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Информация о владельце:

Должность: Ректор

Уникальный программный ключ:

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ФИО: Ястребов Олег Алектейскай State Autonomous Educational Institution of Higher Education Дата подписания: 07.06.2023 15:57:05 **PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA RUDN University**

Institute of Medicine

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

COURSE SYLLABUS

Orthodontics and pediatric prosthetics

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:

31.05.03 Dentistry

higher education programme profile/specialisation title

2022-2023

1. COURSE GOAL(s)

The goal of the course **«Orthodontics»** is to equip students with knowledge of the basics and latest achievements of orthodontics to use that knowledge gained in practical and scientific activities.

1. COURSE GOAL(s)

The goal of the course "Orthodontics and pediatric prosthetics" is aimed at developing the the following competences /competences in part:

GC-1; GPC-1, GPC-2, GPC-4, GPC-5, GPC-9; PC-1, PC-2, PC-5;

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

Competence code and competence name		Indicators of Competence Formation (within the framework of this discipline))
GC-1.	Able to carry out a critical analysis of problem situations based on a systematic approach, to develop an action strategy.	GC-1.1. Analyze the problem situation as a system, identifying its components and the links between them.
GPC-1.	Able to implement moral and legal norms, ethical and deontological principles in professional activities	GPC-1.1. Complies with the basics of medical ethics and deontology; fundamentals of legislation in the field of healthcare; legal aspects of medical activity. GPC-1.3. He has practical experience in solving standard tasks of professional activity based on ethical norms and deontological principles when interacting with colleagues and patients (their legal representatives), knowledge of the legal aspects of medical practice.
GPC-2.	Able to analyze the results of their own activities to prevent professional errors	GPC-2.1. Analyzes the causes of professional errors, adverse outcomes of treatment and conflict situations. GPC-2.2. Scientifically substantiates and implements recommendations aimed at improving the medical and legal training of dentists, at preventing professional errors, adverse outcomes and conflict situations. GPC-2.3. Evaluates the effectiveness of preventive measures aimed at preventing professional errors, adverse outcomes and conflict situations in dentistry
GPC-4.	Able to conduct and monitor the effectiveness of preventive measures, the formation of a healthy lifestyle and sanitary and	GPC-4.1. Analyzes the awareness of the population about a healthy lifestyle and medical literacy. GPC-4.3. Prepares an oral presentation or printed text that promotes a healthy lifestyle and increases the literacy of the population in the prevention of dental diseases.

	hygienic	
	education of the	
	population	
GPC-5.	Able to conduct a	GPC-5.1. Collects anamnesis, analyzing the patient's
	patient	complaints, conducting a physical examination at a
	examination in	dental appointment.
	order to establish	GPC-5.2. Formulates a preliminary diagnosis and
	a diagnosis in	draws up a plan for laboratory and instrumental
	solving	examinations of a dental patient.
	professional	GPC-5.3. Prepares medical documentation of the
	problems	dental patient in accordance with regulatory
		requirements.
		GPC-5.4. Refers the patient for a laboratory
		examination if there are medical indications in
		accordance with the current procedures for the
		provision of medical care, clinical recommendations
		(treatment protocols) on the provision of medical care,
		taking into account the standards of dental care.
		GPC-5.5. Refers the patient for an instrumental
		examination if there are medical indications in
		accordance with the current procedures for the
		provision of medical care, clinical recommendations
		(treatment protocols) on the provision of dental care,
		taking into account the standards.
		GPC-5.6. Refers the patient for a consultation with
		specialist doctors if there are medical indications in
		accordance with the current procedures for the
		provision of medical care, clinical guidelines
		(treatment protocols) on the provision of dental care,
		taking into account standards.
		GPC-5.8. Conducts differential diagnosis with other
		diseases/conditions, including urgent ones.
		GPC-5.9. Establishes a diagnosis, taking into account
		the current international statistical classification of
		diseases and health-related problems.
GPC-6.	Able to prescribe,	GPC-6.1. Develops a plan for the treatment of a dental
	monitor the	disease, taking into account the diagnosis, age and
	effectiveness and	clinical picture in accordance with the current
	safety of non-drug	procedures for the provision of medical care, clinical
	and drug	recommendations (treatment protocols) on the
	treatment in	provision of medical care, taking into account the
	solving	standards of medical care.
	professional	GPC-6.2. P selects medical devices (including dental
	problems	materials) for the preparation of a comprehensive plan
		for the treatment of dental diseases. Monitor the
		progress of the patient's treatment.
		GPC-6.3. Evaluates possible side effects from taking
		medications.
		GPC-6.4. Provides medical care to a dental patient in
		urgent or emergency forms.
		GPC-6.5. Organizes the prevention and treatment of

