Информация о владельце: ФИО: Ястребов Олег Arederal State Autonomous Educational Institution of Higher Education Должность: Ректор Дата подписания: 14.10.2025 17:39% PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA NAMED AFTER PATRICE LUMUMBA Уникальный программный ключ: ca953a0120d891083f939673078ef1a989dae18a **RUDN University Institute of Medicine** educational division (faculty/institute/academy) as higher education program developer **COURSE SYLLABUS Modern Endodontics** course title Recommended by the Didactic Council for the Education Field of: 31.05.03 Dentistry field of studies / speciality code and title

Документ подписан простой электронной подписью

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 goal of the course "Modern Endodontics" is to equip students with the knowledge of clinic, diagnosis and treatment of complicated caries; to form the clinical thinking of the future specialist; establish causal relationships between the manifestations of the disease and the patient's complaints; substantiate the diagnosis, draw up an adequate plan for examination and treatment, using modern materials and new technologies.

2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) «Modern Endodontics» is aimed at the development of the following competences /competences in part:

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

Table 2.1. List of competences that students acquire through the course study			
Competence code	Competence descriptor	Competence formation indicators (within this course)	
GPC - 2	Being able to analyse the results of their own professional activity to prevent professional errors	GPC-2.1. Analysing the causes of professional errors, therapeutic failures and conflict situations; GPC-2.2. Providing scientific arguments for and implementing recommendations aimed at improving the medical and legal training of dentists, preventing professional errors, adverse outcomes and conflict	
GPC-5	Being able to examine patients to determine a diagnosis when solving professional tasks	situations. 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-5.4. Referring a patient to a laboratory examination in case there are medical indications 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 standards of dental care.	
		GPC-5.5. Referring a patient to an instrumental examination in case 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 the standards. 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 general health status; identifying concomitant diseases in order to make a preliminary diagnosis. 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.

PC -2	Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.1. Organizing the provision of emergency and urgent medical care for acute dental diseases, conditions, exacerbation of chronic diseases, which pose a threat to the patient's life, or without obvious signs of a threat to the patient's life.
		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-2.3. Consulting patients on methods for treating dental diseases drawing up a comprehensive treatment plan which justifies the most appropriate tactics and assesses possible complications caused by using this technique.
		PC-2.4. Selecting the type of local anesthesia/anesthesia and assessing the possible complications caused by using it.

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the core/variable/<u>elective</u>* 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

Comp etence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GPC- 2.1	Being able to analyse the results of their own professional activity to prevent professional errors therapeutic failures and conflict situations;	Bioethics Local anesthesia and anesthesiology in dentistry	Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Oral and Maxillofacial Surgery Head and Neck Diseases Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Implantology and reconstructive surgery of the oral cavity Modern Endodontics

GPC- 2.2	Providing scientific arguments for and implementing recommendations aimed at improving the medical and legal	Bioethics Local anesthesia and anesthesiology in dentistry	Aesthetic Restoration Observing and Assisting a Dentist (Operative Dentistry and Endodontics) Observing and Assisting a Dentist (Prosthodontics) Observing and Assisting a Dentist (Pediatric) Preparation for and Passing the State Exam State Exam (Computer Testing) State Exam (Interdisciplinary Interview) Endodontics Head and Neck Diseases Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Maxillofacial and Orthognathic Surgery
	training of dentists, preventing professional errors, adverse outcomes and conflict situations.		Orthodontics and Pediatric Prosthodontics Pediatric Dentistry Implantology and reconstructive surgery of the oral cavity Modern Endodontics Observing and Assisting a Dentist (Prosthodontics) Observing and Assisting a Dentist (Pediatric) Preparation for and Passing the State Exam State Exam (Computer Testing) State Exam (Interdisciplinary Interview)
GPC- 5.1.	Gathering anamnesis by analysing the patient's complaints, making a physical examination at a dental appointment.	Local anesthesia and anesthesiology in dentistry	Internal Medicine General Surgery Surgical Diseases Dermatovenerology Neurology Psychiatry and Narcology Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Gnathology and Temporo-Mandibular Joint's Functional Diagnostics Prosthodontics (Simple Prosthetics) Prosthodontics of Edentulous Patient Prosthodontics (Complex Prosthetics) Maxillofacial and Orthognathic Surgery Head and Neck Maxillofacial Prosthodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Medical Genetics in Dentistry Modern Endodontics Observing and Assisting a Dentist (Operative Dentistry and Endodontics) Observing and Assisting a Dentist (Pediatric)

