

MINISTRY OF HEALTHCARE OF THE REPUBLIC OF BELARUS
BELARUSIAN STATE MEDICAL UNIVERSITY



APPROVED BY

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Контрольный
экземпляр

PROSTHODONTICS
Curriculum in Specialty
1-79 01 07 Dentistry

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The curriculum is composed on the basis of the standard educational program "Prosthodontics ", approved on 20.05.2015, registration # УД-Л.501/мен

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Recommended for approval:

The Prosthodontic departmental meeting on 26.05.2015 (protocol # 20)

The dental subject methodological committee of Educational Institution "Belarusian State Medical University" on 28.05.2015. (protocol # 7)

EXPLANATORY NOTE

" Prosthodontics" is an academic discipline containing systemized scientific knowledge studying prevention, etiology, pathogenesis and treatment of congenital malformations, acquired defects, injuries, deformities and functional disorders of the masticatory system and other organs of the dentoalveolar system.

"Prosthodontics" curriculum includes the latest scientific data on new methods of prosthetics and construction materials such as:

- pressed ceramics;
- ceramic denture making with the use of CAD/CAM technologies;
- peculiarities of various fixed and removable prosthesis on implants making;
- adhesive dentures including those developed at the department;
- new methods of splinting in case of periodontal tissue disease;
- computer technology use in denture planning and construction;
- orthodontic treatment peculiarities of anomalies and deformities of the dentoalveolar system in the formed occlusion, with the use of physical-and-pharmacological agents.

This program content is different from previous ones because of changes in Prosthodontics, new topics of lectures and practical classes have been introduced.

The curriculum peculiarity for 2015-2016 academic year is setting tasks of the study and teaching subject aimed at developing the academic, social, personal and professional competence of a student.

The prosthodontic study objective is the formation and acquisition of scientific knowledge on prevention, etiology, pathogenesis and treatment of acquired defects, anomalies, injuries, deformities and functional disorders of the masticatory system and other organs of the dentoalveolar system, as well as training of professionals with basic clinical thinking; being able to examine a patient, make and confirm the diagnosis, work out a treatment plan; having mastered basic manual skills in case of dental disease orthopedic treatment.

The study task is to acquire the academic competence based on the following knowledge of:

- medical terminology;
- medical ethics and deontology;
- history and modern scientific research in Prosthodontics in the world and the Republic of Belarus;
- development of age-related changes, the anatomical and histological structure, physiology, the dentoalveolar system, masticatory system biomechanics;
- etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, prevention, treatment methods of general nosologic forms of the dentoalveolar system.

Certain diseases that Prosthodontics singles out as independent painful conditions based on an identified cause (etiology), peculiarities of development (pathogenesis), typical external manifestations and characteristic lesions of dentoalveolar system organs and tissues include:

- pathology of hard tooth tissues;
- partial and complete absence of teeth (edentia);
- periodontal diseases;
- anomalies and deformities of the dentoalveolar system;
- jaws and face traumatic lesions;
- temporomandibular joint diseases;
- oral mucosa diseases;
- combined forms of injuries and dentoalveolar system diseases.

The teaching tasks are social, personal and professional competence formation based on the following knowledge and application of:

- principles of oral cavity preparation for prosthodontic treatment, types of anesthesia;
- mechanisms of adaptation to dentures, prosthodontics impact on the dentoalveolar system and human organism;
- organizational and economic aspects of prosthodontic departments at dental clinics, hygiene requirements and equipment of prosthodontist and dental technician work places;
- professional and ethical norms, legislation acts, orders and letters of instructions, detecting the prosthodontist work.

Prosthodontics teaching and successful studying are based on acquired knowledge and skills on the following subjects:

General Chemistry. Chemical elements and their compounds. Chemical reactions. Technologies of metals, plastics, ceramics, and their compatibility.

Bioorganic Chemistry. Inorganic and organic chemicals. Elements of analytical chemistry, synthesis and modification of useful chemical compounds.

Medical and Biological Physics. Medical devices and equipment used in dentistry. Physical phenomena: adhesion, magnetic fields, laser radiation, EDF in the oral cavity, non-soldered method of denture making.

Medical Biology and General Genetics. Biological basis of vital activity. Biology of the Cell. Reproduction. Heredity and variability. Biological aspects of human ecology.

Biological Chemistry. Structure, functions and exchange of amino acids, nucleic acids, proteins, carbohydrates and lipids. Nucleic acids and protein biosynthesis. Energy metabolism in the cell.

