Документ подписан простой электронной подписью Информация о владельце: ФИО: Ястребов Олег Александрович Должность: Ректор Federal State Autonomous Educational Institution of Higher Education Дата подписания: 05.06.2024 15:35:43 Уникальный программнрустр LES' FRIEND SHIP UNIVERSITY OF RUSSIA NAMED AFTER ca953a0120d891083f939673078ef1a989dae18a PATRICE LUMUMBA

RUDN University named after Patrice Lumumba

Medical Institute

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

COURSE SYLLABUS

PHYSIOPHERAPY OF DENTAL DISEASES

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:

Specialty

higher education programme profile/specialisation title

1. THE GOALS OF MASTERING THE DISCIPLINE

The objectives of the discipline: the student's mastery of the theoretical foundations of physiotherapy and practical skills in the use of physical methods for the prevention, diagnosis, treatment and rehabilitation of dental diseases.

2. REQUIREMENTS to LEARNING OUTCOMES

The mastering of the discipline **«Physiopherapy of dental diseases»** is aimed at the formation of the following competencies of students:

General Professional Competences (GPC)- 8

Professional Competences (PC) – 2

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

Table 2.1.	The list of	^c competencie	s formed b	y students	during	the d	developmen	t of the	discipline
		(results	s of the ma	stering of	the disc	iplin	e)		

Competences	Competence name	General Professional Competence Achievement Indicator		
General Professional Competence GPC – 8 (8.1; 8.2),	Being able to use main physical and chemical, mathematic and scientific notions and methods when dealing with professional tasks.	GPC-8.1. Applying basic fundamental physical and chemical knowledge to deal with professional tasks. GPC-8.2. Using applied natural science knowledge to deal with professional tasks.		
Professional Competence PC -2 (2.2, 2.13)	Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.2. Selecting drugs and medical devices (including dental materials) for dental disease treatment assessing the possible side effects of taking medicinal drugs PC-2.13.Performing physiotherapy procedures		

3. THE COURSE IN THE HIGHER EDUCATION PROGRAMME STRUCTURE

The course **«Physiopherapy of dental diseases»** refers to the Compulsory Disciplines of block B1 of the Higher Education Program Curriculum.

Within the framework of the Educational Program, students also master other disciplines and/or practices that contribute to expected learning outcomes of the course «Physiopherapy of dental diseases».

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

N⁰	Code and name of	Previous	Subsequent disciplines (groups of
	competence	disciplines	disciplines)
Genera	al professional compe	tences	
GPC-	Applying basic	Mathematics	Obstetrics
8.1.	fundamental	Physics	Physiotherapy of Dental Diseases
	physical and	Science of Dental	Preparation for and Passing the State
	chemical	Materials	Exam
	knowledge to deal	Chemistry of	State Exam (Computer Testing)
	with professional	Biogenic Elements	State Exam (Interdisciplinary Interview)
	tasks.		
GPC-	Using applied	Mathematics	Obstetrics
8.2.	natural science	Physics	Physiotherapy of Dental Diseases
	knowledge to deal	Biology	Dental Modeling of Teeth
	with professional		Preparation for and Passing the State
	tasks		Exam
			State Exam (Computer Testing)
Derefere			State Exam (Interdisciplinary Interview)
Protess	sional Competence	T	
PC-	Selecting drugs and	Innovative	Clinical Pharmacology
2.2.	medical devices	Dentistry	Corontostomatology and disassas of the
	(including dental	Local anesthesia	oral mucosa
	materials) for dental	and anesthesiology	Periodontics
	disease treatment	in dentistry	Oral surgery
	assessing the		Maxillofacial and Orthognathic Surgery
	possible side effects		Head and Neck Diseases
	of taking medicinal		Pediatric Dentistry
	drugs		Orthodontics and Pediatric
	C		Prosthodontics
			Physiotherapy of Dental Diseases
			Implantology and Reconstructive Surgery
			Modern Endodontics
			Aesthetic Restoration
			Surgery)
			Observing and Assisting a Dentist
			(Pediatric)
			Observing and Assisting a Dentist
			(General Dentistry), Including Research
			Practice
			Preparation for and Passing the State
			Exam
			State Exam (Computer Testing)
DC			State Exam (Interdisciplinary Interview)
PC-	Performing		Organization of General Care
2.13	physiotherapy		Observing and Assisting a Dentist
	procedures		(General Dentistry), including Research
			Preparation for and Passing the State
			Exam
1			

	State Exam (Interdisciplinary Interview)
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4. THE DISCIPLINE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the discipline **«Physiopherapy of dental diseases»** is equal to 2 credits.

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

Type of educational work	Total		Seme	esters	
	hours	Χ			
Classroom activities (total)	48	48			
among them	-	-			
Lectures					
Practical classes (PC)					
Seminars (S)					
Laboratory classes (LC)	48				
Of them in interactive form (IF)					
Independent work (total)	24	24			
Total workload of disciplines ac. hours	72				
credits	2				

Practical classes/seminars are not provided.

5. THE COURSE CONTENTS AND ACADEMIC ACTIVITIES

N⁰	Section name disciplines	Section contents
1	The theoretical basis of physiotherapy, physioprophylaxis. The organization of physiotherapeutic dental care.	The theoretical basis of physiotherapy, physioprophylaxis. Physiological mechanisms of physical factors. The organization of physiotherapeutic dental care. Documentation in the work of the physiotherapy room. Fundamentals of safety.
2	Galvanization, medicinal electrophoresis and depophoresis in dentistry.	The mechanism of physical and physiological action of direct current, therapeutic effects in the treatment of dental diseases. Galvanization, medicinal electrophoresis in dentistry Depophoresis. Trans-channel DC current. The method of conducting depophoresis.
3	Pulsed low and medium frequency currents and their use in dentistry.	Pulsed low and medium frequency currents. Indications and contraindications for use in dental practice. Electrical anesthesia. Electroodontodiagnostics, fluctuorization, amplipulse therapy. Techniques and methods of conducting.
4	High-frequency alternating current, electric and	High frequency alternating current, electrical and electromagnetic fields, their application in dentistry.