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GPC-9. PC-1.	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems Able to conduct examination of the patient in order to establish a diagnosis	complications, side effects, adverse reactions, including unforeseen ones, resulting from diagnostic or therapeutic procedures, the use of drugs and (or) medical devices, non-drug treatment at a dental appointment. GPC-6.9. Evaluates the effectiveness and safety of the use of medicines, medical devices and other methods of treatment at a dental appointment GPC-9.1. Owns the algorithm of clinical laboratory and functional diagnostics in solving professional problems. GPC-9.2. Evaluates the results of clinical, laboratory and functional diagnostics in solving professional problems. GPC-9.3. Determines the morphofunctional, physiological states and pathological processes of the human body. PC-1.1. Conducts initial and/or re-examination of the patient in order to establish a preliminary diagnosis. PC-1.2. Receives information from patients (their relatives/legal representatives), conducts a survey of patients on the subject of general health, identification of concomitant diseases in order to establish a preliminary diagnosis. PC-1.3. It detects dentoalveolar and facial anomalies, deformities and prerequisites for their development, defects in the crowns of teeth and dentition in patients based on examination of the patient, laboratory, instrumental, as well as additional examinations in order to establish a preliminary / final diagnosis based on the examination of the patient, laboratory and instrumental studies. PC-1.5. Establishes the final diagnosis on the basis of additional examinations of patients.
PC-2.	Able of prescribing, monitoring the efficacy and safety of non-drug and drug treatments	PC-2.1. Organizes the provision of medical care in emergency and urgent forms for acute dental diseases, conditions, exacerbation of chronic diseases that pose a threat to the patient's life or without obvious signs of a threat to the patient's life. PC-2.2. Carries out the selection of medicines and medical devices (including dental materials) for the treatment of dental diseases, evaluating possible side effects from taking medicines. PC-2.3. Provides consultation to the patient on the methods of treatment of dental diseases, drawing up a comprehensive treatment plan with the rationale for the most appropriate tactics and assessing possible complications caused by the use of this technique. PC-2.4. Selects the type of local anesthesia / anesthesia and evaluates possible complications caused

		PC-2.5. Conducts a specialized reception of adults and / or children, monitoring the course of treatment of caries, non-carious diseases of the teeth, pulpitis, periodontitis, periodontitis, bone tissue of the jaws, peripheral nervous system of the maxillofacial region, temporomandibular joint, salivary glands, diseases of the mucous membrane of the cavity of the mouth, with the exception of precancers, using modern methods of treatment approved for use in medical practice. PC-2.8. Carries out observation and treatment of diseases of the mucous membrane of the oral cavity, lips, with the exception of a specialized appointment for the treatment of precancers of the mucous membrane of the oral cavity and lips and the treatment of children with manifestations of viral, bacterial, allergic and other childhood infections in the oral cavity.
PC-5.	Able to conduct sanitary and hygienic education among the population and medical workers in order to form a healthy lifestyle	PC-2.9. Conducts a phased sanitation of the oral cavity (excluding sanitation of children under anesthesia). PC-5.1. Forms in patients (their relatives/legal representatives) the motivation to lead a healthy lifestyle and give up bad habits.