The Latin language. Practical knowledge of grammar and principles of word formation. Knowledge of meanings of Latin and Greek word-formation elements and definite minimum of special terminology in Latin.

Human Anatomy. Structure of the human body, its constituent systems, organs, tissues, sex and age characteristics of the organism.

Histology, Cytology, Embryology. Methods of histological and cytological studies. Development and histological structure of the tooth and other organs of the dentoalveolar system.

General Dentistry. Oral biology (structure of teeth, surrounding tissues, composition and biological role of saliva), anatomical and physiological peculiarities

of masticatory system structure, biomechanical issues, occlusion and articulation. Basic and supplementary methods of examining a patient (diagnosis). Semiotic analysis of the revealed pathological signs. Clinical material science and laboratory techniques (techniques of various dentures and orthopedic apparatuses making).

Normal Physiology. Organism and its protective systems. Principles of physiological function formation and regulation. Physiological role and importance of the masticatory system and its influence on digestion and the gastrointestinal tract in general. Fundamentals of biomechanics.

Pathological Anatomy. Notion and biological nature of inflammation. Etiology and pathogenesis, morphology, classification (common inflammation, specific inflammation). Immunity: immunogenesis morphology, local allergic reactions, autoimmune diseases.

Pathological Physiology. Etiology. Pathogenesis studies. Pathogenic effects of environmental factors (biological factors, viruses, bacteria, protozoa). The role of organism reactivity in pathological processes. Allergic reactivity of the organism. Pathological physiology of infectious processes.

Pharmacology. Pharmacodynamics. Drug effect principles. Drug side and toxic effects. Substances that influence on inflammation and allergy processes. Antimicrobial and anti-parasitic agents: antiseptic, disinfectant, chemotherapeutic.

The curriculum structure. The program consists of six sections. Prosthodontics includes:

- prosthodontic treatment of tooth crown and dentition defects;
 - prosthodontic treatment of dentition defects with removable dentures ;
 - prosthodontic treatment of complete tooth loss and pathological abrasion ;
 - prosthodontic treatment of periodontal diseases; dentition and occlusion deformities; oral mucosa diseases, temporomandibular joint diseases (TMJ). Allergy and galvanism;
 - dentoalveolar anomalies and deformities treatment in the formed occlusion.
- Maxillofacial Orthopedics ;
- polyclinic prosthodontics .

Requirements for the level of student's knowledge on completing the discipline studying.

The student should know:

- dentoalveolar system physiology, anatomy and biomechanics of the masticatory system;
- etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, prevention and treatment techniques of the most common pathological processes and dentoalveolar system diseases;
- oral cavity preparation techniques in prosthodontic treatment, techniques of anesthesia;
- mechanisms of adaptation to dentures and prosthodontics influence on the dentoalveolar system and patient's organism;
- organizational and economic aspects of dental clinic prosthodontic departments;

The students should be able to:

- organize the prosthodontist workplace in accordance with ergonomics and requirements of asepsis, antiseptics, safety measures;
- prevent common complications at receiving a patient and, if necessary, provide emergency;
- examine dental patients, detect indications for health-improving and special procedures before prosthetics;
- detect treatment methods and constructions of dentures and apparatuses;
- provide orthodontic treatment in case of dentoalveolar system anomalies and deformities in adults.

The structure of the curriculum of educational discipline "Prosthodontics" is presented in six sections.

In total, the study of the discipline given to 1076 academic hours, including classroom - 644 hours. Distribution of classroom hours by type of training: 60 hours of lectures, 584 hours of practical classes, 432 hours of self-study student.

The current certification is carried out in accordance with the curriculum of the specialty in the form of: differentiated test (5, 6 semesters), offset (8, 9, 10 semesters), exam (semester 7).

Final certification - the state exam.

Form of education - full day.

TIMING OF TRAINING HOURS PER SEMESTER

Code number, specialty	Hours of training						Certification forms
	Semester	total	in-class	including			
				lectures	Laboratory studies	Practical classes	
<i>1</i>	2	3	4	5	6	7	9
1-79 01 07 «Dentistry»	5	160	99	14	85	61	credit with a differentiated mark
	6	158	99	14	85	59	credit with a differentiated mark
	7	190	102	12	90	88	examination
	8	140	82	10	72	58	credit
	9	196	122	10	112	74	credit
	10	232	140		140	92	credit state examination
Total time		1076	644	60	584	432	

