

MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS

Educational Institution
BELARUSIAN STATE MEDICAL UNIVERSITY

**Контрольный
экземпляр**

APPROVED

by Rector of the Educational
Institution «Belarusian State
Medical University»

S.P. Rubnikovich

26.06.2024

Reg. # UD-001/107/2425 /edu.

PROPAEDEUTICS IN DENTISTRY

**Curriculum of the educational institution
in the academic discipline for the specialty**

7-07-0911-03 «Dentistry»

Curriculum is based on the educational program «Propaedeutics in Dentistry», approved 26.06.2024, registration № УД-091-107/2425/уч.; on the educational plan in the specialty 7-07-0911-03 «Dentistry», approved 15.05.2024, registration # 7-07-0911-03/2425/mf.

COMPILERS:

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RECOMMENDED FOR APPROVAL:

by the Department of Propaedeutics of Dentistry and Materials Science of the educational institution «Belarusian State Medical University»
(protocol # 20 of 20.05.2024);

by the Scientific and Methodological Council of the educational institution «Belarusian State Medical University»
(protocol # 18 of 26.06.2024)

EXPLANATORY NOTE

«Propaedeutics in Dentistry» is an academic discipline of the Propaedeutic Dentistry and Materials Science Module containing systematized scientific knowledge about the functional anatomy of the dental system, the composition and properties of filling and structural materials, methods for restoring hard dental tissues and manufacturing various types of fixed dentures.

The aim of the academic discipline «Propaedeutics in Dentistry» is the formation of basic professional competence for carrying out therapeutic and orthopedic manipulations in dentistry.

The objectives of the discipline «Propaedeutics in Dentistry» are to form students' scientific knowledge about:

- the basics of the organization and structure of dental care in the Republic of Belarus;
- basics of asepsis and antisepsis in dentistry;
- basics of individual and professional oral hygiene;
- basics of functional anatomy of the maxillofacial system;
- types and properties of materials for filling carious cavities and root canals of teeth;
- methods and stages of preparation and filling of carious cavities of various locations;
- methods and stages of preparation and filling of root canals of single-rooted and multi-rooted teeth;
- methods and stages of manufacturing various types of modern fixed dentures;
- the main goals and objectives of medical ethics and deontology in the provision of dental care to the population,
- skills and abilities required for:
 - carrying out professional oral hygiene;
 - preparation of hard dental tissues during therapeutic treatment and production of various types of fixed dentures orthopedic structures;
 - filling carious cavities and root canals of teeth;
 - manufacturing and fixation of fixed dentures.

The knowledge, skills and abilities acquired in the study of the academic discipline «Propaedeutics in Dentistry» are necessary for the successful study of the modules «Medical Prevention in Dentistry», «Therapeutic Dentistry», «Prosthodontics Dentistry».

A student who has mastered the content of the educational material of the academic discipline should have the following basic professional competence: work with filling and structural materials, apply methods of restoration of teeth hard tissues, dissect hard tissues of teeth during therapeutic interventions and the manufacture of orthopedic structures.

As a result of studying the academic discipline «Propaedeutics in Dentistry», the student should

know:

- sections and branches of dentistry;
- normative equipment and equipment of the workplace of a dentist;
- rules for operating a dental unit;

fundamentals of modern ergonomics;
 basics of asepsis and antisepsis in dentistry;
 functional anatomy of maxillofacial system;
 compositions and properties of filling materials for restoration of the crown part of the tooth;
 stages, tools, modes of preparation of the cavities of the crown part of the tooth;
 stages, tools, modes of filling of the cavities of the crown part of the tooth;
 principles and criteria for quality control of tooth preparation for therapeutic restorations;
 principles and criteria for quality control of tooth preparation for dentures;
 criteria for quality control of filling cavities in the coronal part of the tooth;
 methods and clinical and laboratory stages of inlay manufacturing;
 methods and clinical and laboratory stages of artificial crowns manufacturing;
 methods for selecting impression materials according to classification and application;
 methods and techniques for taking impressions;
 composition and properties of materials for temporary and permanent fixation of prostheses;
 structure of the periodontal tissue complex;
 types of dental plaque, mechanism of their formation;
 instruments for individual and professional oral hygiene;
 stages and techniques of individual and professional oral hygiene;
 composition and properties of root canals filling materials of teeth;
 endodontic instruments, algorithm of use;
 techniques for mechanical and chemical treatment of dental root canals;
 stages and technique of dental root canal filling;
 principles and criteria for quality control of tooth preparation and filling of root canals;
 clinical and laboratory stages of dental bridges manufacturing;
 methods and sequence of pin constructions manufacturing;
 methods and sequence of manufacturing a customized post and core;
 methods and sequence of restoration of the coronal part of a tooth using standard pins;
 composition and properties of alginate impression materials, technology for taking impressions;
 composition and properties of silicone impression materials, technique for taking impressions;
 materials and methods of temporary and permanent fixation of fixed dentures;
 tools and techniques for removing of fixed dentures;
be able to:
 organize a dentist's workplace;
 choose materials for temporary fillings;
 select materials for isolating base and therapeutic liners;
 choose glass ionomer cements;
 choose adhesive systems;

- choose chemical and light curing composite materials;
- work with various polymerization devices;
- select tools and products for processing and polishing filling materials;
- choose materials and methods for inlays manufacturing;
- choose materials and methods for artificial crowns manufacturing;
- choose impression material and impression-taking technique;
- obtain different impressions depending on the type and material of the fixed dentures;
- choose materials for fixation of fixed dentures;
- choose instruments for removing dental plaque;
- choose methods and means of oral hygiene;
- carry out a standard method of teeth brushing on a phantom model;
- determine the hygiene index (OHIS);
- carry out dental plaque removal on a phantom model;
- choose instruments for opening and widening the tooth cavity;
- apply a devitalizing agent to the opened tooth cavity;
- choose endodontic instruments;
- choose tools and means for extirpation, antiseptic treatment and drying of the root canal;
- carry out extirpation, antiseptic treatment and drying of the root canal;
- choose a mechanical root canal treatment technique;
- determine the effectiveness of root canal filling;
- identify endodontic treatment errors;
- interpret x-ray images of teeth and maxillofacial system;
- choose instruments and methods for unfilling obturated root canals;
- choose instruments and methods for unfilling obturated root canals for pin constructions;
- choose the material and method of manufacturing the pin constructions;
- choose instruments, materials and methods for restoring a tooth core using standard pins;
- select instruments and materials for modeling the wax composition of the customized cast post and cores;
- select criteria for the effectiveness of tooth restoration using pin constructions;
- identify manufacturing errors in pin constructions;
- choose materials and type of fixed dentures;
- select tools and materials for the dental bridge manufacture from various materials;
- choose equipment and tools for preparing abutment teeth for dental bridges;
- prepare teeth for various dental bridge types;
- select tools and materials for gum retraction;
- select impression trays and impression material when making fixed dentures on a phantom model;
- choose impression material for dental bridge manufacturing;
- take impressions for dental bridge manufacturing;
- choose instruments for removing of fixed dentures;