			Preparation for and Passing the State Exam
			State Exam (Computer Testing) State Exam (Interdisciplinary Interview)
CDC	Formanilating a	Duamaadaytiaa af	State Exam (Interdisciplinary Interview Internal Medicine
GPC-	Formulating a	Propaedeutics of	
5.2	preliminary	Dental Diseases	General Surgery
	diagnosis and	Local anesthesia	Surgical Diseases
	drawing up a plan for	and anesthesiology	Dermatovenerology
	laboratory and	in dentistry	Neurology
	instrumental	in dention y	Psychiatry and Narcology
			Endodontics
	examinations of a		Gerontostomatology and diseases of the oral
	dental patient		mucosa
			Periodontics
			Oral surgery
			Gnathology and Temporo-Mandibular Joint's
			Functional Diagnostics
			Prosthodontics (Simple Prosthetics)
			Prosthodontics of Edentulous Patient
			Prosthodontics (Complex Prosthetics)
			Maxillofacial and Orthognathic Surgery
			Head and Neck Diseases
			Pediatric Maxillofacial Dentistry
			Maxillofacial Prosthodontics
			Pediatric Dentistry
			Orthodontics and Pediatric Prosthodontics
			Medical Genetics in Dentistry
			Modern Endodontics
			Observing and Assisting a Dentist (Operative
			Dentistry and Endodontics) Observing and
			Assisting a Dentist (Prosthodontics)
			Observing and Assisting a Dentist (Pediatric)
			Preparation for and Passing the State Exam
			State Exam (Computer Testing)
			State Exam (Interdisciplinary Interview)
GPC-	Compiling medical	Propaedeutics of	Internal Medicine
5.3	documentation for a	Dental Diseases	General Surgery
	dental patient in		Surgical Diseases
	accordance with		Dermatovenerology
			Neurology
	regulatory		Psychiatry and Narcology
	requirements		Endodontics
			Gerontostomatology and diseases of the oral
			mucosa
			Periodontics
			Oral surgery
			Gnathology and Temporo-Mandibular Joint's
			Functional Diagnostics
			Prosthodontics (Simple Prosthetics)
			Prosthodontics of Edentulous Patient
			Prosthodontics (Complex Prosthetics)
			Maxillofacial and Orthognathic Surgery
			Head and Neck Diseases

			Pediatric Maxillofacial Dentistry Maxillofacial Prosthodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Medical Genetics in Dentistry Modern Endodontics Observing and Assisting a Dentist (Operative Dentistry and Endodontics) Observing and Assisting a Dentist (Prosthodontics) Observing and Assisting a Dentist (Pediatric) Preparation for and Passing the State Exam State Exam (Computer Testing) State Exam (Interdisciplinary Interview)
GPC- 5.4.	Referring a patient to a laboratory examination in case there are medical indications 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 standards of dental care.		Internal Medicine Dermatovenerology Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Modern Endodontics Observing and Assisting a Dentist (Pediatric) Preparation for and Passing the State Exam State Exam (Computer Testing)
GPC- 5.5.	Referring a patient to an instrumental examination in case 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 the standards.	Propaedeutics of Dental Diseases	Internal Medicine Dermatovenerology Neurology Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Three-dimensional x-ray Diagnostic Methods in Dentistry Observing and Assisting a Dentist (Pediatric) Preparation for and Passing the State Exam State Exam (Computer Testing) State Exam (Interdisciplinary Interview)
GPC- 5.9.	Making a diagnosis based on the current international statistical	Pathologic Anatomy - Pathologic Anatomy of Head	Internal Medicine Dermatovenerology Obstetrics Endodontics Gerontostomatology and diseases of the oral