THEMATIC PLAN OF IN-CLASS STUDIES

Theme	hours	
	lectures	Practical classes
Semester 5		
1. Prosthodontic treatment of dental crowns and dentition defects	14	85
1.1. Introduction. Prosthodontic treatment of tooth crown defects with inlays	2	10
1.2. Prosthodontic treatment of tooth crown defects with artificial crowns	4	25
1.3. Prosthodontic treatment in the absence of a tooth crown	4	10
1.4. Prosthodontic treatment of dentition defects with dental bridges	4	40
Semester 6		
2. Prosthodontic treatment of dentition defects with removable dentures	14	85
2.1. Prosthodontic treatment of dentition defects with partial removable acrylic-based dentures	7	50
2.2. Prosthodontic treatment of dentition defects with clasp dentures	7	35
Semester 7		
3. Prosthodontic treatment with complete loss of teeth and pathological abrasion	12	90
3.1. Prosthodontic treatment in case of complete tooth loss with complete removable laminar dentures	6	47
3.2. Prosthodontic treatment of patients with complete tooth loss on one jaw	2	17
3.3. Prosthodontic treatment of the localized form of pathological abrasion	2	13
3.4. Prosthodontic treatment of the generalized form of pathological abrasion	2	13
Semester 8		
4. Prosthodontic treatment in case of periodontal diseases, oral mucosa diseases, temporomandibular joint pathology, dentition and occlusion deformities, allergies and galvanism.	10	72
4.1. Prosthodontic treatment in case of periodontal diseases	3	26
4.2. Prosthodontic treatment in case of oral mucosa diseases	2	12
4.3. Prosthodontic treatment in case of temporomandibular joint diseases	1	10
4.4. Prosthodontic treatment in case of dentition and occlusion	2	12

Theme	hours	
	lectures	Practical classes
deformities		
4.5. Prosthodontic treatment in case of allergies and galvanism	2	12
Semester 9		
5. Treatment of dentoalveolar anomalies and formed occlusion deformities. Maxillofacial prosthodontics	10	112
5.1. Treatment of dentoalveolar anomalies and deformities in the formed occlusion.	4	32
5.2. Maxillofacial prosthodontics. Prosthodontic treatment methods of patients with neoplasms in the dentoalveolar system. Post-resection dentures	4	64
5.3. Prosthodontic treatment with implants	2	16
Semester 10		
6. Outpatient prosthodontics	--	140
6.1. Prosthodontic treatment and rehabilitation in pathology of tooth hard tissues		20
6.2. Prosthodontic treatment and rehabilitation in partial tooth loss		28
6.3 Prosthodontic treatment and rehabilitation in complete tooth loss		34
6.4. Prosthodontic treatment and rehabilitation in periodontal diseases		30
6.5. Tactical, diagnostic and technological mistakes in prosthodontics		16
6.6. Fundamentals of prosthodontic services in the Republic of Belarus		12
Total time	60	579

EDUCATIONAL MATERIAL CONTENT

1. Prosthodontic treatment of dental crowns and dentition defects

1.1. Introduction. Prosthodontic treatment of tooth crown defects with inlays

Prosthodontics: subject, goals, objectives. Etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, prevention and treatment methods of nosologic dentoalveolar system pathologies: pathology of tooth hard tissues, partial and complete tooth absence, periodontal diseases, anomalies and deformities of the dentoalveolar system, jaw and face traumatic lesions, temporomandibular joint diseases, oral mucosa diseases, combined forms of lesions and dentoalveolar system diseases.

Medical ethics and deontology notions. A dentist and patient, a dentist and dental technician, a dentist and medical staff relationship. Oral cavity preparation for prosthodontic treatment. Goals and objectives. Therapeutic, surgical, orthodontic, special preparation.

Inlays, indications for their use. Classification of cavities. Peculiarities of cavity formation in prosthetics with inlays depending on the topography of a defect. Inlays making techniques. Clinical-and-laboratory stages of tooth crown restoration using inlays. Fitting and fixation of inlays.

1.2. Prosthodontic treatment of tooth crown defects with artificial crowns

Methods of anesthesia in tooth hard tissue preparation. Principles of tooth preparation. Rules of tooth preparation and the amount of removed hard tissue in making dentures (pressed, plastic, ceramic, cast and combined (metal-acrylic and metal-ceramic) crowns. Assessment methods of quality preparation.

Pressed, plastic, cast, ceramic (milled and sintered), metal-acrylic and metal-ceramic crowns. Indications for their use. Clinical-and-laboratory stages of crowns making. Techniques and assessment of impressions making.

Single crown fitting techniques. Rules and order of crown application and fixing.