produce a plastic dental bridge using the matrix method;
 manufacture a dental bridge from self-cured plastic using direct molding;
 choose tools and materials for making veneers;
 prepare a tooth for a veneer on a phantom model;
 select materials and tools for adhesive fixation of veneers;

master:

skill in determining the type of bite;
 a method for correction of occlusal and articulatory relationships of teeth and dentition;
 methodology for choosing an x-ray diagnostic method according to indications;
 skill in interpreting x-ray pictures of the dental system;
 skill in determining the type of dental material using archival intraoral and panoramic radiographs;
 skill in preparing cavities of classes 1, 2, 3, 4, 5 by Black;
 skill of mixing and applying therapeutic liner and isolating base in cavities of classes 1, 2, 3, 4, 5 by Black;
 skill in filling cavities of classes 1, 2, 3, 4 by Black with composite material;
 skill in filling cavities of class 5 by Black with glass ionomer cements;
 skill in preparing cavities for various types of inlays;
 skill in preparing teeth for various types of artificial crowns;
 skill in unsealing an obturated root canal for customized post and core;
 skill in modeling veneers made of composite material;
 skill in making a temporary crown from self-cured plastic material using finger adapting method;
 skill in making a temporary crown from self-cured plastic material using matrix method;
 skill in modeling a customized cast post and core from wax;
 the skill of mixing alginate material and taking an impression of the teeth of the upper or lower jaw prepared for fixed dentures;
 the skill of mixing silicone material and taking an impression of the teeth of the upper or lower jaw prepared for fixed dentures;
 skills in temporary fixation of fixed dentures;
 skill in mixing glass ionomer cement for fixation of various types of fixed dentures;
 skills in permanent fixation of fixed dentures;
 skill in removing fixed dentures;
 skill in opening and widening the tooth cavity in the incisors and canines of the upper jaw;
 skill in opening and widening the tooth cavity in the premolars and molars of the upper jaw;
 skill in opening and widening the tooth cavity in the incisors and canines of the lower jaw;
 skill in opening and widening the tooth cavity in the premolars and molars of the lower jaw;

skill in performing mechanical instrumental treatment of root canals using the step back technique;

skill in filling (obturation) of tooth root canals using the lateral condensation method;

skill in unfilling an obturated root canal of a tooth.

Total number of hours for the study of the discipline is 576 academic hours, of which 374 classroom hours and 202 hours of student independent work. Classroom hours according to the types of studies: lectures – 24 hours, practical classes – 350 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit (3 semester) and examination (4 semester).

Form of higher education – full-time.

ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

Code, name of the specialty	semester	Number of academic hours					Form of intermediate assessment
		total	in-class	including		out-of-class self-studies	
				lectures	practical classes		
7-07-0911-03 «Dentistry»	3	288	185	15	170	103	credit
	4	288	189	9	180	99	exam
Total hours		576	374	24	350	202	

THEMATIC PLAN

Section (topic) name	Number of classroom hours	
	lectures	practical classes
1. Introduction to the specialty	1,5	10
1.1. Organization and equipment of a dental clinic, department, office. Medical ethics and deontology	-	5
1.2. Asepsis and antisepsis in dentistry	1,5	5
2. Individual and professional oral hygiene	-	5
3. Functional anatomy of the maxillofacial system	4,5	45
3.1. Articulation, occlusion	1,5	10
3.2. Bite. Types of bite	1,5	5
3.3. Biomechanics of the chewing apparatus	1,5	20
3.4. X-ray anatomy of the maxillofacial system	-	10
4. Preparation and filling of coronal cavities of teeth	7,5	85
4.1. Preparation of cavities by Black	1,5	35
4.2. Dental materials for filling	6	40
4.3. Filling cavities by Black	-	10
5. Fixed dentures	1,5	140
5.1. Preparation of teeth for fixed dentures	1,5	45
5.2. Methods and stages of manufacturing of fixed dentures	-	65
5.3. Methods and stages of taking impressions in the manufacture of fixed dentures	-	15
5.4. Types of fixation of fixed dentures	-	15
6. Propaedeutics of endodontic manipulations	9	65
6.1. Preparation of root canals of teeth for filling (obturation), equipment, tools, methods, stages	4,5	45
6.2. Filling (obturation) of tooth root canals, equipment, tools, methods, stages	4,5	20
Total hours	24	350

CONTENT OF THE EDUCATIONAL DISCIPLINE

1. Introduction to the specialty

1.1. Organization and equipment of a dental clinic, department, office. Medical ethics and deontology

Organization and structure of dental care in the Republic of Belarus.

Definition of the concept of «dentistry». The main goals and objectives facing dentistry. Basic principles of ergonomics in dentistry.

The main goals and objectives of medical ethics and deontology in the provision of dental care to the population.

Design and organization of a dental clinic, appointment of main structural units. Equipment and tools of the dental office. Medical furniture.

Equipment and tools necessary for the direct performance of dental therapeutic or diagnostic procedures: dental unit (types and design of dental units), dental chair, doctor's chair, assistant's chair, dentist's dental table.

Dental instruments: types and purpose.

Equipment for the work of a nurse.

Equipment for sterilization and disinfection: a dry-heat oven for sterilizing instruments, a glass-perlene sterilizer for sterilizing small instruments, a table for sterile instruments, a quartz lamp for disinfecting room air.

Equipment for hand hygiene and pre-sterilization washing: sink for washing hands, sink for washing instruments, containers with disinfectant and cleaning solutions.

1.2. Asepsis and antisepsis in dentistry

Sanitary and epidemiological requirements for organizing and equipping a dental department and office.

Asepsis: disinfection and sterilization in dentistry. Methods for disinfecting instruments and equipment in the dental office. Samples to check the quality of disinfection of used instruments.

Sterilization of instruments. Methods of sterilization of dental instruments, quality control of sterilization.