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

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*		
GC-1. Able to carry out a critical analysis of problem situations based on a systematic approach, to develop an action strategy.		 Propaedeutics of dental diseases Prevention and Community Dentistry Cariesology and disease of hard tissues of teeth Endodontics Local anesthesia and anesthesiology in dentistry Dental prosthetics (simple prosthetics) 	 Pediatric maxillofacial surgery Maxillofacial prosthetics Orthodontics and pediatric prosthetics Clinical dentistry 		
GPC-1	GPC-1. Able to implement moral and legal norms, ethical and deontological principles in professional activities	 Propaedeutics of dental diseases Prevention and Community Dentistry Cariesology and disease of hard tissues of teeth Endodontics Local anesthesia and anesthesiology in dentistry Dental prosthetics (simple prosthetics) 	 Pediatric maxillofacial surgery Maxillofacial prosthetics Pediatric Dentistry Clinical Dentistry medical rehabilitation 		
GPC-2	GPC-2. Able to analyze the results of their own activities to prevent professional errors	 Propaedeutics of dental diseases Prevention and Community Dentistry Cariesology and disease of hard tissues of teeth Endodontics Local anesthesia and anesthesiology in dentistry Dental prosthetics (simple prosthetics) 	 Pediatric maxillofacial surgery Maxillofacial prosthetics Pediatric Dentistry Clinical Dentistry medical rehabilitation 		
GPC_6	GPC-6. Able to prescribe, monitor the effectiveness and safety	• Cariesology and disease of hard tissues of teeth	Pediatric maxillofacial surgery		

	of non-drug and drug treatment in solving professional problems	 Endodontics Local anesthesia and anesthesiology in dentistry Dental prosthetics (simple prosthetics) Pharmacology 	 Maxillofacial prosthetics Pediatric Dentistry Clinical Dentistry
GPC-9	GPC-9. Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	 Propaedeutics of dental diseases Cariesology and disease of hard tissues of teeth Endodontics Local anesthesia and anesthesiology in dentistry Dental prosthetics (simple prosthetics) 	 Pediatric maxillofacial surgery Maxillofacial prosthetics Children's dentistry Clinical dentistry medical rehabilitation
PC-1	PC-1. Able to conduct examination of the patient in order to establish a diagnosis.	 Propaedeutics of dental diseases Cariesology and disease of hard tissues of teeth Endodontics Local anesthesia and anesthesiology in dentistry Dental prosthetics (simple prosthetics) 	 Pediatric maxillofacial surgery Maxillofacial prosthetics Pediatric Dentistry Clinical Dentistry medical rehabilitation

^{*} 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 6 credits (216 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	Semesters/training modules				
	hours	8	9			
Contact academic hours	216	51	64			
including:						
Lectures (LC)	-	-	-			
Lab work (LW)	115	51	64			
Seminars (workshops/tutorials) (S)	-	-	-			
Self-studies		101	21	80		
Evaluation and assessment (exam/passing grade)						
Course workload	academic hours_	216	72	144		

Type of academic activities	Total academic	Semesters/training modules			
	hours	8	9		
	6	2	4		

5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

Course module title	Course module contents (topics)	Academic activities types
Orthodontics and pediatric prosthetics	Module 1. Introduction to the specialty. Organization of orthodontic care. Age features of the dentoalveolar system of the child are normal. Etiology, classification of dentoalveolar anomalies.	Lw
	Module 2. Methods of examination and diagnostics in orthodontics.	Lw
	Module 3. Methods of treatment in orthodontics. Prevention of dental anomalies.	Lw
	Module 4. Modern technologies in orthodontics Module 5. Dental prosthetics in children and	Lw
	adolescents.	Lw
	Module 6. Dental anomalies. clinical forms. Diagnostics. Treatment.	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)
Lecture	An auditorium for lecture-type classes, equipped with a set of specialized furniture; board (screen) and technical means of multimedia presentations.	Training room for conducting lecture and seminar classes, group and individual consultations, current control and

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	A variety of equipment is used for classroom activities: (visual aids, dental equipment and surgical instruments for extraction of teeth, phantoms, drugs, extracted teeth, x-rays, computer presentation, computers, projector, tables, dental equipment and surgical instruments for emergency care),	intermediate certification. A set of specialized furniture; technical means: multimedia projector, laptop, WiFi available Internet access. Software: Microsoft products (OS, office suite, including MS Office / Office 365, Teams)
Lab work	(classrooms 245, 249) An auditorium for laboratory work, individual consultations, current control and intermediate certification, equipped with a set of specialized furniture and equipment.	
Phantom Class	Cabinets of children's dental clinics with appropriate equipment, instruments, medical equipment, preventive measures;	
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.	