1.3. Prosthodontic treatment in complete absence of a tooth crown

Prosthodontic treatment in case of complete absence of a tooth crown. Post constructions and their elements. Indications for their use. Examination methods. Requirements for state of the root and its surrounding tissues. Clinical-and-laboratory stages of post making: simple post-tooth, constructions by Ilina-Markosian, Richmond and others.

Prosthodontic treatment with stump post constructions in case of tooth crown absence, indications for their use. Clinical-and-laboratory stages of stump post constructions making. Fiberglass posts and materials for their fabrication.

1.4. Prosthodontic treatment of dentition defects with dental bridges

Prosthetics with bridges in partial tooth loss (secondary partial edentia). Examination methods. Partial dentition defects. Clinic picture, etiology, classification of dentition defects (Kennedy, Gavrilov). Biological and clinical

fundamentals of treatment with bridges. Periodontium and its structure, functions, reserve strength and endurance.

Indications and contraindications for use of bridges. Clinical-and-laboratory sequence of making soldered, unit-cast and combined (metal-acrylic and metal-ceramic) bridges. Tooth preparation in prosthetics of partial tooth loss with bridges. Quality assessment criteria of tooth preparation. Peculiarities of tooth preparation depending on denture types. Detection and methods of central occlusion fixation in prosthetic treatment of partial tooth loss with bridges. Fitting of crowns in prosthetics with bridges in case of partial tooth loss, impressions making. Check of dental bridge construction. Dental bridge fitting and application. Quality assessment criteria for supporting elements and the denture itself. Bridge fixation. Modern technologies in Prosthodontics. Pressed ceramic. CAD / CAM, CEREC systems (milled ceramic). The use of fiberglass posts in prosthodontics. Adhesive bridges. Characteristics and properties of modern construction materials. Techniques of modern denture making.

2. Prosthodontic treatment of dentition defects with removable dentures

2.1. Prosthodontic treatment of dentition defects with partial removable acrylic-based dentures

Characteristics of removable acrylic-based dentures and their elements, variety of removable dentures. Indications and contraindications (absolute or relative) for acrylic-based denture making. Positive and negative characteristics of removable dentures. Fixation of removable partial acrylic-based dentures. Partial denture fixation and stabilization methods. Anatomical retention, adhesiveness, mechanical methods of fixing removable acrylic-based dentures (clasp, attachments, telescopic crowns, Rumpel system). Borders of removable laminar dentures. Indications for abutment tooth covering with artificial crowns. Types of clasps. Clinical-and-laboratory sequence of removable acrylic-based denture making. Impression taking for partial removable dentures. Model casting. Detection of removable denture borders paying attention to clasp location. Wax base making with occlusal rims, detection of central occlusion and clinical landmark for artificial teeth selection and placement. Check of denture constructions, final removable denture making. Fitting and application of dentures, instructions for their use and adaptation.

2.2. Orthopedic treatment of dentition defects with clasp dentures

Clasp dentures and their characteristics. Indications for their use. Structural elements, their purpose and location in relation to prosthetic bed tissues. Impression taking techniques and model making, characteristics of impression materials (silicone, alginate). Parallelometry. The device of parallelometer and its purposes. Characteristics of the survey line (boundary, general sight) and methods of its detection. (Novak's method, the method of choice, arbitrary method). The notion of application and removal of partial dentures. Ney's clasps system, attachments. Planning of clasp denture constructions. Clasp denture attachment (tough, partially labile, labile). Clinical-and-laboratory sequence of soldered and unit-cast clasp denture making (casting with model making). Soldered method of clasp denture making. Impressions taking, model casting, central occlusion detection, study of the

models in parallometr, planning of clasp denture constructions. Framework design of clasp denture according to standard blanks. Casting of the frame parts and their attachment with the help of soldering. Solid frames with model taking, Professor L.S. Velichko's method. Fitting of clasp denture on the model, frame checking in the mouth. Setup, check of the clasp denture construction, replacement of wax by plastic. Fitting and application of clasp dentures, instructions for the patient. Clinical-and-laboratory sequence of unit-cast clasp denture making on refractory models. Impression taking for cast clasp denture making on refractory models. Model casting using dental stone, wax bases with occlusal rims making. Detection of the central occlusion, study of models in parallelmeter, planning of clasp denture constructions. Duplication of the model, characteristics of refractory mass. Modeling of the clasp denture frame, casting. Fitting of the frame on the model, checking in the oral cavity. Setup, check of the denture construction, replacement of wax by plastic. Grinding, polishing, fitting and clasp denture application. Clinical-and-laboratory sequence of unit-cast clasp denture making on refractory models with attachment fixation. Characteristics of attachments (locking attachments) and their purpose. Treatment planning. Types of locking attachments and their choice. Detection of the required space to apply locking attachments. Sequence of clinical-and-laboratory stages of clasp denture making on the refractory model with fixation on the attachments.