Rules and methods of hygienic and antiseptic cleaning of the hands of a dentist.

Antiseptics in dentistry. Iatrogenic infections.

Methods for isolating the working area of the oral cavity during dental procedures.

Rubber dam: purpose, application methods.

2. Individual and professional oral hygiene

Structure and functions of the periodontal tissue complex. Types of dental plaque, causes and mechanism of their formation. Types of microorganisms involved in the formation of dental plaque. Index assessment of dental plaque. Green-Vermillion Index (OHIS), its definition and interpretation.

Methods and means for individual oral hygiene. Individual teeth brushing methods.

Methods and means for professional oral hygiene, dental instruments and equipment.

3. Functional anatomy of the maxillofacial system

3.1. Articulation, occlusion

Articulation. Occlusion, types of occlusion. Signs characterizing central occlusion. Anatomy, physiology and functions of the periodontium, determining its endurance to chewing load. Characteristics of the concept of «periodontal reserve forces». Absolute strength of the masticatory muscles. Chewing pressure.

Characteristics of the dental, alveolar and basal arches on the upper and lower jaws. Characteristics of the occlusal surface of the dentition of the upper and lower jaws (sagittal and transversal occlusal curves).

3.2. Bite. Types of bite

Physiological bite. Basic and auxiliary signs that determine the type of bite. Semi-physiological and pathological types of occlusion.

3.3. Biomechanics of the chewing apparatus

Vertical movements of the lower jaw. Central ratio, terminal axis of rotation, state of physiological rest, interocclusal space.

Sagittal movements of the lower jaw. Sagittal articular path angle. Sagittal incisal path angle.

Transversal movements of the lower jaw. Characteristics of the working and non-working sides. Characteristics of the Bennett angle. Transversal incisal path angle. Characteristics of Bonneville's three-point contact.

Devices that reproduce the movements of the lower jaw: types and purposes of occluders, articulators and face bow.

Practical skills on a phantom model:

determination of the type of bite;

carrying out the selection of a method for correcting the occlusal and articulatory relationships of teeth and dentition.

3.4. X-ray anatomy of the maxillofacial system

Methods and interpretation of radiological visualization of the normal anatomy of the maxillofacial system, including hard dental tissues and periodontium, temporomandibular joint, as well as radiological features of the display of various dental materials (metal alloys, amalgams, dental cements, composite and ceramic materials). Indications for intraoral dental radiography, orthopantomography, cone-beam computed tomography, telerradiography and other radiological methods.

Practical skills on a phantom model:

selecting an x-ray diagnostic method according to indications;

interpretation of the X-ray picture of the maxillofacial system and determination of the type of dental material using archival intraoral and panoramic radiographs.

4. Preparation and filling of coronal cavities of teeth

4.1. Preparation of cavities by Black

Classification of carious cavities by Black.

Stages and features of the preparation of cavities of classes 1, 2, 3, 4, 5 by Black.

Principles of quality control of implementation of rules and stages of preparation of dental cavities of various locations, compliance with modern ergonomic requirements. Errors in the preparation of dental cavities of various locations and methods for their prevention and elimination.

Practical skills on a phantom model:

carrying out preparation of class 1 cavities by Black;

carrying out preparation of class 2 cavities by Black;

carrying out preparation of class 3 cavities by Black;

carrying out preparation of class 4 cavities by Black;

carrying out preparation of class 5 cavities by Black.

4.2. Dental materials for filling

Classification of filling materials. Properties of filling materials and requirements for them. Adhesive systems: composition, properties, application methods. Materials for temporary fillings: composition, properties, application methods. Types of filling materials: isolating, therapeutic and combined. Composition and properties of materials for permanent fillings: glass ionomer cements, chemical-cured and light-cured

composite materials, dual-cured composite materials. Methods of using glass ionomer cements, isolating base and therapeutic liners. Methods of layer-by-layer restoration.

Practical skills on a phantom model:

mixing and applying therapeutic liner and isolating base in class 1 cavities by Black;
mixing and applying therapeutic liner and isolating base in class 2 cavities by Black;
mixing and applying therapeutic liner and isolating base in class 3 cavities by Black;
mixing and applying therapeutic liner and isolating base in class 4 cavities by Black;
mixing and applying therapeutic liner and isolating base in class 5 cavities by Black.

4.3. Filling cavities by Black

Stages and methods of using self- and light-cured composite materials, adhesive systems, dual-cured composite materials and glass ionomer cements for filling of 1, 2, 3, 4, 5 cavities by Black. Additional tools and equipment used for filling cavities of various locations. Contact point, equipment, tools and methods for its restoration.

Practical skills on a phantom model:

filling of class 1 cavities by Black with composite material;
filling of class 2 cavities by Black with composite material;
filling of class 3 cavities by Black with composite material;
filling of class 4 cavities by Black with composite material;
filling of class 5 cavities by Black with composite material;

5. Fixed dentures

5.1. Preparation of teeth for fixed dentures

Preparing teeth for veneers, mistakes and methods of their prevention.

Preparation of teeth for various types of inlays depending on the location of the cavities. Selection of tools for preparation for veneers and inlays, features of preparation modes, methods of protecting dental pulp.

Preparation of teeth for various types of artificial crowns, types of margins. Features of tooth preparation for supporting crowns of bridges.

Rules and methods for preparing hard dental tissues and methods for unfilling root canals for the subsequent use of various types of pins and pin constructions. Features of instrumental treatment of root canals when restoring the coronal part of single-rooted and multi-rooted teeth using standard pins and individual pin structures made of various materials.

Practical skills on a phantom model:

preparation of cavities for various types of inlays;
carrying out tooth preparation for various types of artificial crowns;
carrying out unsealing of the obturated root canal under the customized cast post and core.

5.2. Methods and stages of manufacturing of fixed dentures

Methods and stages of making veneers from various materials.

Methods and stages of making inlays from various materials.

Methods and stages of manufacturing artificial crowns from various materials.

Methods and stages of making temporary plastic crowns.

Methods and stages of manufacturing dental bridges from various materials.

Methods and stages of restoration of the crown part of teeth using standard pins from various materials.

Methods and stages of restoration of the crown part of teeth using individual pin structures made of various materials.

Practical skills on a phantom model:

modeling of veneers made of composite material;

production of a temporary crown from self-cured plastic by finger adapting method;

production of a temporary crown from self-cured plastic using the matrix method;

modeling of a customized cast post and core by wax.