^{*} The premises for students' self-studies are subject to **MANDATORY** mention

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

- Dentistry of children's age: textbook: /O.Z.Topolnitsky (et al.). M.: GEOTAR Media, 2016. Part 2. Surgery. 259 p.: silt
- Dentistry of childhood [Electronic resource]: A textbook in 3 parts. Part 2: Surgery. M. : GEOTAR-Media, 2016. 320 p. ISBN 978-5-9704-3553-3.
- Dentistry of children's age: Textbook for universities / L.S. Persin, V.M. Elizarova, S.V. Dyakova. 5th ed., revised. and additional M.: Medicine, 2008. 640 p.: ill. (Educational literature for medical students). ISBN 5-225-04354-2: 638.00.
- Dentistry of childhood [Text]: Textbook for universities / L.S. Persin, V.M. Elizarova, S.V. Dyakova. 5th ed., revised. and additional M.: Medicine, 2003. 640 p.: ill. (Educational literature for medical students). ISBN 5-225-04353-2: 128.90.

Additional readings:

Printed editions:

- -Methodical manual on orthodontics for students of 4.5 courses. Tests, part 1.2. Department of pediatric dentistry with a course of orthodontics of RUDN University, 2008.
- -Handbook of Pediatric Dentistry / ed. A. Cameron, R. Widmer.-M.: "MEDpress-inform", 2003.- 287p.

- Diseases of the temporomandibular joint in children and adolescents [Electronic resource]: Textbook / S.A. Ulyanov, O.V. Loginopulo, M.A. Pershina. Electronic text data. M.: Publishing House of RUDN University, 2017. 62 p.: ill. ISBN 978-5-209-08406-8.
- Dental trauma in children [Electronic resource]: Educational and methodological manual / Comp.: T.F. Kosyreva, V.V. Safroshkina, O.M. Davidyan, E.S. Zaporizhskaya-Abramova. Electronic text data. M.: Publishing House of RUDN University, 2014. 40 p. ISBN 978-5-209-05964-6.
- Pharmacotherapy in pediatric dentistry [text] / E.V. Zoryan // Clinical Dentistry. 2012. No. 2. S. 6 10.
- Drugs in pediatric dentistry: textbook /. Minsk: Higher School, 2017. 320 p. Bibliography: p. 305 ISBN 978-985-06-2717-9; The same [Electronic resource]. URL: http://biblioclub.ru/index.php?page=book&id=480060 (04/08/2019).
- General anesthesia and sedation in pediatric dentistry [Electronic resource]: A guide. M. : GEOTAR-Media, 2007. 184 p. ISBN 978-5-9704-0505-5.
- Pain relief in the treatment and extraction of teeth in children [Text]: Monograph / M.M. Solovyov [i dr.]. L.: Medicine, 1985. 184 p. 0.70.
- Diseases of the temporomandibular joint in children and adolescents [Text] / N.N. Kasparova, A.A. Kolesov, Yu.I. Vorobyov. M.: Medicine, 1981. 159 p.: ill. (Library of a practitioner. The most important issues of dentistry). 0.45.
- Pediatric dentistry at the present stage [text] / O.P. Maksimova // Clinical Dentistry. 2012. No. 3. P.38-41.
- Inflammatory diseases, injuries and tumors of the maxillofacial region in children: textbook / comp. S.B. Fishchev, A.G. Klimov, I.V. Berezkina, A.V. Sevastyanov. St. Petersburg: SpecLit, 2015. 57 p.: tab. Bibliography. in book. ISBN 978-5-299-00618-6; The same [Electronic resource]. URL: http://biblioclub.ru/index.php?page=book&id=483651 (04/08/2019).
- Lutskaya, I.K. Diagnostic reference book of the dentist / I.K. Lutsk. Moscow: Medical Literature, 2010. 400 p.: ill. (Pocket reference book of the doctor). ISBN 978-5-89677-112-8; The same [Electronic resource]. URL: http://biblioclub.ru/index.php?page=book&id=484015 (04/08/2019).
- Dentistry of children's age: Textbook / Persin L.S. Elizarova V.M., Dyakova S.V. 5th ed., Rev. and additional M.: Medicine, 2011. 639s.
- Congenital cleft lip and palate / S.V. Chuikin, L.S. Persin, N.A. Davletshin. M .: MIA, 2008. -368 .: ill.
- Guidelines for writing a term paper on the topic "History of the disease in the clinic of pediatric dentistry".: /T.F.Kosyreva, V.V.Safroshkina, E.S.Zaporozhskaya-Abramova. – M.: RUDN, 2012. -24p.
- The state of the dentoalveolar system in patients with congenital complete cleft lip and palate before prosthetics and recommendations for treatment. Met. Recommendations / T.F. Kosyreva, N.S. Tuturov. M.: RUDN University, 2012. 47p.
- Handbook of a dentist. V.V. Trezubov, I.V. Marusov et al. on medicinal products. S.-P. "Foliant", 2002. -398s.
- Handbook of Pediatric Dentistry / ed. A. Cameron, R. Widmer. -M.: "MEDpress-inform", 2003. 287p.
- Functional distension diseases of the temporomandibular joint in children and adolescents.: teaching aid / S.A. Ulyanov, M.A. Pershina. M.: RUDN, 2012.-23s.
- -Methodical manual on orthodontics for students of 4.5 courses. Tests, part 1.2. Department of pediatric dentistry with a course of orthodontics of RUDN University, 2008.
- -Handbook of Pediatric Dentistry / ed. A. Cameron, R. Widmer.-M.: "MEDpress-inform", 2003.- 287p.