3. Prosthodontic treatment with complete tooth loss and pathological abrasion

3.1. Prosthodontic treatment in case of complete tooth loss with complete removable acrylic-based dentures

Prosthetics in case of complete tooth loss (complete secondary edentia). Peculiarities of clinical examination in case of complete tooth loss. Detection of hard and soft tissue morphological peculiarities of the prosthetic bed, the degree of alveolar process bone tissue and jawbone atrophy, mucosa compliance.

Classification of edentulous jaws by Schroeder, Kurlandskiy V. U, Keller, Oksman I.M. Methods of fixation and stabilization of complete removable acrylic-based dentures. Definition and notion of physical, mechanical, biophysical and biomechanical fixation of complete removable acrylic-based dentures. Stabilization. Definition, notion. Stabilization methods of complete removable laminar dentures. Methods of anatomical impression making for baseplate fabrication and materials used for these purposes. Baseplates, characteristics, fabrication techniques and materials used for these purposes. Baseplates fitting (by Herbst). Preparation and assessment of functional impressions. Substantiation of impression material choice for functional impressions. Denture base borders in complete tooth loss. Anthropometric landmarks and anatomic structure of the face in the orthognathic occlusion. Model casting and wax base with occlusal rollers making. Detection of the centric jaw relation in complete tooth loss (techniques). Sequence of landmark transfer to wax bases with occlusal rims. Possible mistakes and complications in detection and fixation of the centric jaw relation. Articulation and occlusion. Types and selection of artificial teeth.

The construction of dentitions in case of complete tooth loss and the orthognathic jaw relation. Peculiarities of tooth setting up in case of the prognathic and mesial relation of the alveolar process. Check of wax denture composition. The techniques of removable dentures with metal base making. Analysis and correction of medical and technical mistakes in detecting the central relation of jaws. Fitting and application of acrylic-based dentures in complete tooth loss. The rules of use and correction of complete removable dentures.

3.2. Prosthodontic treatment of patients with complete tooth loss on one jaw.

Prosthetics in complete tooth loss on one jaw. Complete removable acrylic-based denture making according to duplicated models in second prosthetics.

3.3. Prosthodontic treatment of the localized form of pathological abrasion

Localized pathological abrasion. Characteristic, types, etiology, pathogenesis. Classification of pathological abrasion. Pathological abrasion (localized form). Etiology. Clinical picture, prevention. Orthopedic treatment techniques and clinical-and-laboratory stages of making prosthodontic constructions.

3.4. Prosthodontic treatment of the generalized form of pathological abrasion

Generalized pathological abrasion. Clinical picture, differential diagnosis. Prevention. Prosthodontic treatment techniques in generalized abrasion and clinical-and-laboratory stages of making restorative constructions.

4. Prosthodontic treatment in case of periodontal diseases, oral mucosa diseases, temporomandibular joint (TMJ) diseases, dentition and occlusion defomities, allergies and galvanism

4.1. Prosthodontic treatment in case of periodontal diseases

Classification of periodontal diseases. Etiology, pathogenesis, clinical picture, diagnostic methods, differential diagnosis. The role of exogenous and endogenous factors in the development of periodontal diseases. Parodontogram as an indicator of functional state and periodontal endurance. Periodontium reserve forces and their changes depending on the degree of the alveolar process. Interrelation between the degree of inflammation in periodontal tissues and the tooth mobility. The role of occlusal relations in the development of periodontal diseases. Selective grinding of teeth and the technique of its conduction. Possible mistakes and preventive measures. Prosthodontic and orthodontic treatment in periodontal diseases and their role in traumatic occlusion elimination. Temporary, permanent splinting, indications, characteristics of splints. Different types of stabilization depending on the condition of dentitions. Prosthetics itself. Indications for application of removable and fixed splints (according to the methods developed by the department). Comparative characteristics and clinical-and-laboratory stages of making removable and fixed splints. Constructive features of making permanent splints and splint-dentures in case of the anatomical integrity and dentition defects.

Functional pathology of the dentoalveolar system. Substantiations of the problem study of functional pathology of the dentoalveolar system. Influence of endogenous and exogenous factors on the growth and development of the dentition.

The main causes of functional pathology development and groups of dentoalveolar system lesions.