5.3. Methods and stages of taking impressions in the manufacture of fixed dentures

Methods and stages of taking working and auxiliary impressions when making veneers.

Methods and stages of taking working and auxiliary impressions when making artificial crowns.

Methods and stages of taking working and auxiliary impressions in the manufacture of dental bridges made of various materials.

Methods and stages of taking working and auxiliary impressions in the manufacture of individual pin constructions.

Errors when taking impressions, causes and methods for eliminating them.

Practical skills on a phantom model:

mixing alginate material and taking an impression of the upper or lower jaw teeth prepared for fixed dentures;

mixing silicone material and taking an impression of the teeth of the upper or lower jaw prepared for fixed dentures.

5.4. Types of fixation of fixed dentures

Classification of materials for fixation of fixed dentures.

Methods and stages of temporary fixation of fixed dentures.

Methods and stages of permanent fixation of fixed dentures.

Adhesive technique for fixation of fixed dentures, indications and stages of implementation.

Methods and stages of removing fixed dentures.

Practical skills on a phantom model:

temporary fixation of fixed dentures;

mixing glass ionomer cement for fixation of various types of fixed dentures;

permanent fixation of fixed dentures;

carrying out the removal of fixed dentures.

6. Propaedeutics of endodontic manipulations

6.1. Preparation of root canals of teeth for filling (obturation), equipment, tools, methods, stages

Endodontic instruments, principles of standardization.

Manual and machine endodontic instruments, operating principles.

Tools, methods, stages of opening the tooth cavity and creating endodontic access in single-rooted and multi-rooted teeth of the upper jaw.

Tools, methods, stages of opening the tooth cavity and creating endodontic access in single-rooted and multi-rooted teeth of the lower jaw.

Determination of root canal length, instruments and equipment.

Methods and stages of mechanical processing of dental root canals.

Step back technique of dental root canals processing.

Step back technique, steps.

Methods and stages of irrigation and disinfection of dental root canals.

Mistakes when preparing tooth root canals for filling, prevention and methods of elimination.

Practical skills on a phantom model:

performing opening and widening of the tooth cavity in the incisors and canines of the upper jaw;

performing opening and widening of the tooth cavity in the premolars and molars of the upper jaw;

performing opening and widening of the tooth cavity in the incisors and canines of the lower jaw;

performing opening and widening of the tooth cavity in the premolars and molars of the lower jaw;

performing mechanical instrumental treatment of root canals using Step back technique.

6.2. Filling (obturation) of tooth root canals, equipment, tools, methods, stages

Classification of materials for filling root canals of teeth.

Tools and equipment for filling (obturation) of tooth root canals.

Modern methods and stages of root canal filling (obturation).

Errors during filling (obturation) of the root canals of teeth, prevention and methods of elimination.

Practical skills on a phantom model:

filling (obturation) of the root canals of teeth using the lateral condensation method;

performing unfilling of an obturated root canal of a tooth.

ACADEMIC DISCIPLINE «PROPEDEUTICS IN DENTISTRY» CURRICULAR CHART

Section, topic #	Section (topic) name	Number of classroom hours		Literature	Practical skills	Form of control	
		lectures	practical			of practical skills	of current / intermediate assessment
	Lectures	15	-				
1.2.	Asepsis and antisepsis in dentistry	1,5	-	17			
3.1.	Functional anatomy of the maxillofacial system. Articulation and occlusion. Occlusal surface of the dentition	1,5	-	4, 17			
3.2	Functional anatomy of the maxillofacial system. Bite, types of bite	1,5	-	4, 17			
3.3.	Functional anatomy of the maxillofacial system. Biomechanics of the chewing apparatus. Movements of the lower jaw	1,5	-	4, 17			
4.1.	Principles and main stages of preparation and filling of carious cavities	1,5	-	2, 3, 16, 17			
4.2.	Dental materials for filling. Glass ionomer cements. Composition, properties, application	1,5	-	3, 16, 17			
4.2.	Dental materials for filling. Chemically cured composite materials. Classification. Composition, properties, application	1,5	-	3, 17			
4.2.	Dental materials for filling. Light-cured composite materials. Classification. Composition, properties, application	1,5	-	3, 17			
4.2.	Adhesive systems in dentistry	1,5	-	3, 16, 17			

5.1.	Preparation of teeth for fixed dentures (inlays, veneers)	1,5	-	2, 17			
	Practical lessons	-	170				
1.1	Organization and equipment of a dental clinic, department, office. Medical ethics and deontology	-	5	17	Organize of a dentist's workplace in accordance to ergonomics	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
1.2.	Asepsis and antisepsis in dentistry. Rubber dam	-	5	12, 17	Carry out of hygienic and antiseptic cleaning of the hands of a dentist	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
2.	Individual and professional oral hygiene	-	5	12, 17	Select instruments for removal of dental deposits. Select methods and means of oral hygiene. Carry out a standard method of teeth brushing on a phantom model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.1.	Articulation, occlusion	-	5	4, 17	Model the anatomical shape of the maxillary first molar in occlusion from wax	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.1.	Occlusion. Occlusal curves	-	5	4, 17	Model the anatomical shape of the mandibular first molar in occlusion from wax	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.2.	Bite. Types of bite	-	5	4, 17	Determine the type of bite on the phantom model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.3.	Biomechanics of the chewing apparatus. Vertical movements of the lower jaw	-	5	4, 17	Model the anatomical shape of the maxillary second premolar in occlusion from wax	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.3.	Biomechanics of the chewing apparatus. Saggital movements of the lower jaw	-	5	4, 17	Model the anatomical shape of the mandibular second premolar in occlusion from wax	Carrying out practical skills on	Test; quiz; survey

						simulation equipment (model)	
3.3.	Biomechanics of the chewing apparatus. Transversal movements of the lower jaw	-	5	4, 17	Model the anatomical shape of the maxillary first premolar in occlusion from wax	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.3.	Biomechanics of the chewing apparatus. Devices that reproduce the movements of the lower jaw	-	5	4, 17	Model the anatomical shape of the mandibular first premolar in occlusion from wax	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.4.	X-ray anatomy of the maxillofacial system	-	5	17	Select of an X-ray diagnostic method according to the indications	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
3.4.	X-ray anatomy of the maxillofacial system	-	5	17			Colloquium*
4.1.	Preparation of class 1 cavities according to Black	-	5	2, 16, 17	Prepare class 1 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.1.	Preparation of class 5 cavities according to Black	-	5	2, 16, 17	Prepare class 5 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.1	Preparation of class 2 cavities according to Black	-	5	2, 16, 17	Prepare class 2 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.1	Preparation of class 2 cavities according to Black	-	5	2, 16, 17	Prepare class 2 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.1	Preparation of class 3 cavities according to Black	-	5	2, 16, 17	Prepare class 3 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey

4.1	Preparation of class 4 cavities according to Black	-	5	2, 16, 17	Prepare class 4 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.1	Preparation of class 4 cavities according to Black	-	5	2, 16, 17	Prepare class 4 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.2.	Filling materials. Classification, requirements. Materials for temporary fillings: composition, properties, application. Isolating bases, therapeutic and combined liners	-	5	3, 16, 17	Select materials for temporary fillings, isolating base, therapeutic and combined liners according to classification and application. Mix and apply a therapeutic liner and isolating base in class 1-5 cavities according to Black on the model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.2	Glass ionomer cements: composition, properties, application	-	5	3, 16, 17	Select glass ionomer cements according to classification and application. Perform composite restoration in class 1 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.2	Composite filling materials. Composition, properties, application. Polymerization devices	-	5	3, 10, 16, 17	Select chemical-cured composites and light-cured composites according to classification and application. Be able to work with various polymerization devices. Perform composite restoration in class 5 cavity according to Black on a model.	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.2	Composite filling materials. Contact point, methods of restoration, tools	-	5	3, 10, 16, 17	Select tools for contact point restoration according to classification and application.	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey

					Perform composite restoration in class 2 cavity according to Black on a model		
4.2	Adhesive systems. Composition, properties, application	-	5	3, 10, 17	Select adhesive systems according to classification and application. Perform composite restoration in class 2 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.2	Composite filling materials. Color science. Determination of tooth color	-	5	3, 10, 17	Teeth color determination. Perform composite restoration in class 3 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.3	Methods of finishing of composite restorations	-	5	2, 10, 17	Select instruments and means for processing and polishing of filling materials. Perform composite restoration in class 4 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
4.3	Mistakes and complications during work with composite materials	-	5	2, 10, 17	Perform composite restoration in class 4 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.1	Preparation of teeth for fixed prosthetic restoration: veneers	-	5	2, 17	Prepare a tooth for a veneer on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of fixed prosthetic restoration: ceramic veneers	-	5	3, 5, 7, 9, 13, 17	Select materials and methods for manufacturing of veneers according to classification and application. Model veneer from composite material	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of fixed prosthetic restoration: composite veneers	-	5	3, 5, 10, 13, 17	Model veneer from composite material	Carrying out practical skills on	Test; quiz; survey

						simulation equipment (model)	
5.1	Preparation of teeth for fixed prosthetic restorations: inlays (onlay, overlay)	-	5	2, 7, 9, 17	Prepare cavities for inlays (onlays, overlays) on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of fixed prosthetic restorations: onlays		5	3, 5, 7, 9, 11, 13, 17	Select materials and methods for manufacturing of inlays according to classification and application. Model onlay from wax on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of fixed prosthetic restorations: overlays		5	3, 5, 7, 9, 11, 13, 17	Model overlay from wax on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of fixed prosthetic restorations: overlays. Methods of restoration of the tooth crown		5	3, 5, 7, 9, 11, 13, 17			Colloquium Credit
	4 semester						
	Lectures	9	-				
6.1.	Endodontic instruments. Standardization principles. Additional methods and means for endodontic treatment of root canals of teeth	1,5	-	1,17			
6.1.	Methods of instrumental treatment of dental root canals	1,5	-	1, 15, 17			
6.1.	Methods of chemical treatment of dental root canals	1,5	-	1,17			
6.2.	Root Canal Obturation Materials. Classification, Composition, Properties and Indications for Use. Root Canal Obturation Methods	1,5	-	1, 3, 15, 17			
6.2	Intracanal post and core restorations. Types, manufacturing methods	1,5	-	1, 5, 17			
6.2	Modern methods of the tooth crown restoration	1,5	-	15,17			

	Practical classes	-	180				
3.	Anatomical and topographic features of the permanent teeth pulp chamber. Structure and functions of the pulp and periodontium	-	5	1, 4, 17	Determine the group and individual characteristics of teeth according to anatomical and topographic features	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Endodontic instruments, purpose, principles of standardization	-	5	1, 15, 17	Select endodontic instruments according to classification and application	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Instruments, methods, stages of opening of the tooth pulp chamber and creation of an endodontic access in single-root and multi-root teeth of the upper jaw	-	5	1, 2, 15, 17	Select endodontic instruments according to classification and application. Apply a devitalizing agent on the opened pulp chamber. Open and prepare pulp chambers of single-root and multi-root teeth of the upper jaw on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Instruments, methods, stages of opening of the tooth pulp chamber and creation of an endodontic access in single-root and multi-root teeth of the lower jaw	-	5	1, 2, 15, 17	Select endodontic instruments according to classification and application. Apply a devitalizing agent on the opened pulp chamber. Open and prepare pulp chambers of single-root and multi-root teeth of the lower jaw on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Determination of root canal length, instruments and equipment. Methods and stages of instrumental processing of root canals of teeth	-	5	1, 15, 17	Determine the length of the dental root canals. Select instruments and means for extirpation, irrigation and disinfection of the dental root canals	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Apical-coronal methods of root canal treatment of single-rooted teeth of the upper jaw	-	5	1, 15, 17	Perform mechanical instrumental treatment of root canals of single-rooted teeth of the upper jaw	Carrying out practical skills on	Test; quiz; survey