Table 5.1. The content of the discipline

	electromagnetic fields and their application in dentistry.	Diathermy, diathermocoagulation - physical and physiological action, therapeutic effects. Method of diathermocoagulation for pulpitis, periodontitis, granulation in the periodontal pocket.
5	Phototherapy. Ultrasound therapy in dentistry.	Phototherapy and laser therapy in dentistry Laser therapy of dental diseases. Ultrasound therapy in dentistry. Therapeutic effects of ultrasound. Indications and contraindications for use.
6	Physical methods in the diagnosis and treatment of diseases of hard tooth tissues.	Physical methods in the diagnosis and treatment of diseases of the hard tissues of the tooth. Physiotherapy of periodontal diseases Physiotherapy in the treatment of diseases of the mucous membrane of the oral cavity.
7	The main algorithms for the use of physical factors in the treatment of various dental diseases.	Physiotherapy of inflammatory processes in the maxillary area. Physiotherapy of traumatic injuries of the PMO. Physiotherapy of neurostomatological diseases Physiotherapy of TMJ diseases. Physiotherapy of diseases of the salivary glands.

Table 5.2. The types of academic activities

N⁰	Name of discipline section	L	LC	CPC	Total hours
1	The theoretical basis of physiotherapy, physioprophylaxis. The organization of physiotherapeutic dental care.		6	3	9
2	Galvanization, medicinal electrophoresis and depophoresis in dentistry.		6	3	9
3	Pulsed currents of low and medium frequency and their use in dentistry.		6	3	9
4	High-frequency alternating current, electrical and electromagnetic fields and their application in dentistry		6	3	9
5	Phototherapy. Ultrasound therapy in dentistry.		6	3	9
6	Physical methods in the diagnosis and treatment of diseases of hard tooth tissues.		6	3	9
7	Algorithms of physical methods in the treatment of dental diseases.		12	6	18

N⁰	The name of the practical classes of the discipline		The amount per semester		
		Х			
1	The theoretical basis of physiotherapy, physioprophylaxis. Physiological mechanisms of physical factors.	3			
2	The organization of physiotherapeutic dental care. Documentation in the work of the physiotherapy room. Fundamentals of safety.	3			
3	The mechanism of physical and physiological action of direct current, therapeutic effects in the treatment of dental diseases. Galvanization, medicinal electrophoresis in dentistry	3			
4	Depophoresis. Trans-channel DC current. The method of conducting depophoresis.	3			
5	Pulsed low and medium frequency currents. Indications and contraindications for use in dental practice. Electrical anesthesia	3			
6	Electroodontodiagnostics, fluctuorization, amplipulse therapy. Techniques and methods of conducting.	3			
7	High frequency alternating current, electrical and electromagnetic fields, their application in dentistry	3			
8	Diathermy, diathermocoagulation - physical and physiological effects, therapeutic effects. The method of conducting diathermocoagulation with pulpitis, periodontitis, granulations in the periodontal pocket	3			
9	Light therapy and laser therapy in dentistry. Laser therapy for dental diseases.	3			
10	Ultrasound therapy in dentistry. Therapeutic effects of ultrasound. Indications and contraindications for use.	3			
11	Physical methods in the diagnosis and treatment of diseases of hard tooth tissues.	3			
12	Physiotherapy of periodontal diseases Physiotherapy in the treatment of diseases of the oral mucosa.	4			
13	Physiotherapy of inflammatory processes in CLO. Physical therapy of traumatic lesions of CLO.	4			
14	Physiotherapy of neurostomatological diseases Physiotherapy of diseases of the TMJ. Physiotherapy of diseases of the salivary glands.	4			
15	Total: 45	45			

6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENT

For classes in the physiotherapy of dental diseases, specially equipped classrooms and physiotherapy rooms at the dental clinic are used: multimedia installations, laptops, screens, multimedia discs with a set of illustrated materials, physiotherapy devices and accessories for them.

7. RECOMMENDED SOURSES for COURSE STUDIES

- 1. software_- there is Microsoft office 2012 software for practical training
- 2. resources of the information and telecommunication network "Internet":
- 3. EBS of RUDN University and third-party EBS to which university students have access on the basis of concluded agreements:
 - a. Electronic library system RUDN EBS RUDN http://lib.rudn.ru/MegaPro/Web
 - b. EBS "University Library Online" http://www.biblioclub.ru
 - c. EBS Yurayt http://www.biblio-online.ru
 - d. EBS "Student Consultant" www.studentlibrary.ru
 - e. EBS "Doe" http://e.lanbook.com/
- 4. Databases and search engines:
 - a. PUBMED
 - b. SCOPUS abstract database http://www.elsevierscience.ru/products/scopus/
 - c. WHO Documentation Center <u>http://whodc.mednet.ru/</u>
- 5. Literature:
 - а. Аппаратные методы диагностики и лечения заболеваний зубов = Deviceassisted methods of diagnostics and treatment of tooth diseases : учебное пособие / А. Г. Волков [и др.]. – Москва : РУДН, 2020. – 80 с. : ил. ISBN 978-5-209-10585-5

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 "Physiopherapy of dental diseases" are presented in the Appendix to this Work Program of the discipline.

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

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