4.2. Prosthodontic treatment in case of oral mucosa diseases

Etiology, clinical picture, diagnosis of oral mucosa diseases. Differential diagnosis and peculiarities of prosthodontic treatment in oral mucosa chronic diseases. Peculiarities of prosthodontic treatment of patients with oral mucosa diseases.

Medical deontology and ethics of a prosthodontist on admission of patients with dentoalveolar system cancer. Diagnosis of cancer of the face and jaws. Precancerous diseases and signs of malignancy lesions of the oral mucosa. Prosthodontic treatment peculiarities of patients with oral mucosa diseases, susceptible to malignancy (leukoplakia, lichen planus, etc.).

4.3. Prosthodontic treatment in case of temporomandibular joint diseases

Etiology, pathogenesis, clinical picture and manifestation of allergic conditions and galvanism in the oral cavity. Differential diagnosis (allergies, galvanism paresthesias). Prevention and treatment techniques of allergy and galvanism. Peculiarities of prosthetics and selection of materials in cases of allergy.

4.4. Prosthodontic treatment in case of dentition and occlusion deformities

State of the dentoalveolar system with partial lesions of dentitions. Compensated, subcompensated, decompensated state of the dentoalveolar system. Deformities development in case of secondary partial edentia. Traumatic nodes and traumatic occlusion, their characteristics, mechanism of formation. Etiology, pathogenesis and classification of dentition deformities. Complex treatment methods of dentition deformities and occlusion. Examination of patients with dentition deformities. Goals and objectives. Methods of elimination of dentition deformities. Methods of treatment: prothetic, orthodontic, instrument-surgical, instrument-physiotherapy, surgical.

4.5. Prosthodontic treatment in case of allergies and galvanism

Classification of temporomandibular joint diseases. Etiology, pathogenesis, clinical picture, differential diagnosis and methods of treatment of temporomandibular joint diseases

5. Treatment of dentoalveolar anomalies and formed occlusion deformities. Maxillofacial prosthodontics.

5.1. Treatment of dentoalveolar anomalies and deformities in the formed occlusion.

Classification of tooth anomalies, dentitions and occlusion (Engle, Katz, Kurlandskiy, Kalvelis, World Health Organization). Examination methods of orthodontic patients. Diagnosis, plan and objectives of orthodontic treatment. Orthodontic apparatuses. Peculiarities of orthodontic and complex treatment of dentoalveolar system anomalies and deformations in adults (formed occlusion). Changes in the periodontium of teeth in orthodontic treatment. Dosing of the strength. Principles and peculiarities of pathogenetic treatment of dentoalveolar anomalies in the formed occlusion. Application of surgical, physical and physical-pharmacological methods in complex treatment of dentoalveolar anomalies and

deformities. Prosthetics in anomalies and deformities of the dentoalveolar system in adults.

5.2. Maxillofacial prosthodontics. Prosthodontic treatment methods of patients with neoplasms in the dentoalveolar system. Post-resection dentures.

Principles of complex treatment of gunshot and non-gunshot maxilla fractures. Classification of splinting, controlling and forming apparatuses. Clinical picture, diagnosis, principles of complex treatment of gunshot and non-gunshot maxilla fractures. Principles of complex treatment of gunshot and non-gunshot mandibular fractures. Classification of splinting, controlling and forming apparatuses. Clinical picture, diagnosis, principles of complex treatment of gunshot and non-gunshot mandibular fractures. Prosthodontic treatment methods in false joints, improperly healed jaw fractures, bone defects in the mandibula, in microstomia. Types of constructions and apparatuses and their clinical-and-laboratory stages of making. Prosthodontic treatment techniques in acquired and congenital defects of the palate. Prosthodontic treatment techniques in surgical interventions on jaws, construction forming dentures (devices). Preparation of face mask. Vankevich`s and Tigrstedt`s splints making.

Medical deontology and ethics of a prosthodontist when seeing patients with cancer of the dentoalveolar system. Diagnosis of face and jaw cancer. Prosthodontic treatments in surgical interventions on jaws, design forming dentures (devices). Post-resection dentures. Prophylactic medical examination of patients after dental treatment of oncological diseases of tissues and maxillofacial area organs.

5.3. Prosthodontic treatment with implants

Implants. Types and characteristics. Indications and contraindications for application. Prosthetics using implants when making fixed dentures. Prosthetics using implants when making removable dentures. Using fiberglass posts in Prosthodontics. Non-metal ceramics (pressed, milled). Prosthetics with framework dentures with attachments. Making frames of removable dentures by transfer molding. Modern materials for making of restorative constructions.

