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Информация о владельце:

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Дата подписания: 14.10.2025 17:39:02 PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA

Уникальный программный ключ:

NAMED AFTER PATRICE LUMUMBA

ca953a0120d891083f939673078ef1a989dae18a

**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 of higher education:

#### **DENTISTRY**

higher education programme profile/specialisation title

### 1. COURSE GOAL(s)

The discipline "Pathological anatomy - Patanatomy of the head and neck" is included in the program of the specialty "Dentistry" in the direction of the 31.05.03 "Dentistry" and is studied in 5, 6 semesters of the 3d course. The discipline is implemented by the Department of Pathological Anatomy. The discipline consists of 6 sections and 24 topics and is aimed at studying morphological changes in organs and systems in diseases.

The goal of the course is to acquire student's knowledge about the structural foundations of diseases, to study the most typical, characteristic changes at the macro and microscopic levels to comprehend the theoretical foundations of medicine, to study the clinic in more depth and to use the knowledge gained in the work of a general practitioner.

### 2. REQUIREMENTS FOR LEARNING OUTCOMES

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, GPC-9, PC-1.

*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           | 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 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<br>courses/modules*   | Subsequent courses/modules*  |
|------------------|--|--|--|
| 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; Human Anatomy - Anatomy of the head and neck; | 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.   |

| Compet<br>ence<br>code | Competence descriptor  | Previous courses/modules*   | Subsequent courses/modules*  |
|------------------------|--|---|--|
|                        |  | Topographic anatomy and operative surgery of the head and neck; Immunology, clinical  | Dental Assistant (therapist);  |
| PC-1                   | Being able to make an examination of a patient in order to determine a diagnosis | 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**; | 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 the diagnosis, planning and evaluation of the effectiveness of dental solutions; |

| Compet<br>ence<br>code | Competence descriptor | Previous<br>courses/modules* | Subsequent<br>courses/modules* |
|------------------------|-----------------------|------------------------------|--------------------------------|
|                        |                       |                              | Onco-dentistry and radiation   |
|                        |                       |                              | therapy;                       |

<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 "Pathological Anatomy-Pathological Anatomy of the Head and Neck" is 5 credits (180 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             | Semesters/training modules |    |  |  |
|--|-----------------|-------------------|----------------------------|----|--|--|
|  |                 | academic<br>hours | 5                          | 6  |  |  |
| Contact academic hours                                 |                 | 122               | 68                         | 54 |  |  |
| including:   |                 |                   |                            |    |  |  |
| Lectures (LC)  |                 | -                 | -                          | -  |  |  |
| Lab work (LW)  |                 | 122               | 68                         | 54 |  |  |
| Seminars (workshops/tutorials) (S)                     |                 | -                 | -                          | -  |  |  |
| Self-studies   |                 | 34                | 34                         | -  |  |  |
| Evaluation and assessment (exam/passing/failing grade) |                 | 24                | 6                          | 18 |  |  |
| Course workload  | academic hours_ | 180               | 108                        | 72 |  |  |
|  | credits         | 5                 | 3                          | 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<br>activities<br>types |
|---|--|---------------------------------|
| Module 1 Pathoanatomy of cells                  | <b>Topic 1.1.</b> Reversible cell damage. Pathology of protein metabolism.                       | LW                              |
| and tissues.                                    | <b>Topic 1.2.</b> Pathology of fat and mineral metabolism.                                       | LW                              |
|   | <b>Topic 1.3.</b> Disorders of pigment metabolism.   | LW                              |
|   | <b>Topic 1.4.</b> Irreversible cell damage. Necrosis. Apoptosis.                                 | LW                              |
| Module 2  | <b>Topic 2.1.</b> Circulatory disorders. Shock. Thrombosis. Embolism.                            | LW                              |
| Pathoanatomy of typical pathological processes. | Topic 2.2. Atrophy. Hypertrophy. Regeneration. Types of tissue healing. Immune damage to organs. | LW                              |
|   | <b>Topic 2.3.</b> Exudative inflammation. Productive inflammation.                               | LW                              |
| Module 3  | <b>Topic 3.1.</b> Introduction to oncopathology.   | LW                              |