					using the apical-coronal method on a model	simulation equipment (model)	
6.1	Apical-coronal methods of root canal treatment of multi-rooted teeth of the upper jaw	-	5	1, 15, 17	Perform mechanical instrumental treatment of root canals of multi-rooted teeth of the upper jaw using the apical-coronal method on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Apical-coronal methods of root canal treatment of single-rooted teeth of the lower jaw	-	5	1, 15, 17	Perform mechanical instrumental treatment of root canals of single-rooted teeth of the lower jaw using the apical-coronal method on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Apical-coronal methods of root canal treatment of multi-rooted teeth of the lower jaw	-	5	1, 15, 17	Perform mechanical instrumental treatment of root canals of multi-rooted teeth of the lower jaw using the apical-coronal method on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.1	Coronal-apical methods of root canal treatment. Mistakes made during preparation of root canals of teeth for obturation, prevention and methods of their elimination	-	5	1, 15, 17	Select instruments for root canal treatment using the coronal-apical method	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.2	Materials, instruments and equipment for filling (obturation) of root canals of single-rooted teeth	-	5	1, 3, 15, 17	Fill (obturate) the root canals of single-rooted teeth using the lateral condensation method on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.2	Materials, instruments and equipment for filling (obturation) of root canals of multi-rooted teeth of the upper jaw	-	5	1, 3, 15, 17	Fill (obturate) the root canals of the maxillary multi-rooted teeth using the lateral condensation method on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.2	Materials, instruments and equipment for filling (obturation) of root canals of multi-rooted teeth of the lower jaw	-	5	1, 3, 15, 17	Fill (obturate) the root canals of the mandibular multi-rooted teeth using the lateral condensation method on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
6.2	Disobturation of root canals. Disobturation of root canals for post and core restorations	-	5	1, 2, 15, 17	Disobturate dental root canals on a model.	Carrying out practical skills on	Test; quiz; survey

					Disobturate dental root canals for a post and core on a model	simulation equipment (model)	
5.1	Preparation of teeth for fixed prosthetic restorations (individual post and core)	-	5	2, 15, 17	Prepare the tooth for an individual post and core	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of restoration of the crown part of single-rooted teeth using individual post and core restorations made of various materials	-	5	5, 13, 17	Model an individual cast post and core from wax for a single-rooted tooth	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of restoration of the crown part of multi-rooted teeth using individual post and core restorations made of various materials	-	5	5, 13, 17	Model an individual cast post and core from wax for a single-rooted tooth	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of restoration of the crown part of teeth using standard posts made of various materials	-	5	5, 8, 17	Select tools, materials and methods for restoration of a tooth core using standard posts	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of restoration of the crown part of teeth using standard posts made of various materials	-	5	5, 8, 17			Colloquium*
5.1	Preparation of teeth for fixed prosthodontic restorations (stamped crowns)	-	5	2, 8, 17	Prepare teeth for metal (stamped) crowns on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.1	Preparation of teeth for fixed prosthodontic restorations (cast crowns)	-	5	2, 8, 17	Prepare teeth for metal (cast) crowns on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of metal (stamped and cast) crowns	-	5	3, 5, 8, 11, 13, 17	Select materials and instruments for manufacturing of metal (stamped and cast) crowns	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.1	Preparation of teeth for fixed prosthodontic restorations (porcelain fused to metal crowns)	-	5	2, 7, 8, 17	Prepare teeth for porcelain fused to metal crowns on a model	Carrying out practical skills on	Test; quiz; survey

						simulation equipment (model)	
5.1	Preparation of teeth for fixed prosthodontic restorations (porcelain fused to metal crowns). Retraction	-	5	2, 7, 8, 17	Select instruments and materials for retraction. Prepare teeth for porcelain fused to metal crowns on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of porcelain fused to metal crowns	-	5	3, 5, 7, 8, 11, 13, 17	Select instruments and materials for manufacturing of porcelain fused to metal crowns	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.3	Methods and stages of obtaining alginate impressions during manufacturing of fixed prosthodontic restorations	-	5	3, 5, 13, 14, 17	Mix alginate material and take teeth impressions of the upper and lower jaws	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.3	Methods and stages of obtaining silicone impressions (C-type) during manufacturing of fixed prosthodontic restorations	-	5	3, 5, 14, 17	Mix C-type silicone material and take teeth impressions of the upper and lower jaws	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.3	Methods and stages of obtaining silicone impressions (A-type) during manufacturing of fixed prosthodontic restorations. Materials for occlusion registration	-	5	3, 5, 14, 17	Select materials and methods for occlusion registration. Mix A-type silicone material and take teeth impressions of the upper and lower jaws	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of temporary acrylic crowns (matrix method)	-	5	3, 5, 6, 8, 10, 11, 13, 17	Manufacture a temporary crown from a self-curing resin using the matrix method	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of temporary acrylic crowns (free moulding)	-	5	3, 5, 6, 8, 10, 11, 13, 17	Manufacture a temporary crown from a self-curing resin using finger adapting method	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.2	Methods and stages of manufacturing of temporary acrylic crowns	-	5	3, 5, 6, 8, 10, 11, 13, 17	Select materials and instruments for acrylic crown manufacturing. Manufacture a temporary crown from a self-curing resin using finger adapting method	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey

5.1	Preparation of teeth for fixed prosthodontic restorations (metal dental bridges)	-	5	2, 8, 17	Prepare teeth for supporting crowns of metal bridge prostheses (stamped-soldered and cast)	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.1	Preparation of teeth for fixed prosthodontic restorations (combined dental bridges)	-	5	2, 7, 8, 10, 17	Prepare teeth for supporting crowns of porcelain fused to metal bridge dentures	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.4	Types of fixation of fixed prosthodontic restorations: temporary, permanent	-	5	3, 6, 17	Carry out temporary fixation of fixed prosthodontic restorations. Mix zinc phosphate cement for fixation of various types of fixed prosthodontic restorations. Carry out permanent fixation of fixed dentures on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.4	Adhesive technique of fixation of fixed prosthodontic restorations. Removal of previously cemented fixed prosthodontic restorations	-	5	3, 6, 17	Remove previously cemented fixed prosthodontic restorations on a model	Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
5.4	Adhesive technique of fixation of fixed prosthodontic restorations. Removal of previously cemented fixed prosthodontic restorations. Final lesson on practical skills control	-	5	3, 6, 17		Carrying out practical skills on simulation equipment (model)	Test; quiz; survey
		24	350				Exam

*This is a mandatory form of current certification

INFORMATION AND INSTRUCTIONAL UNIT

LITERATURE

Basic (relevant):

1. Endodontics: Principles and Practice, sixth edition / M. Torabinejad, A. Fouad, S. Shabahang. – Elsevier, 2021. – 493 p.

