

Документ подписан простой электронной подписью
Информация о владельце:
ФИО: Ястребов Олег Александрович
Должность: Ректор
Дата подписания: 05.06.2024 15:55:45
Уникальный программный ключ:
ca953a0120d891083f939673078ef1a989dae18a

**Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE
LUMUMBA
RUDN University**

Medical Institute

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

COURSE SYLLABUS

Pediatric Maxillofacial Dentistry/ surgery

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

2024

1. THE GOALS OF MASTERING THE DISCIPLINE

The purpose of mastering the discipline "Pediatric maxillofacial surgery" is the acquisition by the student of knowledge and skills in the field of diagnosis, treatment and prevention of major surgical dental diseases and injuries of the maxillofacial region in children.

2. REQUIREMENTS to LEARNING OUTCOMES

Mastering the discipline "Pediatric maxillofacial surgery" is aimed at developing the following competencies in students:

UC-1; GPC-5; GPC-6; PC-1; PC-2; PC-6

(In accordance with the Federal State Educational Standard of Higher Education (FSSES) 3++ 31.05.03 Dentistry).

Table 2.1. The list of competencies formed by students during the development of the discipline (results of the mastering of the discipline)

Competence code	Competence	Indicators of Competence Formation (within the framework of this discipline)
UC-1.	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy.	UC-1.1. Analysing the problem situation as a system identifying its components and links between them.
GPC-5	Being able to examine patients to determine a diagnosis when solving professional tasks	GPC-5.1. Gathering anamnesis by analysing the patient's complaints, making a physical examination at a dental appointment. GPC-5.2. Formulating a preliminary diagnosis and drawing up a plan for laboratory and instrumental examinations of a dental patient. GPC-5.3. Compiling medical documentation for a dental patient in accordance with regulatory requirements. 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-6	Being able to prescribe non-drug and drug treatment, monitor its efficacy and safety when solving professional tasks	GPC-6.1. Developing a plan for dental disease treatment taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the medical care standards. GPC-6.2. Selecting medical products (including dental materials) for drawing up a comprehensive plan for dental disease treatment. Following up the treatment of a patient.
PC- 1	Being able to make an examination of a patient in order to determine a diagnosis.	PC-1.1. Making an initial examination and/or reexamination of a patient in order to make a preliminary diagnosis. PC-1.2. Receiving information from patients (their relatives/legal representatives); conducting a questionnaire survey of patients regarding their

Competence code	Competence	Indicators of Competence Formation (within the framework of this discipline)
		<p>general health status; identifying concomitant diseases in order to make a preliminary diagnosis.</p> <p>PC-1.3. Detecting if patients have dentoalveolar, facial anomalies, deformities and prerequisites for their development, defects in the crowns of teeth and dentition on the basis of the patient examination; laboratory, instrumental, and additional examinations in order to make a preliminary/final diagnosis.</p> <p>PC-1.4. Detecting if patients have risk factors for oncopathology (including various background processes, precancerous conditions) based on laboratory, instrumental and additional examinations in order to make a preliminary/final diagnosis.</p> <p>PC-1.5. Making a preliminary/final diagnosis based on the patient examination; laboratory and instrumental examinations.</p>
PC-2	Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.6 Providing orthopaedic treatment for persons with defects in teeth, dentition within the temporization procedure, rehabilitation of single defects in the dentition, dental prostheses of up to three units (excluding dental implants prosthetics), partial and complete removable laminar denture using modern treatment methods approved for use in medical practice.
PC-6	Being able to analyze and present in public medical information based on evidence-based medicine, participate in scientific research, introduce new methods and techniques aimed at protecting public health	PC-6.1. Searching for medical information based on evidence-based medicine, interpreting data from scientific publications and/or preparing a presentation to make medical information, the results of scientific research public.

3. THE COURSE IN THE HIGHER EDUCATION PROGRAMME STRUCTURE

Discipline "**Pediatric maxillofacial surgery**" refers to the mandatory part of the block B1.O.60 of the EP HE.

As part of the higher education programme, students also master other disciplines and / or practices that contribute to the achievement of the planned results of mastering the discipline "**Pediatric Maxillofacial Surgery**".