	classification of	and Neck	mucosa
	diseases and health		Periodontics
			Gnathology and Temporo-Mandibular Joint's
	problems.		Functional Diagnostics
			Prosthodontics (Simple Prosthetics)
			Prosthodontics of Edentulous Patient
			Prosthodontics (Complex Prosthetics)
			Pediatric Maxillofacial Dentistry
			Maxillofacial Prosthodontics
			Pediatric Dentistry
			Orthodontics and Pediatric Prosthodontics
			Medical Genetics in Dentistry
			Modern Endodontics
			Observing and Assisting a Dentist (Operative
			Dentistry and Endodontics) Observing and
			Assisting a Dentist (Prosthodontics)
			Observing and Assisting a Dentist (Pediatric)
			Preparation for and Passing the State Exam
			State Exam (Computer Testing)
			State Exam (Interdisciplinary Interview)
GPC-	Developing a plan	Immunology,	Internal Medicine
6.1.	for dental disease	Clinical	Clinical Pharmacology
	treatment taking into	Immunology	General Surgery
	account the	Pharmacology	Surgical Diseases
	diagnosis, age and		Health and Safety
			Dermatovenerology
	clinical picture in		Neurology
	accordance with the		Psychiatry and Narcology
	current procedures		Pediatrics
	for the provision of		Endodontics
	medical care, clinical		Gerontostomatology and diseases of the oral
	guidelines (treatment		mucosa
	` `		Periodontics
	protocols) on the		Oral surgery
	provision of medical		Gnathology and Temporo-Mandibular Joint's
	care taking into		Functional Diagnostics
	account the medical		Prosthodontics (Simple Prosthetics)
	care standards.		Prosthodontics of Edentulous Patient
			Prosthodontics (Complex Prosthetics)
			Maxillofacial and Orthognathic Surgery
			Head and Neck Diseases
			Pediatric Maxillofacial Dentistry
			Maxillofacial Prosthodontics
			Pediatric Dentistry
			Orthodontics and Pediatric Prosthodontics
			Medical Genetics in Dentistry
			Medical Rehabilitation
			Clinical Dentistry
			Implantology and Reconstructive Surgery
			Modern Endodontics
			Observing and Assisting a Dentist (Pediatric)
			Observing and Assisting a Dentist (General
		<u> </u>	Ouserving and Assisting a Dentist (General

			Dentistry), Including Research Practice Preparation for and Passing the State Exam State Exam (Computer Testing) State Exam (Interdisciplinary Interview)
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	Dental Materials General Surgery	Internal Medicine Surgical Diseases Health and Safety Dermatovenerology Psychiatry and Narcology Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Gnathology and Temporo-Mandibular Joint's Functional Diagnostics Prosthodontics (Simple Prosthetics) Prosthodontics of Edentulous Patient Prosthodontics (Complex Prosthetics) Maxillofacial and Orthognathic Surgery Head and Neck Diseases Pediatric Maxillofacial Dentistry Maxillofacial Prosthodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Medical Genetics in Dentistry Medical Rehabilitation Implantology and Reconstructive Surgery Modern Endodontics 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) State Exam (Interdisciplinary Interview)
PC- 1.1.	Making an initial examination and/or reexamination of a patient in order to make a preliminary diagnosis.	Immunology, Clinical Immunology Local anesthesia and anesthesiology in dentistry Propaedeutics of Dental Diseases	Health and Safety Otorhinolaryngology Obstetrics Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Gnathology and Temporo-Mandibular Joint's Functional Diagnostics Prosthodontics (Simple Prosthetics) Prosthodontics of Edentulous Patient Prosthodontics (Complex Prosthetics) Maxillofacial Prosthodontics Head and Neck Diseases Pediatric Maxillofacial Dentistry Maxillofacial and Orthognathic Surgery

			Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Medical Genetics in Dentistry Medical Rehabilitation Implantology and Reconstructive Surgery Modern Endodontics Aesthetic Restoration Observing and Assisting a Dentist (Oral Surgery) Observing and Assisting a Dentist (Operative Dentistry and Endodontics) Observing and Assisting a Dentist (Prosthodontics) 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) State Exam (Interdisciplinary Interview)
PC- 1.2.	Receiving information from patients (their relatives/legal representatives); conducting a questionnaire survey of patients regarding their general health status; identifying concomitant diseases in order to make a preliminary diagnosis.	Immunology, Clinical Immunology Local anesthesia and anesthesiology in dentistry	Health and Safety Otorhinolaryngology Ophthalmology Obstetrics Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Gnathology and Temporo-Mandibular Joint's Functional Diagnostics Prosthodontics (Simple Prosthetics) Prosthodontics (Gomplex Prosthetics) Maxillofacial Prosthodontics Head and Neck Diseases Pediatric Maxillofacial Dentistry Maxillofacial and Orthognathic Surgery Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Medical Genetics in Dentistry Medical Rehabilitation Implantology and Reconstructive Surgery Modern Endodontics Observing and Assisting a Dentist (Oral Surgery) Observing and Assisting a Dentist (Operative Dentistry and Endodontics) 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)

