	<b>Topic 3.1.</b> Introduction to oncopathology.	Lab
Pathoanatomy of	<b>Topic 3.2.</b> Tumors from the epithelium.	Lab
tumors.	<b>Topic 3.3.</b> Tumors of mesenchymal and mesodermal origin.	Lab
Module 4	Topic 4.1. Hemoblastoses.	Lab
Pathoanatomy of blood and bone marrow cells.	Topic 4.2. Anemia.	Lab
Module 5	<b>Topic 5.1.</b> Non-infectious diseases of the scalp.	Lab
Pathoanatomy of the orofacial region	<b>Topic 5.2.</b> Lesions of the orofacial region in infectious diseases.	Lab
	<b>Topic 5.3.</b> Diseases of teeth, gums and periodontium.	Lab
	<b>Topic 5.4.</b> Diseases of the mucous membrane of the oral cavity and lips.	Lab
	<b>Topic 5.5.</b> Diseases of the salivary glands.	
	<b>Topic 5.6.</b> Diseases of the jaw bones.	
Module 6	<b>Topic 6.1.</b> Congenital anomalies of the neck.	Lab
Pathoanatomy of	<b>Topic 6.2.</b> Tumors and tumor-like diseases.	Lab
infectious diseases.	<b>Topic 6.3.</b> Pathology of the lymph nodes of the neck.	Lab
	<b>Topic 6.4.</b> Diseases of the thyroid gland.	Lab
	<b>Topic 6.5.</b> Diseases of the parathyroid glands.	Lab

<sup>\* -</sup> to be completed only in the **FULL-TIME** form of study: *lectures*; *laboratory work*; *seminars*; *self-study*.

## 6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

*Table 6.1. Material and technical support of the discipline* 

Classroom for Academic Activity Type	Classroom Equipment	Specialized educational/laboratory equipment, software and materials for the development of the course. (if necessary)
Laboratory (2)	An auditorium for conducting laboratory work, individual consultations, routine monitoring and intermediate certification, equipped	Museum of macro-preparations for various types of human pathology; A set of micro- preparations for various types of
	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).	pathology; Binocular microscopes for studying micropreparations; Tables for various types of pathology.

Classroom for Academic Activity Type	Classroom Equipment	Specialized educational/laboratory equipment, software and materials for the development of the course. (if necessary)
Seminary (1)	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 (Dell Optiplex 3080 Micro Mini PC, LG 49UK6200 TV). Software: Microsoft products (OS, office suite, including Office 365).	
Seminary (3a)	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 (Dell Optiplex 3080 Micro Mini PC, LG 49UK6200 TV). Software: Microsoft products (OS, office suite, including Office 365).	
Seminary (3b)	An auditorium for conducting seminar- 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).	
For self-study of students (3b)	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 audience for self-study of students **MANDATORY**!

### 7. RECOMMENDED SOURSES FOR COURSE STUDIES

*Main reading (sources):* 

- 1. Kumar, Vinay, et al. Robbins & Kumar Basic Pathology. 11th ed., illustrated, Elsevier, 2022, 840p.- ISBN 978-0-323-79018-5.
- 2. Sivapathasundharam, B. Shafer's Textbook of Oral Pathology Ebook. India, Elsevier Health Sciences, 2020, 868p. ISBN 978-8-131-25546-9.
- 3. Woo, Sook-Bin. Oral Pathology. Netherlands, Elsevier, 2023, 656p. ISBN 978-0-323-82918-2.

- 4. Mohan, Harsh. Practical Pathology. India, Jaypee Brothers Medical Publishers, 2021, 294p.
- 5. Nayak, Ramadas., Nayak, Rakshatha. Exam Preparatory Manual for Undergraduates: Pathology. India: Jaypee Brothers Medical Publishers Pvt. Limited, 2020, 942p. ISBN 978-9-389-77640-9
- 6. Pathological anatomy [Electronic resource]: Textbook / A.I. Strukov, V.V. Serov; Edited by V. S. Paukov. 6th ed., reprint. and additional M.: GEOTAR-Media, 2023. 880 p.: ill. <a href="https://www.studentlibrary.ru/book/ISBN9785970461396.html">https://www.studentlibrary.ru/book/ISBN9785970461396.html</a>