Table 3.1. List of Higher Education Program disciplines that contribute to expected learning outcomes

Code	Name of competence	Previous disciplines/modules, practices*	Subsequent disciplines/modules, practices*
UC-1	Able to carry out a critical analysis of problem situations based on a systematic	Dental Assistant (therapist); Dental Assistant (orthopedist);	

	<p>approach, develop an action strategy</p>	<p>Human Anatomy - Head and Neck Anatomy; Pediatric dentistry; Dental prosthetics (simple prosthetics); Immunology, clinical immunology; Mathematics; Medical genetics in dentistry; Orthodontics and Pediatric prosthetics; Otorhinolaryngology; Dental prosthetics (complex prosthetics); Prosthetics with complete lack of teeth; Psychology, pedagogy; Physics; Philosophy; Obstetrics; Pathophysiology - Pathophysiology of the head and neck; Chemistry of biogenic elements**; Medical rehabilitation; Dental teeth modeling**; History of Medicine; Bioelements in medicine**; Medical elementology**;</p>	
<p>GPC-5</p>	<p>Able to conduct a patient examination in order to establish a diagnosis in solving professional problems</p>	<p>Dental Assistant (orthopedist); Head and neck diseases; Dental prosthetics (simple prosthetics); Cariesology and diseases hard tissues of teeth; Medical genetics in dentistry; Local anesthesia and anesthesiology in dentistry; General surgery; Orthodontics and Pediatric prosthetics; Dental prosthetics (complex prosthetics); Prosthetics with complete lack of teeth; Surgical diseases; Oral surgery;</p>	

		<p>Maxillofacial and gnathic surgery; Internal illnesses; Gerontostomatology and diseases of the mucous membrane oral cavity; Neurology; Periodontology; Psychiatry and Narcology; Endodontics; Dermatovenerology; Pediatric dentistry; Dental propaedeutics diseases; Ophthalmology; Emergency conditions in outpatient dental practice; Pathological anatomy - Pathanatomy of the head and neck; Obstetrics; Pediatrics;</p>	
GPC-6	<p>Able to prescribe, monitor the effectiveness and safety of non-drug and drug treatment in solving professional problems</p>	<p>Dermatovenerology; Pediatric dentistry; Head and neck diseases; Dental prosthetics (simple prosthetics); Immunology, clinical immunology; Cariesology and diseases hard tissues of teeth; Clinical dentistry; Medical genetics in dentistry; General surgery; Orthodontics and Pediatric prosthetics; Dental prosthetics (complex prosthetics); Prosthetics with complete lack of teeth; Surgical diseases; Oral surgery; Maxillofacial and gnathic surgery; Fundamentals of military training. Life safety; Internal illnesses; Gerontostomatology and</p>	

		<p>diseases of the mucous membrane oral cavity; Neurology; Periodontology; Pediatrics; Psychiatry and Narcology; Endodontics; Medical rehabilitation; Pharmacology; Materials Science; Obstetrics; Emergency conditions in outpatient dental practice;</p>	
PC-1	<p>Capable of examining the patient in order to establish a diagnosis</p>	<p>Dental Assistant (therapist); Dental Assistant (surgeon); Dental assistant (Assistant to the pediatric dentist); Dental Assistant (orthopedist); Dental Assistant (hygienist); Orthodontics and Pediatric prosthetics; Pathological anatomy - Pathanatomy of the head and neck; Dental prosthetics (complex prosthetics); Prosthetics with complete lack of teeth; Fundamentals of military training. Life safety; Radiation diagnostics; Medical rehabilitation; Cone beam computer tomography in diagnostics, planning and evaluation effectiveness dental solution; Pediatric dentistry; Immunology, clinical immunology; Head and neck diseases; Dental prosthetics (simple prosthetics); Cariesology and diseases hard tissues of teeth;</p>	