			State Exam (Interdisciplinary Interview)
PC-	Detecting if patients	Immunology,	Health and Safety
1.3.	have dentoalveolar,	Clinical	Endodontics
1.0.	facial anomalies,	Immunology	Gerontostomatology and diseases of the oral
	deformities and		mucosa
			Periodontics
	prerequisites for their		Gnathology and Temporo-Mandibular Joint's
	development, defects		Functional Diagnostics
	in the crowns of teeth		Prosthodontics (Simple Prosthetics)
	and dentition on the		Prosthodontics of Edentulous Patient
	basis of the patient		Prosthodontics (Complex Prosthetics)
	examination;		Pediatric Maxillofacial Dentistry
	laboratory,		Maxillofacial Prosthodontics
	instrumental, and		Pediatric Dentistry
	· ·		Orthodontics and Pediatric Prosthodontics
	additional		Medical Genetics in Dentistry
	examinations in		Medical Rehabilitation
	order to make a		Three-dimensional Computer Modeling of
	preliminary/final		Teeth
	diagnosis.		Modern Endodontics
			Aesthetic Restoration
			Observing and Assisting a Dentist (Operative
			Dentistry and Endodontics) Observing and
			Assisting a Dentist (Prosthodontics)
			Observing and Assisting a Dentist (Pediatric) Observing and Assisting a Dentist (General
			Dentistry), Including Research Practice
			Cone Beam Computed Tomography in the
			Diagnosis Planning and Evaluation of the
			Effectiveness of Dental Solutions
			Preparation for and Passing the State Exam
			State Exam (Computer Testing)
			State Exam (Interdisciplinary Interview)
PC-	Organizing the	Local anesthesia	Endodontics
2.1.	provision of	and anesthesiology	Gerontostomatology and diseases of the oral
2.1.	emergency and	in dentistry	mucosa
		,	Periodontics
	urgent medical care		Oral surgery
	for acute dental		Maxillofacial and Orthognathic Surgery
	diseases, conditions,		Head and Neck Diseases
	exacerbation of		Pediatric Dentistry
	chronic diseases,		Orthodontics and Pediatric Prosthodontics
	which pose a threat		Implantology and Reconstructive Surgery
	to the patient's life,		Modern Endodontics
	or without obvious		Observing and Assisting a Dentist (Oral
			Surgery)
	signs of a threat to		Observing and Assisting a Dentist (Pediatric)
	the patient's life.		Observing and Assisting a Dentist (General
			Dentistry), Including Research Practice
			Preparation for and Passing the State Exam
			State Exam (Computer Testing)
			State Exam (Interdisciplinary Interview)

PC- 2.2.	Selecting drugs and medical devices (including dental materials) for dental disease treatment assessing the possible side effects of taking medicinal drugs	Innovative techniques in dentistry Local anesthesia and anesthesiology in dentistry	Clinical Pharmacology Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Oral surgery Maxillofacial and Orthognathic Surgery Head and Neck Diseases Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Physiotherapy of Dental Diseases Implantology and Reconstructive Surgery Modern Endodontics Aesthetic Restoration Observing and Assisting a Dentist (Oral 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) State Exam (Interdisciplinary Interview)
PC- 2.3.	Consulting patients on methods for treating dental diseases drawing up a comprehensive treatment plan which justifies the most appropriate tactics and assesses possible complications caused by using this technique.	Medical Elementology Bioelements in Medicine	Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Clinical Dentistry Modern Endodontics 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) State Exam (Interdisciplinary Interview)
PC- 2.4.	Selecting the type of local anesthesia/anesthesia and assessing the possible complications caused by using it.	Propaedeutics of Dental Diseases	Clinical Pharmacology Endodontics Gerontostomatology and diseases of the oral mucosa Periodontics Pediatric Dentistry Orthodontics and Pediatric Prosthodontics Modern Endodontics 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) State Exam (Interdisciplinary Interview) of the higher education programme.

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 "Modern Endodontics" is 2 credits (72 academic hours).

Table 4.1. Types of academic activities during the periods of higher education

programme mastering (full-time training)*

		Total	Semesters/training modules				
Type of academic activ	academic hours	10 (A)					
Contact academic hours	34	34					
including:							
Lectures (LC)							
Lab work (LW)	34	34					
Seminars (workshops/tutorials) (S)							
Self-studies		35	35				
Evaluation and assessment		3	3				
(exam/passing/failing grade)							
Course workload	academic hours	72	72				
	credits	2	2				

^{*} 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 activities types	
Section 1 Basic aspects of modern endodontics.	Topic 1.1. Endodontics or implantation: criteria for choosing a treatment method. Topic 1.2. Key stages of endodontic treatment and modern standards for each of them. Topic 1.3. Methods of endodontic treatment: indications and contraindications.		
Section 2 Diagnostics in endodontics.	Topic 2.1 Basic diagnostic methods. Additional diagnostic methods. Topic 2.2 Differential diagnosis of endodontic pathology. The most common diagnostic errors	LW	
Section 3 Preparing the patient for endodontic treatment.	Topic 3.1 Isolation of the working field. Topic 3.2 Creating an access cavity depending on the group membership and anatomical features of the teeth. Primary navigation, creation of a "carpet path" and the formation of a root canal.	LW	
Section 4 Disinfection of the root canal system.	Topic 4.1 Microbiology of the root canal system. Topic 4.2 Irrigation solutions. Techniques for activating irrigation solutions. Preparations for disinfection of root canals between visits.	LW	
Section 5 Obturation of root canals.	Topic 5. Sealers and pastes. Lateral condensation of cold gutta-percha. Monopin method. Modified lateral condensation, application of gutta-percha on a carrier, vertical compaction of heated gutta-percha	LW	