### Additional (optional) reading (sources)

### 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. Mohan, Harsh, and Mohan, Sugandha. Essential Pathology for Dental Students. India, Jaypee Brothers Medical Publishers Pvt. Limited, 2016, 634p.
- 2. Robinson, Max, et al. Soames' & Southam's Oral Pathology. United Kingdom, OUP Oxford, 2018, 255p. ISBN:9780192555489.
- 3. Purkait, Swapan Kumar. Essentials of Oral Pathology. India, Jaypee Brothers Medical Publishers Pvt. Limited, 2019. 750p. ISBN:9789352705702.
- 4. Mhaske, Shubhangi. Textbook of Oral Pathology. India, Jaypee Brothers Medical Publishers Pvt. Limited, 2013, 1,025p. ISBN:9789350901717.
- 5. Babichenko I.I., Ivina A.A. Dictionary of basic pathoanatomical terms. Specialty "Medicine". M.: Publishing House of RUDN University, 2014. 48 p.
- 6. 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
- 7. 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
- 8. 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
- 9. Range, E. D., & Jiang, ".X. (2019). Practical Head and Neck Pathology: Frequently Asked Questions (Practical Anatomic Pathology) (1st ed. 2019 ed.). Springer. <a href="https://doi.org/10.1007/978-3-030-10623-2">https://doi.org/10.1007/978-3-030-10623-2</a>
- 10. 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" http://www.biblioclub.ru
  - EBS Urite http://www.biblio-online.ru
  - EBS "Student's consultant" www.studentlibrary.ru

- EBS "Lan" <a href="http://e.lanbook.com/">http://e.lanbook.com/</a>
- 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>
- 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 <a href="https://rd.springer.com/">https://rd.springer.com/</a>
- Taylor & Francis journals https://www.tandfonline.com/
- Thieme https://science-of-synthesis.thieme.com/
- Wiley Online Library a multidisciplinary collection of journals <a href="http://www.wileyonlinelibrary.com/">http://www.wileyonlinelibrary.com/</a>

### 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: <a href="http://www.ncbi.nlm.nih.gov/pubmed/">http://www.ncbi.nlm.nih.gov/pubmed/</a>
- Scientific electronic library: http://elibrary.ru/defaultx.asp
- Website of the Russian Society of Pathologists <a href="http://patholog.ru">http://patholog.ru</a>
- Website of the Royal College of Pathologists <u>https://www.rcpath.org/</u>
- 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 <a href="https://www.medicalschoolpathology.com/">https://www.medicalschoolpathology.com/</a>
- 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 http://www.pathguy.com/
- WebPathology Slides Database https://www.webpathology.com/
- Micropreparations Juan Rosai's Collection <a href="https://www.rosaicollection.org/">https://www.rosaicollection.org/</a>

Learning toolkits for self-studies during the development of the discipline\*:

- 1. A course of lectures on the discipline "Pathological Anatomy Pathological Anatomy of the Head and Neck."
- 2. Laboratory practice on the discipline "Pathological anatomy Pathological anatomy of the head and neck".
- 3. Methodological guidelines for the implementation and execution of control and independent work on the discipline "Pathological Anatomy Pathological Anatomy of the Head and Neck".
- \* all educational and methodological materials for independent work of students are placed in accordance with the current procedure on the page of the discipline on **TUIS!**

# 8. EVALUATION TOOLKIT AND SCORE-RATING SYSTEM FOR ASSESSING THE LEVEL OF FORMATION OF COMPETENCES IN THE COURSE

Evaluation Toolkit (ET) and a score-rating system (SRS)\* for assessment the level of competence formation (part of competencies) based on the results of mastering the discipline "Pathological Anatomy, Pathological Anatomy of the Head and Neck" are presented in the appendix to this Working Program of the Course.

\* - ET and SRS are formed on the basis of the requirements of the relevant local regulatory act of the RUDN University.

### **DEVELOPERS:**

Head of the Department of		Babichenko I. I.
pathological Anatomy of MI		
Position, Basic training unit	Signature	Surname Full name
Associate Professor of the Department of Pathological		Ivina A. A.
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HEAD OF THE DEPARTMENT:  Department of Pathological Anatomy		Babichenko I. I.
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