		<p>Medical genetics in dentistry; Local anesthesia and anesthesiology in dentistry; Otorhinolaryngology; Dental propaedeutics diseases; Oral surgery; Maxillofacial and gnathic surgery; Obstetrics; Gerontostomatology and diseases of the mucous membrane oral cavity; Periodontology; Endodontics; Three-dimensional x-ray diagnostic methods in dentistry**; Three-dimensional computer teeth modeling**; Chemistry of biogenic elements**; Ophthalmology; Dental teeth modeling**; Pathophysiology - Pathophysiology of the head and neck;</p>	
PC-2	<p>Capable of prescribing, monitoring the efficacy and safety of non-drug and drug treatments</p>	<p>Pediatric dentistry; Head and neck diseases; Cariesology and diseases hard tissues of teeth; Local anesthesia and anesthesiology in dentistry; Orthodontics and Pediatric prosthetics; Oral surgery; Maxillofacial and gnathic surgery; Gerontostomatology and diseases of the mucous membrane oral cavity; Periodontology; Endodontics; Innovative technologies in dentistry; Dental physiotherapy diseases; Clinical dentistry;</p>	

		Bioelements in medicine**; Medical elementology**; Dental propaedeutics diseases; Dental prosthetics (simple prosthetics); Medical genetics in dentistry; Dental prosthetics (complex prosthetics); Prosthetics with complete lack of teeth; Infectious diseases phthysiology; Organization of general care sick; Dental Assistant (surgeon); Dental Assistant (therapist); Dental Assistant (Pediatric);	
PC-6	Able to analyze and publicly present medical information based on evidence-based medicine, to participate in scientific research, to introduce new methods and techniques aimed at protecting public health	Dental prosthetics (simple prosthetics); Immunology, clinical immunology; Medical genetics in dentistry; Dental prosthetics (complex prosthetics); Prosthetics with complete lack of teeth; Pharmacology; Ophthalmology; Clinical researches; Clinical dentistry;	

* - filled in accordance with the matrix of competencies of higher education programme.

** - elective subjects/practices

4. THE DISCIPLINE WORKLOAD AND ACADEMIC ACTIVITIES

The total complexity of the discipline " **Pediatric maxillofacial surgery** " is **3** credit units.

Table 4.1. Types of academic activities during the period of the HE program mastering

Type of academic activities	TOTAL, academic hours (ac.h.)	Semester(s)			
		10			
Classroom learning , <i>ac.h.</i>	68	68			
including:					

Type of academic activities	TOTAL, academic hours (ac.h.)	Semester(s)			
		10			
Lectures (Lec)	-	-			
Lab work (Lab)	68	68			
Practical/seminar sessions	-	-			
Self-studies, academic hours	31	31			
Evaluation and assessment (exam or pass/fail grading)	9	9			
Total workload of the discipline	ac.h.	108	108		
	credits.	3	3		

5. THE COURSE MODULES AND CONTENTS

Table 5.1. The content of the discipline and types of academic activities

Name of the discipline section	Contents of the section (topic)	Type of academic activities
Section 1 Anesthesia in pediatric surgical dental practice. Tooth extraction in children	Topic 1.1. Anatomical and physiological features of the child's body. Indications and contraindications for general and local anesthesia during outpatient dental surgery in children. The value of premedication. Types of local anesthesia, features of its implementation in children. Emergency conditions at an outpatient dental appointment.	Lab
	Topic 1.2. Indications and features of the extraction of temporary and permanent teeth in children. Complications during and after tooth extraction, their prevention and elimination.	Lab
	Topic 1.3. Tactics of a dentist in the presence of supernumerary, impacted and dystopic teeth in children.	Lab
Section 2 Inflammatory diseases of the maxillofacial region in children.	Topic 2.1. Features of the course of odontogenic inflammatory processes in childhood. Inflammatory processes of the soft tissues of the face: lymphadenitis, abscess, phlegmon.	Lab
	Topic 2.2. Clinical picture of acute and chronic periostitis of the jaw bones in children of different ages.	Lab
	Topic 2.3. Acute odontogenic osteomyelitis of the jaws, hematogenous osteomyelitis of newborns and young children.	Lab
	Topic 2.4. Clinical and radiological forms of chronic osteomyelitis of the jaws, principles of rehabilitation of children.	Lab
	Topic 2.5. Odontogenic inflammatory cysts in children. Possible complications, their prevention.	Lab
Section 3	Topic 3.1. Inflammatory diseases of the salivary glands in children. Clinic, diagnosis and treatment.	Lab