Section 6 Systemic	Topic 6.1 Non-steroidal anti-inflammatory drugs,	LW
pharmacotherapy in	antibiotics, immunomodulating agents, complex	
endodontics.	antihomotoxic drugs.	
Section 7 Correction of	Topic 7.1 Formation of the access cavity using burs and	LW
errors and complications	ultrasonic tips: indications for use, quality standards and	
in endodontic practice.	feasibility. Elimination of steps in the root canal, tactics	
_	of work with complex anatomy of the root canal	
	system.	
	Topic 7.2 The use of MTA in the closure of	
	perforations at various levels, apexification and	
	apexogenesis, direct and indirect pulp capping,	
	pulpotomy.	
	Topic 7.3 Re-treatment of root canals filled with plastic	
	and hardening materials. Tactics of work in the	
	presence of a foreign body in the root canal.	

^{* -} 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	A lecture hall for lecture-type classes, equipped with a set of specialised furniture; board (screen) and technical means of multimedia presentations.	
Lab-work	An auditorium for laboratory work, individual consultations, current control and intermediate certification, equipped with a set of specialized furniture and equipment.	Available - 4 phantom classes with 78 head modules with built-in jaws with artificial teeth for practicing methods of treating dental diseases. Also for practicing manual skills in preparation on the latest dental simulator with the 3D function VirT EaSy Dental (manufactured in France) - 4 modules with programs for the treatment and implantation of teeth
Seminar	An auditorium for conducting seminar-type classes, group and individual consultations, current control and intermediate certification, equipped with a set of specialized furniture and technical means for multimedia presentations.	Technical means: TOSHIBA X 200 multimedia projector, ASUS F9E Core2 DUO T 5750 laptop, Internet access. Software: Microsoft products (OC, office suite, including MS Office/Office 365, Teams, Skype) a list of specialized equipment, stands, visual posters, etc. List of specialized equipment, stands, visual posters, etc.
Self-studies	Auditorium for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and	An auditorium for independent work of students (can be used for

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	computers with access to the EIOS.	seminars and consultations), equipped with a set of specialized furniture and computers with access to the EIOS.

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

7. RESOURCES RECOMMENDED FOR COURSE STUDY

Main readings:

- 1. Essentials of operative dentistry. Учебное пособие. М.: ГЕОТАР-МЕДИА. 2019, 512 р. Гриф УМО: регистрационный номер рецензии 571 ЭКУ от 20 декабря 2018 года. Daurova F.Yu., Makeeva M.K., Khabadze Z.S., Vayts S.V., Zoryan A.V., Bagdasarova I.V.
- 2. Cariology and Non-caries Lesions Daurova F. Yu., Khabadze Z.S, Makeeva V.K. Kogevnikova L.A Учебное пособие/Москва 2107
- 3. Tutorial guide of operative dentistry for dental students of second and third year of education, Daurova F. Yu., Khabadze Z.S., Makeeva V.K. Москва, 2016
- 4. Tests and tasks for students of 2nd year for discipline "Cariology". Current control. M.: РУДН. 2020, 132 c. Daurova F. Yu., Makeeva M/K/Vayts S. V., Khabadze Z.S.
- 5. Основы кариесологии в тестах и заданиях: тестовый контроль и оценка уровня знаний. (Fundamentals of cariesology in tests and tasks: Competency and knowledge assessment). Учебно-методические рекомендации на английском языке. М.: Изд-во РУДН. 2018, 88 с. Хабадзе З.С., Багдасарова И.В., Зорян А.В., Карнаева А.С., Кожевникова Л.А.

Internet sources

- 1. 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/

2. Databases and search engines:

- a. PUBMED
- b. SCOPUS abstract database http://www.elsevierscience.ru/products/scopus/
- c. WHO Documentation Center http://whodc.mednet.ru/

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

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

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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 (GPC-2.1, 2.2, 5.1, 5.2, 5.3, 5.4, 5.5, 5.9, 6.1, 6.2; PC – 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4) 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).

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