6. Outpatient Prosthodontics

6.1 Prosthodontic treatment and rehabilitation in pathology of tooth hard tissues

Etiology, clinical picture, examination methods of patients with defects of tooth crown hard tissues. Methods of anesthesia in preparation of tooth hard tissues. Inlays, indications for their use, particularities of the cavity formation in prosthetics with inlays depending on the defect topography. Techniques of inlay making. Clinical picture, laboratory stages of the tooth crown restoration using inlays. Metal crowns, indications for their use. Tooth preparation for crowns, quality assessment methods of preparation. Techniques of impression taking and assessment criteria. The technique of single crown fitting. The rules and sequence of application and fixing of crowns.

Plastic, composite, unit-cast, metal- acryl, metal-ceramic crowns. Indications for their use. Clinical-and-laboratory stages of making. Prosthodontic treatment in complete loss of tooth crown. Post constructions and their elements. Indications for their use. Examination methods. Requirements for the state of the root and its

surrounding tissues. Clinical-and-laboratory making stages: post simple tooth, by Ilina-Markosian, Richmond and others. Prosthodontic treatment in absence of the tooth crown with stump constructions, indications for their use and their clinical-and-laboratory stages of making. Partial defects of dentition. Clinical picture, etiology, classification of dentition defects (Kennedy, Gavrilov). Prosthetics of partial tooth loss (partial secondary edentia) with bridge dentures, indications for their use. Examination methods of the patient. Preparation of teeth in prosthetics of partial tooth loss with soldered bridge dentures. Quality assessment criteria of tooth preparation. Peculiarities of tooth preparation depending on the type of the denture. Detection and methods of central occlusion fixation in prosthetics of partial tooth loss with bridges. Fitting of crowns in prosthetics of partial tooth loss with bridges, taking impressions. Check of bridge constructions. Fitting and application of bridges. Quality assessment criteria of supporting elements and the denture itself. Fixation of bridges. Clinical-and-laboratory stages of making unit--cast, metal-ceramic and metal- acryl bridges.

6.2. Prosthodontic treatment and rehabilitation in partial tooth loss

Partial tooth loss (partial secondary edentia). Etiology, pathogenesis, clinical picture, classification of defects. Peculiarities of examination and examination laboratory methods in partial tooth loss, substantiation of diagnosis. Characteristics of partial dentures and their elements. Indications and contraindications for partial denture use. Methods of fixation and stabilization of removable dentures. Clasp line, types of clasps. The technique of taking impressions, characteristics of impression pastes. Detection of the prosthetic bed borders. Detection of the central occlusion and clinical landmarks for the selection and setup of teeth in partial defects of dentition. Check of the construction of partial removable dentures. The final modeling of denture base on the upper and lower jaw. Plastering of wax denture composition into the cuvette. Stages of replacement wax with acrylic. Processing, grinding, polishing of removable dentures. Fitting and application of acrylic-based dentures. The rules of removable denture use. Process of adaptation to dentures. Correction of partial removable dentures. Clinical and laboratory mistakes arising in denture making.

Clasp dentures. Indications for use. Structural elements, their purpose and their location in relation to tissues of the prosthetic bed. Impression taking technique. Clasp system of clasp construction. Anatomical shape of teeth. Clinical tooth equator. Parallelometry. Topography of general equator line. The notion of denture application and removal. Mechanisms of selection of clasp system and construction. Elements of a clasp denture that reduce chewing load on the periodontium of the abutment. Making techniques of unit-cast soldered clasp dentures with removal from the model and by professor L.S. Velichko's method. Basic techniques, supplementary and basic materials, instruments and equipment used in clasp denture making. Making techniques of unit-cast clasp denture frames on refractory models. Basic techniques, basic and supplementary materials, instruments and equipment. Fitting and checking of a clasp denture frame. Construction of dentitions. Modeling of wax bases. Selection and placement of artificial teeth. Check of fixation correctness. The technique of the clasp denture application in partial tooth loss. Rules of denture use.