Diseases of the salivary glands in children.	Topic 3.2. Salivary disease. Etiology, pathogenesis, clinical picture, diagnosis, treatment, possible complications.	Lab
	Topic 3.3. Retention cysts of small and large salivary glands. Etiology, pathogenesis, clinical picture, diagnosis, treatment, possible complications.	Lab
Section 4 Trauma of the maxillofacial region in children.	Topic 4.1. Dental injuries in children: clinic, treatment, methods of immobilization, outcomes.	Lab
	Topic 4.2. Bruises and fractures of the bones of the face in children. Clinic, diagnostics. Methods of conservative and surgical treatment of fractures in children, healing time, possible complications and methods for their prevention.	Lab
	Topic 4.3. Injuries of soft tissues of the mouth and face in children. Features of primary surgical treatment of facial wounds.	Lab
	Topic 4.4. Burns and frostbite. Clinical picture, treatment, complications. General indications for plastic surgery in childhood. Principles of rehabilitation of children who have suffered trauma to the maxillofacial region.	Lab
Section 5 Diseases of the temporomandibular joint in children.	Topic 5.1. Primary bone diseases of the temporomandibular joint. Osteoarthritis, secondary deforming osteoarthrosis, bone ankylosis, neoarthrosis : etiology, pathogenesis, clinical picture. Diagnosis, principles of complex treatment of diseases of the temporomandibular joint in children. Methods of surgical treatment, age indications. Goals and objectives of orthodontic treatment. Methods for preventing the development of primary bone diseases.	Lab
	Topic 5.2. Functional diseases of the temporomandibular joint in childhood and adolescence. Etiology, pathogenesis, clinical manifestations. Additional examination methods (electromyography, axiography, tomography of the TMJ). Diagnosis, treatment, prevention.	Lab
Section 6 Congenital and hereditary diseases of the maxillofacial region in children.	Topic 6.1. Congenital cysts and fistulas of the maxillofacial region and neck. Dermoid and epidermoid cysts.	Lab
	Topic 6.2. Congenital cleft lip and palate. Prevalence, classification, anatomical and functional disorders, impact on the overall development of the child's body. Secondary deformations of the jaws with cleft palate. Age indications for surgical treatment, the purpose of operations. Clinical examination of children with congenital cleft lip and palate.	Lab
	Topic 6.3.	Lab

	Congenital pathology of the oral mucosa: anomalies of attachment of the frenulum and tongue, small vestibule of the oral cavity. Clinical picture, indications for surgical treatment, methods of operations, features of the postoperative period.	
Section 7 Tumors and tumor-like processes of the maxillofacial region in children.	Topic 7.1. Benign and malignant tumors of the soft tissues of the face and oral cavity in children. Classification, clinical picture, diagnosis, differential diagnosis. Tumors and tumor-like processes of the salivary glands in children.	Lab
	Benign and malignant tumors of the bones of the face in children. Odontogenic formations - cysts, odontogenic tumors of the jaws. Etiology, clinical picture, diagnosis.	Lab
	Topic 7.2. Features of the clinical course of tumors and tumor-like formations in children. Tactics of surgical treatment of neoplasms of the maxillofacial region in children, indications and contraindications for the use of radiation therapy, principles of complex rehabilitation of children. The principle of oncological alertness at an outpatient dental appointment.	Lab

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENT

Table 6.1. Logistical and material provision of the discipline.

Classroom for Academic Activity Type	Classroom Equipment	Specialized educational/laboratory equipment, software and materials for the mastering of the discipline
Lecture	An auditorium for lecture-type classes, equipped with a set of specialized furniture; board (screen) and technical means of multimedia presentations. (classrooms 245, 249)	Technical means: multimedia projector, laptop, WiFi available Internet access. Software: Microsoft products (OS, office suite, including MS Office / Office 365, Teams)
Laboratory	An auditorium for laboratory work, individual consultations, current control and intermediate certification, equipped with a set of specialized furniture and equipment.	Visual aids, dental equipment and surgical instruments for extractions, phantoms, drugs, extracted teeth, x-rays, computer presentation, computers, projector, tables, dental equipment and surgical instruments for emergency care
Classroom for students' self-studies	Classroom for self-studies of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers with access to the internet.	