Additional:

2. Methods of preparation of hard dental tissue : teaching and learning guide / N. M. Polonechik et al. – Minsk : BSMU, 2019. – 36 p.
3. Powers, John M. Dental materials : foundations and applications / Powers, John M., Wataha, John C. – 11th ed. – St. Louis : Elsevier, 2017. – 240 p.
4. Polonechik, N. M. Teeth morphology and biomechanics of the masticatory system : student's workbook. – Minsk : BSMU, 2016. – 40 p.
5. Polonechik, N. M. Impression materials : teaching and learning guide. – Minsk : BSMU, 2018. – 39 p.
6. Provisional restorations : teaching and learning guide / N. M. Polonechik. – Minsk : BSMU, 2018. – 20 p.
7. Polonechik, N. M. Ceramic materials in dentistry and technological processes used in the fabrication of ceramic dental prostheses : teaching and learning guide. – Minsk : BSMU, 2018. – 40 p.
8. Polonechik, N. M. Metals and alloys of metals in dentistry. Technological processes used for production of dental prostheses of metals alloys : teaching and learning guide. – Minsk : BSMU, 2018. – 40 p.
9. Polonechik, N. M. Modelling materials used in dentistry : teaching and learning guide. – Minsk : BSMU, 2018. – 20 p.
10. Polonechik, N. M. Polymer materials in dentistry and technological processes used in the fabrication of polymer dental prostheses : teaching and learning guide. – Minsk : BSMU, 2018. – 44 p.
11. Polonechik, N. M. Investment materials applied in dentistry : teaching and learning guide. – Minsk : BSMU, 2018. – 19 p.
12. Basics of professional oral hygiene : teaching and learning guide. – Minsk : BSMU, 2019. – 31 p.
13. Polonechik, N. M. Methods of working casts and die systems production : teaching and learning guide. – Minsk : BSMU, 2020. – 24 p.
14. Materials, technological processes and devices used for custom impression trays fabrication : учеб.-метод. пособие / N. M. Polonechik et al. – Minsk : BSMU, 2020. – 16 p.
15. Methods of root canal working length determination : teaching and learning guide / T. N. Manak et al. – Minsk : BSMU, 2021. – 32 p.
16. Chistyakova, G. G. Glass ionomer cements in dentistry : teaching and learning guide. – Minsk : BSMU, 2022. – 24 p.

Electronic courseware for the educational discipline «Propaedeutics in Dentistry»

17. <https://etest.bsmu.by/course/index.php?categoryid=10&browse=courses&perpage=20&page=2>.

METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

The time allocated for independent work can be used by students for:
 preparation for lectures and practical classes;
 preparation for colloquiums, tests and exams in the academic discipline;
 preparation of thematic reports, abstracts, presentations;
 completing practical tasks;
 taking notes on educational literature.

LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms of current performance review are used for diagnostics of competencies:

test;
 quiz;
 survey;
 colloquium.

LIST OF AVAILABLE TEACHING METHODS

Traditional method;
 active (interactive) methods:
 PBL (Problem-Based Learning);
 simulation-based learning.

LIST OF PRACTICAL SKILLS

Name of practical skill	Form of practical skills control
Organize of a dentist's workplace in accordance to ergonomics	Carrying out practical skills on simulation equipment (model)
Carry out of hygienic and antiseptic cleaning of the hands of a dentist	Carrying out practical skills on simulation equipment (model)
Select instruments for removal of dental deposits	Carrying out practical skills on simulation equipment (model)
Select methods and means of oral hygiene	Carrying out practical skills on simulation equipment (model)
Carry out a standard method of teeth brushing on a phantom model	Carrying out practical skills on simulation equipment (model)
Model the anatomical shape of the maxillary first molar in occlusion from wax	Carrying out practical skills on simulation equipment (model)
Model the anatomical shape of the maxillary first premolar in occlusion from wax	Carrying out practical skills on simulation equipment (model)
Model the anatomical shape of the mandibular first premolar in occlusion from wax	Carrying out practical skills on simulation equipment (model)

Name of practical skill	Form of practical skills control
Model the anatomical shape of the mandibular first molar in occlusion from wax	Carrying out practical skills on simulation equipment (model)
Model the anatomical shape of the maxillary second premolar in occlusion from wax	Carrying out practical skills on simulation equipment (model)
Select of an X-ray diagnostic method according to the indications	Carrying out practical skills on simulation equipment (model)
Prepare class 1 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)
Prepare class 2 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)
Prepare class 3 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)
Prepare class 4 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)
Prepare class 5 cavities according to Black on a model	Carrying out practical skills on simulation equipment (model)
Select materials for temporary fillings, isolating base, therapeutic and combined liners according to classification and application	Carrying out practical skills on simulation equipment (model)
Mix and apply a therapeutic liner and isolating base in class 1-5 cavities according to Black on the model	Carrying out practical skills on simulation equipment (model)
Select glass ionomer cements according to classification and application	Carrying out practical skills on simulation equipment (model)
Perform composite restoration in class 1 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)
Select chemical-cured composites and light-cured composites according to classification and application	Carrying out practical skills on simulation equipment (model)
Be able to work with various polymerization devices	Carrying out practical skills on simulation equipment (model)
Perform composite restoration in class 5 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)
Select tools for contact point restoration according to classification and application.	Carrying out practical skills on simulation equipment (model)
Perform composite restoration in class 2 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)
Select adhesive systems according to classification and application	Carrying out practical skills on simulation equipment (model)
Teeth color determination	Carrying out practical skills on simulation equipment (model)

Name of practical skill	Form of practical skills control
Perform composite restoration in class 3 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)
Select instruments and means for processing and polishing of filling materials	Carrying out practical skills on simulation equipment (model)
Perform composite restoration in class 4 cavity according to Black on a model	Carrying out practical skills on simulation equipment (model)
Prepare a tooth for a veneer on a model	Carrying out practical skills on simulation equipment (model)
Select materials and methods for manufacturing of veneers according to classification and application	Carrying out practical skills on simulation equipment (model)
Model veneer from composite material	Carrying out practical skills on simulation equipment (model)
Prepare cavities for inlays (onlays, overlays) on a model	Carrying out practical skills on simulation equipment (model)
Select materials and methods for manufacturing of inlays according to classification and application	Carrying out practical skills on simulation equipment (model)
Model onlay from wax on a model	Carrying out practical skills on simulation equipment (model)
Model overlay from wax on a model	Carrying out practical skills on simulation equipment (model)
Determine the group and individual characteristics of teeth according to anatomical and topographic features	Carrying out practical skills on simulation equipment (model)
Select endodontic instruments according to classification and application	Carrying out practical skills on simulation equipment (model)
Apply a devitalizing agent on the opened pulp chamber	Carrying out practical skills on simulation equipment (model)
Open and prepare pulp chambers of single-root and multi-root teeth of the upper jaw on a model	Carrying out practical skills on simulation equipment (model)
Determine the length of the dental root canals.	Carrying out practical skills on simulation equipment (model)
Select instruments and means for extirpation, irrigation and disinfection of the dental root canals	Carrying out practical skills on simulation equipment (model)
Perform mechanical instrumental treatment of root canals of single-rooted teeth of the upper jaw using the apical-coronal method on a model	Carrying out practical skills on simulation equipment (model)
Perform mechanical instrumental treatment of root canals of multi-rooted teeth of the	Carrying out practical skills on simulation equipment (model)