Information support of discipline

- a) Information technologies used in the educational process:
 - Problem lectures
 - Role and business games
 - Computer presentations during theoretical and practical classes
- b) Software
 - training computer programs prepared using the Microsoft Office application package
 - controlling computer programs prepared using the Microsoft Office application package
- c) Information reference systems
 - selection of lecture material on CDs, video films
- d) databases, information and reference and search systems
 - RUDN Electronic Library System RUDN EBS http://lib.rudn.ru/MegaPro/Web
 - ELS "University Library Online" http://www.biblioclub.ru
 - EBS "Lan" http://e.lanbook.com/
 - scientific electronic library eLibrary
 - PubMed international citation database
 - publishing house of academic medical literature Elsevier
 - information and educational portal for doctors Univadis
 - electronic educational resource "Telecommunication educational and information system" of RUDN University
 - cathedral site

Internet sources

- 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/
 - 2. Databases and search engines:
- electronic fund of legal and normative-technical documentation http://docs.cntd.ru/
 - Yandex search engine https://www.yandex.ru/
 - Google search engine https://www.google.ru/
 - abstract database SCOPU S

http://www.elsescience.en/products/scopus/

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

- 1. The set of lectures on the course "Orthodontics and pediatric prosthetics"
- 2. The laboratory workshop (if any).on the course "Orthodontics and pediatric prosthetics"
- 3. The guidelines for writing a course paper / project (if any) on the course "Orthodontics and pediatric prosthetics"

4.												
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* 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 (GC-1; GPC-1, GPC-2, GPC-4, GPC-5, GPC-9; PC-1, PC-2, PC-5) 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:		
Senior Lecturer, Department of Pediatric Dentistry and Orthodontics		Imad Katbeh
Position, educational department	Signature	name and surname.
HEAD OF EDUCATIONAL DEP	ARTMENT:	
Department of Pediatric Dentistry		N.S. Tuturov
and Orthodontics		
name of department	Signature	name and surname.
HEAD OF HIGHER EDUCATION PROGRA	AMME:	
Head department, professor, Department of propaedeutics of dental diseases		S.N. Razumova
position, department	signature	name and surname