| Course module title                          | Course module contents (topics)  | Academic activities types |
|--|--|---------------------------|
| Pathoanatomy of tumors.                      | <b>Topic 3.2.</b> Tumors from the epithelium.                                  | LW                        |
|  | <b>Topic 3.3.</b> Tumors of mesenchymal and                                    | LW                        |
|  | mesodermal origin.   |                           |
| Module 4                                     | <b>Topic 4.1.</b> Hemoblastoses.   | LW                        |
| Pathoanatomy of blood and bone marrow cells. | Topic 4.2. Anemia.   | LW                        |
| Module 5                                     | <b>Topic 5.1.</b> Non-infectious diseases of the scalp.                        | LW                        |
| Pathoanatomy of the orofacial region         | <b>Topic 5.2.</b> Lesions of the orofacial region in infectious diseases.      | LW                        |
| -  | <b>Topic 5.3.</b> Diseases of teeth, gums and periodontium.                    | LW                        |
|  | <b>Topic 5.4.</b> Diseases of the mucous membrane of the oral cavity and lips. | LW                        |
|  | <b>Topic 5.5.</b> Diseases of the salivary glands.                             | LW                        |
|  | <b>Topic 5.6.</b> Diseases of the jaw bones.                                   | LW                        |
| Module 6                                     | <b>Topic 6.1.</b> Congenital anomalies of the neck.                            | LW                        |
| Pathoanatomy of                              | <b>Topic 6.2.</b> Tumors and tumor-like diseases.                              | LW                        |
| infectious diseases.                         | <b>Topic 6.3.</b> Pathology of the lymph nodes of the neck.                    | LW                        |
|  | <b>Topic 6.4.</b> Diseases of the thyroid gland.                               | LW                        |
|  | <b>Topic 6.5.</b> Diseases of the parathyroid glands.                          | 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                    | An auditorium for conducting  | Museum of macro-preparations  |
| (2)                         | 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). | for various types of human pathology; A set of micropreparations for various types of pathology; Binocular microscopes for studying micropreparations; Tables for various types of pathology. |
| Seminar                     | An auditorium for conducting seminar-   |   |
| (1)                         | 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   |   |

| Type of academic activities | Classroom equipment  | Specialised educational / laboratory equipment, software, and materials for course study (if necessary) |
|-----------------------------|--|---|
|                             | 49UK6200 TV). Software: Microsoft products (OS, office suite, including Office 365).   |   |
| Seminar (3a)                | An auditorium for conducting seminar-<br>type classes, group and individual<br>consultations, ongoing monitoring and<br>intermediate certification, equipped<br>with a graphite board, a set of<br>specialized furniture and technical<br>multimedia presentation tools (Dell<br>Optiplex 3080 Micro Mini PC, LG<br>49UK6200 TV). Software: Microsoft<br>products (OS, office suite, including<br>Office 365). |   |
| Seminar (3b)                | An auditorium for conducting seminar-<br>type classes, group and individual<br>consultations, ongoing monitoring and<br>intermediate certification, equipped<br>with a set of specialized furniture and<br>technical multimedia presentation tools<br>(NEC VT59 projector).  |   |
| Self-studies (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. RESOURSES RECOMMENDED FOR COURSE STUDY

*Main readings:* 

- 1. Babichenko I.I., Ivina A.A., Familia Frias D.R. Guid for Laboratory Classes in Pathological Anatomy in the Speciality Dentistry. Moscow: RUDN Publishing House, 2024. 201 p.
- 2. Babichenko I.I., Ivina A.A., Familia Frias D.R. Brief Review of Pathological Processes. Specialty "Dentistry". Moscow: RUDN Publishing House, 2024. 49 p.
- 3. Kumar, Vinay, et al. Robbins & Kumar Basic Pathology. 11th ed., illustrated, Elsevier, 2022, 840p.- ISBN 978-0-323-79018-5.
- 4. Sivapathasundharam, B. Shafer's Textbook of Oral Pathology Ebook. India, Elsevier Health Sciences, 2020, 868p. ISBN 978-8-131-25546-9.
- 5. Woo, Sook-Bin. Oral Pathology. Netherlands, Elsevier, 2023, 656p. ISBN 978-0-323-82918-2.
- 6. Mohan, Harsh. Practical Pathology. India, Jaypee Brothers Medical Publishers, 2021, 294p.

- 7. 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
- 8. 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 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. 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" <a href="http://www.biblioclub.ru">http://www.biblioclub.ru</a>
  - EBS Urite http://www.biblio-online.ru
  - 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>
- 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"
   <a href="http://www.sciencedirect.com/">http://www.sciencedirect.com/</a>
- 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 <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 http://patholog.ru
  - 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 <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>

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. 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, GPC-9, PC-1) 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:**

| Head of the Department of        |                  | Babichenko I. I.  |  |
|----------------------------------|------------------|-------------------|--|
| pathological Anatomy of MI       |                  |                   |  |
| Position, Basic training unit    | Signature        | Surname Full name |  |
|                                  |                  |                   |  |
| Professor of the Department of   |                  | Ivina A. A.       |  |
| Pathological Anatomy             |                  |                   |  |
| Position, Basic training unit    | Signature        | Surname Full name |  |
|                                  |                  |                   |  |
| HEAD OF THE DEPARTMENT:          |                  |                   |  |
| Department of Pathological       |                  | Babichenko I. I.  |  |
| Anatomy                          |                  |                   |  |
| Name of the Basic training unit  | Signature        | Surname Full name |  |
|                                  |                  |                   |  |
| HEAD OF THE HIGHER EDUCA         | ATIONAL PROGRAM: | :                 |  |
| First Densets Director of MI for |                  | D C M             |  |
| First Deputy Director of MI for  |                  | Razumova S.N.     |  |
| Academic Affairs                 |                  |                   |  |
| Name of the Basic training unit  | Signature        | Surname Full name |  |