Federal State Autonomous Educational Institution for Higher Education

PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA

(RUDN University)

Medical Institute

(name of the main educational unit)

COURSE SYLLABUS

DENTAL MODELING OF TEETH

Recommended by the Didactic Council for the Education Field of:

31.05.03. Dentistry

(Code and Higher Education Field)

The course instruction is implemented within the professional educationprogramme of higher education:

Dentistry

(Name of specialization EP of HE)

2024 г.

1. COURSE GOAL(s)

The development of students' personal qualities, as well as the formation of general professional and professional competencies in accordance with the requirements of the Federal State Educational Standard for Higher Education in the field of Dentistry in the discipline "*Dental modeling of teeth*".

2. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

The development of the discipline "Dental modeling of teeth" is aimed at the formation of the following competencies (parts of competencies): **GPC – 8 (8.2)**

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

Code	Competencies	Indicators of competence achievement
GPC -8	GPC - 8. The ability to use basic physico-chemical, mathematical and natural science concepts and methods in solving professional problems.	GPC - 8.2. Application of applied natural science knowledge to solve professional problems.

3. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF THE EP of HE.

The discipline "**Dental modeling of teeth**" refers to the mandatory part: block **B.1** of the EP of HE.

Within the framework of the EP of HE, students also master other disciplines that contribute to achieving the planned results of mastering the discipline "**Dental modeling of teeth**".

Table 3.1. The list of components of the EP of HE that contribute to achieving the planned results of mastering the discipline

Code	Competencies	Previous disciplines	Subsequent disciplines
GPC - 8.	The ability to use basic physico-chemical, mathematical and natural science concepts and methods in solving professional problems		Cariesology. Endodontics. Gerontostomatology and diseases of the oral mucosa. Periodontics. Local anesthesia and anesthesiology in dentistry. Oral surgery. Gnatology and functional diagnostics of TMJ. Dental prosthetics (simple prosthetics). Prosthetics in the complete absence of teeth. Prosthetics of dentition (complex prosthetics). Maxillofacial surgery. Pediatric dentistry. Minimally invasive technologies in dentistry.

			Implantology and reconstructive surgery of the oral cavity. Oncostomatology and radiation therapy. Physiotherapy of dental diseases. Clinical dentistry. Medical genetics in dentistry.

4. THE SCOPE OF THE DISCIPLINE AND TYPES OF ACADEMIC WORK

The total labor intensity of the discipline "Dental modeling of teeth" is **2** credits.

*Table 4.1. Types of educational work according to the periods of mastering the EP of HE for **FULL**-time education.*

Type of educational work	Quantity of hours	Semesters			
		1			
Classroom classes (total)	34	34			
Including:		-	-	-	-
Lectures					
Workshops (WS)					
Seminars *(S)*					
Lab work (LW)	34	34			
Self-study (total)	38	38			
Total labor intensity (academic hour and pass/fail grading)	**72**	**72**			
	2	**2**			

5. THE CONTENT OF THE DISCIPLINE

Table 5.1. The content of the discipline (module) by type of academic work.

Name of the discipline section	**№ Topic**	**The content of the section (topics)**	**Type of ac. work**
Dental modeling of teeth	Topic.1	The anatomy of teeth. Groups of teeth by functional feature. Occlusion. Types and shape of dental arches. Principles of the structure of dental arches. Types of dentition rows. Articulation, its effect on the row of dentition, and the anatomical shape of teeth. Functional flatness (Spee, Wilson)	LW. SS.
	Topic 2.	Types of restoration in dental practice, where it is necessary to use modeling skills and knowledge of the anatomy of teeth and dentition.	LW. SS.
	Topic 3.	Rules and features of modeling the shape of the central incisor of the upper jaw. Modeling from sculptural plasticine.	LW. SS.

	Topic 4.	Rules and features of modeling the shape of the central incisor of the lower jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 5.	Rules and features of modeling the shape of the central incisor of the lower jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 6.	Rules and features of modeling the shape of the lateral incisor of the lower jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 7.	Rules and features of modeling the shape of the canines of the upper jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 8.	Rules and features of modeling the shape of the canines of the lower jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 9.	Rules and features of modeling the shape of the first premolar of the upper jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 10.	Rules and features of modeling the shape of the second premolar of the upper jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 11.	Rules and features of modeling the shape of the first premolar of the mandible. Modeling from sculptural plasticine.	LW. SS.
	Topic 12.	Rules and features of modeling the shape of the second premolar of the mandible. Modeling from sculptural plasticine.	LW. SS.
	Topic 13.	Rules and features of modeling the shape of the first molar of the upper jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 14.	Rules and features of modeling the shape of the second molar of the upper jaw. Modeling from sculptural plasticine.	LW. SS.
	Topic 15.	Rules and features of modeling the shape of the first molar of the mandible. Modeling from sculptural plasticine.	LW. SS.
	Topic 16.	Rules and features of modeling the shape of the second molar of the mandible. Modeling from sculptural plasticine.	LW. SS.
	Topic 17.	The final lesson. A credit class.	Test + conversation

6. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE:

Classroom for Academic Activity Type	Equipping the audience	Specialized educational/laboratory equipment, Software and materials for the development of the discipline.
Lecture Classroom	The lecture-type classroom (№204) is equipped with a set of specialized furniture; a blackboard (screen) and multimedia presentation equipment.	A set of specialized furniture. *Technical support*: – multimedia projector, – Internet connection. *Software*: – Microsoft products (the operating system, a suite of office applications, including MSOffice/ Office 365, Teams.)
Lab/ Seminars classroom	Classrooms are located in buildings: ATI and GUM-SOC. In the ATI building: audiences 249, 250, 251, 252 (the phantom class) и 253. In the GUM-SOC building: audiences 232-235 (the phantom class).	A set of specialized furniture. *Technical support*: Dental simulation units. DLP Optoma H114 Projector. Lenovo Think Centre M71z automated workplace. Laptop Asus X756UVIntel. Projector AcerP1285. Display Elite Screens Spectrum Electric100V. Laptop ASUS X751LDV. Monoblock Dell Optiplex 3030. PC TMO3300 i3 254. Polymerization lamps "Woodpecker". Control units with a micromotor tip. Multimedia projector Sony VPL-C6. Electric screen Projecta PSECO001 Elproelectrol 160x160 sm. MOULAGES patient's head for phantom work in the package. Dental chair with electric drive and programmable

		position. The doctor's units are included. Screen 17" BenQ sc.1472. The screen is on a tripod Projecta, 180x180. Control units of the dental unit for 2 tips and a spray. Blocks of tips "DART 1440". Models of the upper and lower jaw with an articulator. A cupboard for storing sterile instruments. Instruments used in therapeutic, orthopedic and surgical dentistry. Consumables: gypsum, wax, casts, sealing materials, etc. *Information stands and expositions*: – information stand in Russian and English; – visual aids, posters, models.
Computer classroom	Not provided	
Self-studies classroom	Classrooms 249, 250, 251, 252, 253 in ATI building. Classrooms 232-235 in GUM-SOC building, Classrooms equipped with a set of specialized furniture and computers with access to EIOS. Halls. The scientific library in the Main building of the RUDN.	

7. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF THE DISCIPLINE.

7.1. ***Main reading (sources)*:**

1. THEODORE M. ROBERSON, HARALD 0. HEYMANN. Sturdevant's ART and SCIENCE of Operative Dentistry. 4. б.м. : Mosby, 2002. ISBN 0-323-01087-3.

2. Jarned, Fuller A / Gerald E. Denehy / Thomas M. Schulein. Concise Dental Anatomy and Morphology.

3. Stanley J. Nelson, Major M. Ash, Jr. Wheeler's Dental Anatomy, Physiology, and Occlusion. 9. б.м. : Saunders Elsevier, 2010. ISBN: 978-1-4160-6209-7.

7.2. ***Internet-(based) sources:***

1. Electronic libraries with access for RUDN students:
   - Electronic library system РУДН – ЭБС РУДН http://lib.rudn.ru/MegaPro/Web
   - ELS « University Library Online » http://www.biblioclub.ru
   - ELS Yurayt http://www.biblio-online.ru
   - ELS «Student's Consultant » www.studentlibrary.ru
   - ELS «Lan» http://e.lanbook.com/
   - ELS « Troitsky most»
2. Databases and search engines:
   - electronic fund of legal and regulatory and technical documentation http://docs.cntd.ru/
   - the Yandex search engine https://www.yandex.ru/
   - the Google search engine https://www.google.ru/
   - abstract database SCOPUS http://www.elsevierscience.ru/products/scopus/

7.3. *Learning toolkits for self- studies in the RUDN LMS TUIS in disciplines:*

7.3.1. Educational materials and workbooks on all topics of the discipline "Dental modeling of teeth".
7.3.2. Lab works
7.3.3. Glossary and other educational materials.

8. ASSESSMENT MATERIALS AND A POINT-RATING SYSTEM FOR ASSESSING THE LEVEL OF COMPETENCE FORMATION IN THE DISCIPLINE "DENTAL MODELING OF TEETH"

Evaluation materials and a point-rating system for assessing the level of competence formation (part of competencies) based on the results of mastering the discipline "Dental modeling of teeth" are presented in the application to this Work Program of the discipline.

DEVELOPERS:
Senior lecturer of the Department of Propaedeutics of Dental Diseases. Manvelyan A.S.

Main lecturer of the Departmentof Propaedeutics of Dental Diseases,

Candidate of Medical Sciences Gurieva Z.A.

HEAD OF THE DEPARTMENT:
Head of the Department of Propaedeutics of Dental Diseases,
Doctor of Medical Sciences., Professor Razumova S.N.

HEAD OF THE HIGHER EDUCATION PROGRAM

Deputy Director of the Medical Institute, Professor Razumova S.N.