7. RECOMMENDED SOURSES for COURSE STUDIES

Main literature:

- Pediatric oral and maxillofacial surgery: Publisher: Saunders; 1st edition (April 9, 2004) Language: English. Hardcover: 488 pages. ISBN 978-0-7216-9691-1
- Kutcipal, E. (2013). Pediatric oral and maxillofacial surgery. *Dental Clinics*, 57(1), 83-98.
- Koch G. et al. (ed.). Pediatric dentistry: a clinical approach. – John Wiley & Sons, 2017.

Additional literature:

- Gonçalves, J., Marques, H., Saleiro, R., Ferreira, Â., Ferreira, A., Ferreira, Â. T., & Ferreira Sr, A. (2023). Ewing's sarcoma of the zygoma: a very rare location. *Cureus*, 15(3).
- Railean, S., Gudumac, E., Bernic, J., Poștaru, C., & Ursu, D. (2023). Pediatric Tumors And Congenital Anomalies In Oral & Maxillo-Facial Surgery.
- Bouchard, C., Troulis, M. J., & Kaban, L. B. (2022). Pediatric Dentoalveolar Surgery. In *Peterson's Principles of Oral and Maxillofacial Surgery* (pp. 191-210). Cham: Springer International Publishing.
- Kaban, L. B., Bouchard, C., & Troulis, M. J. (2009). A protocol for management of temporomandibular joint ankylosis in children. *Journal of Oral and Maxillofacial Surgery*, 67(9), 1966-1978.
- Troulis, M. J., Troulis, M., & Kaban, L. B. (2013). *Minimally invasive maxillofacial surgery*. PMPH-USA.

Resources of the information and telecommunications network "Internet":

1. RUDN ELS and third-party ELS, to which university students have access on the basis of concluded agreements:

- RUDN Electronic Library System - RUDN EBS <http://lib.rudn.ru/>
- ELS "University Library Online" <http://www.biblioclub.ru>
- EBS Yurayt <http://www.biblio-online.ru>
- ELS "Student Consultant" www.studentlibrary.ru
- EBS "Lan" <http://e.lanbook.com/>
- EBS "Trinity Bridge"

2. Databases and search engines:

- electronic fund of legal and normative-technical documentation
<http://docs.cntd.ru/>

- Yandex search engine [https:// www .yandex.ru/](https://www.yandex.ru/)
- Google search engine <https://www.google.ru/>
- Abstract database SCOPUS
[http:// www . elsevier . en / products / scopus /](http://www.elsevier.com/locate/SCOPUS)

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

1. A course of lectures, presentations, video materials on the discipline "**Pediatric maxillofacial surgery**".

2. Guidelines for the implementation and execution of control and independent work on the discipline "**Pediatric maxillofacial surgery**".

* - all educational and methodological materials for independent work of students are placed in accordance with the current procedure on the page of the discipline **in TUIS** (the university telecommunication educational and information system).

8. EVALUATION TOOLKIT AND GRADE SYSTEM FOR ASSESSMENT

Evaluation Toolkit (ET) and a point-rating system (PRS)* for assessment the level of competence formation (part of competencies) based on the results of mastering the discipline "**Pediatric Oral and Maxillofacial Surgery**" are presented in the Appendix to this Work Program of the discipline.

* - ET and PRS are formed on the basis of the requirements of the relevant local regulatory act of the RUDN

DEVELOPERS:

Senior Lecturer, Department of
Pediatric Dentistry and
Orthodontics

Position, educational department

Imad Katbeh

Signature

name and surname.

HEAD OF EDUCATIONAL DEPARTMENT:

Department of Pediatric Dentistry
and Orthodontics

educational department

N.S. Tuturov

Signature

name and surname.

HEAD OF HIGHER EDUCATION PROGRAMME:

Head department, professor
Of the Department of
propaedeutics of dental diseases

Position, educational department

S.N. Razumova

Signature

name and surname.