Name of practical skill	Form of practical skills control
lower jaw using the apical-coronal method on a model	
Select instruments for root canal treatment using the coronal-apical method	Carrying out practical skills on simulation equipment (model)
Fill (obturate) the root canals of single-rooted teeth using the lateral condensation method on a model	Carrying out practical skills on simulation equipment (model)
Fill (obturate) the root canals of the maxillary multi-rooted teeth using the lateral condensation method on a model	Carrying out practical skills on simulation equipment (model)
Fill (obturate) the root canals of the mandibular multi-rooted teeth using the lateral condensation method on a model	Carrying out practical skills on simulation equipment (model)
Disobturate dental root canals on a model	Carrying out practical skills on simulation equipment (model)
Disobturate dental root canals for a post and core on a model	Carrying out practical skills on simulation equipment (model)
Prepare the tooth for an individual post and core	Carrying out practical skills on simulation equipment (model)
Model an individual cast post and core from wax for a single-rooted tooth	Carrying out practical skills on simulation equipment (model)
Model an individual cast post and core from wax for a single-rooted tooth	Carrying out practical skills on simulation equipment (model)
Select tools, materials and methods for restoration of a tooth core using standard posts	Carrying out practical skills on simulation equipment (model)
Prepare teeth for metal (stamped) crowns on a model	Carrying out practical skills on simulation equipment (model)
Prepare teeth for metal (cast) crowns on a model	Carrying out practical skills on simulation equipment (model)
Select materials and instruments for manufacturing of metal (stamped and cast) crowns	Carrying out practical skills on simulation equipment (model)
Prepare teeth for porcelain fused to metal crowns on a model	Carrying out practical skills on simulation equipment (model)
Select instruments and materials for retraction	Carrying out practical skills on simulation equipment (model)
Select instruments and materials for manufacturing of porcelain fused to metal crowns	Carrying out practical skills on simulation equipment (model)
Mix alginate material and take teeth impressions of the upper and lower jaws	Carrying out practical skills on simulation equipment (model)

Name of practical skill	Form of practical skills control
Mix C-type silicone material and take teeth impressions of the upper and lower jaws	Carrying out practical skills on simulation equipment (model)
Select materials and methods for occlusion registration	Carrying out practical skills on simulation equipment (model)
Mix A-type silicone material and take teeth impressions of the upper and lower jaws	Carrying out practical skills on simulation equipment (model)
Manufacture a temporary crown from a self-curing resin using the matrix method	Carrying out practical skills on simulation equipment (model)
Select materials and instruments for acrylic crown manufacturing	Carrying out practical skills on simulation equipment (model)
Manufacture a temporary crown from a self-curing resin using finger adapting method	Carrying out practical skills on simulation equipment (model)
Prepare teeth for supporting crowns of metal bridge prostheses (stamped-soldered and cast)	Carrying out practical skills on simulation equipment (model)
Prepare teeth for supporting crowns of porcelain fused to metal bridge dentures	Carrying out practical skills on simulation equipment (model)
Carry out temporary fixation of fixed prosthodontic restorations	Carrying out practical skills on simulation equipment (model)
Mix zinc phosphate cement for fixation of various types of fixed prosthodontic restorations	Carrying out practical skills on simulation equipment (model)
Carry out permanent fixation of fixed dentures on a model	Carrying out practical skills on simulation equipment (model)
Remove previously cemented fixed prosthodontic restorations on a model	Carrying out practical skills on simulation equipment (model)

**LIST OF (APPROXIMATE) PASSPORTS OF EXAMINATION STATIONS OF THE OBJECTIVE
STRUCTURED CLINICAL EXAM, USED FOR THE ASSESSMENT OF STUDENTS**

Passport (approximate) of the examination station «Manual skills in endodontics» of the objective structured clinical exam (OSCE) on the academic discipline «Propaedeutics in dentistry» for the specialty 1-79 01 07 «Dentistry».

LIST OF SIMULATION EQUIPMENT USED

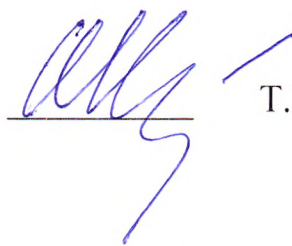
1. Dentist's training simulation station.
2. Micromotors.
3. Angle handpieces.
4. Sets of burs.
5. Plaster models of the upper and lower jaws.

**PROTOCOL OF THE CURRICULUM APPROVAL
BY OTHER DEPARTMENTS**

Title of the discipline requiring approval	Department	Amendments to the curriculum in the academic discipline	Decision of the department, which designed the curriculum (date, protocol #
Removable dentures	Prosthodontic dentistry and orthodontics	No offers made	Protocol # 20 of 20.05.2024
Non-removable Prosthetics	Prosthodontic dentistry and orthodontics	No offers made	Protocol # 20 of 20.05.2024
Preventive Dentistry	Pediatric dentistry	No offers made	Protocol # 20 of 20.05.2024
Conservative dentistry	Conservative dentistry	No offers made	Protocol # 20 of 20.05.2024
Endodontics	Endodontics	No offers made	Protocol # 20 of 20.05.2024

COMPILERS:

Head of the Department of
Propaedeutics of Dentistry and
Materials Science of the educational
institution «Belarusian State Medical
University», PhD, Associate Professor



T.V.Krushinina

Associate Professor of the Department
of Propaedeutics of Dentistry and
Materials Science of the educational
institution «Belarusian State Medical
University», PhD, Associate Professor



N.A.Gres

Curriculum content, composition and the accompanying documents comply with the established requirements.

Dean of the Medical Faculty for
International Students of the
educational institution «Belarusian
State Medical University»

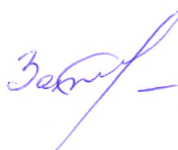
24.06.2024



O.S.Ishutin

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Methodological Department of the
Office of Educational Activities of the
educational institution «Belarusian
State Medical University»

24.06.2024



S.V.Zaturanova