6.3. Prosthodontic treatment and rehabilitation in complete tooth loss

Prosthetics in complete tooth loss (complete secondary edentia). Peculiarities of clinical examination in complete tooth loss. Detection of morphological characteristics of hard and soft tissues of the prosthetic bed, degrees of bone tissue atrophy of the alveolar process and the jaw itself, compliance of mucosa mobility. Classification of edentulous jaws by Schroeder, Keller, Kurlandskiy V.Y., Oksman I.M. Methods of fixation and stabilization of removable dentures in complete tooth loss. Methods of anatomical impression taking for making baseplates and materials used for these purposes. Baseplates, characteristics, their making techniques and materials used for these purposes. Herbst's fitting of baseplates. Taking and assessment of functional impressions. Substantiation of the choice of impression material for functional impressions. The borders of denture bases in complete tooth loss. Casting of models and wax bases with occlusion rollers making. Detection of the central relation of mandible to maxilla in complete tooth loss (methods). Sequence of landmark transfer to wax bases with occlusal rims. Construction of dentitions in complete tooth loss and orthognathic interrelation of the alveolar processes. Peculiarities of tooth setting in prognathic and mesial ratio of the alveolar processes. Check of wax denture composition. Analysis and correction of medical and technical mistakes in detecting the central relation of mandible to maxilla. Fitting and application of acrylic baseplate dentures in complete tooth loss. Rules of use and removable denture correction. Prosthetics in complete tooth loss on one jaw.

6.4. Prosthodontic treatment and rehabilitation in periodontal diseases

Classification of periodontal diseases. Etiology, pathogenesis, clinical picture, diagnostic methods, differential diagnosis. The role of exogenous and endogenous factors in periodontal disease development. Parodontogram as an indicator of functional state and periodontal endurance. Periodontium reserve forces and their changes depending on the degree of alveolar process atrophy. Interrelation between the degree of inflammation in periodontal tissues and the tooth mobility. The role of occlusal interrelations in periodontal disease development. Selective grinding as the first stage of prosthodontic treatment of periodontal diseases. Prosthetics itself as a means of prevention of periodontium overload. Orthodontic treatment of periodontal diseases and its role in the elimination of traumatic occlusion. Temporary splinting, indications. Types and characteristics of splints for temporary splinting. Permanent splinting and indications for its use. Types of the dentition stabilization. Indications for the use of removable and fixed splints, their comparative characteristics. Kinds of splints for frontal, sagittal, frontal-sagittal stabilization and arch stabilization, parasagittal stabilization. Design features and technology of making permanent splints and splint-dentures in anatomic integrity of dentitions. Design features of making permanent splints and splint-dentures in dentition defects.

6.5. Tactical, diagnostic and technological mistakes in Prosthodontics.

Mistakes in prosthetics with removable and fixed dentures. Mistakes while making fixed dentures at clinical stages. Mistakes while making fixed dentures at laboratory stages. Mistakes while making removable dentures at clinical stages. Mistakes while making removable dentures at laboratory stages.

6.6. Fundamentals of prosthodontic services in the Republic of Belarus

The structure of prosthetic dental services in the Republic of Belarus. Legislative acts regulating the prosthodontic service work in the Republic of Belarus. Organizational and economic aspects of prosthodontic department work in dental clinics, hygiene requirements and equipment of dentist and dental technician workplaces. Professional and ethical standards, legislation acts, orders and letters of instruction that determine the prosthodontist work. Standards of medical personnel of dental clinics. Dental clinic structure. Duties of a prosthodontist. Quantitative and qualitative indicators of work and standards of prosthodontist load. Prosthodontist reporting documentation. Legislation.

**EDUCATIONAL AND METHODOLOGICAL CARD OF THE DISCIPLINE
"PROSTHODONTICS"**

№	Theme	Hours			Certification forms
		lectures	Practical classes	extracurricular study	
1	2	3	4	5	6
1.	1. Prosthodontic treatment of dental crowns and dentition defects	14	85	61	
	1.1. Prosthodontic treatment of tooth crown defects with inlays	2	10		interview
	1.2. Prosthodontic treatment of tooth crown defects with artificial crowns	4	25		essays tests
	1.3. Prosthodontic treatment in complete absence of a tooth crown	2	10		credit test
	1.4. Prosthodontic treatment of dentition defects with dental bridges	6	40		
2.	2. Prosthodontic treatment of dentition defects with removable dentures	14	85	59	
	2.1. Prosthodontic treatment of dentition defects with partial removable acrylic-based dentures	7	50		interview essays tests
	2.2. Prosthodontic treatment of dentition defects with clasp dentures	7	35		credit test
3.	3. Prosthodontic treatment with complete tooth loss and pathological abrasion	12	90	88	
	3.1. Prosthodontic treatment in case of complete tooth loss with complete removable acrylic-based dentures	6	47		interview essays tests
	3.2. Prosthodontic treatment of patients with complete tooth loss on one jaw	2	17		exam
	3.3. Prosthodontic treatment of the localized form of pathological abrasion	2	13		
	3.4. Prosthodontic treatment of the generalized form of pathological abrasion	2	13		
4.	4. Prosthodontic treatment in case of periodontal diseases, oral mucosa diseases, temporomandibular joint diseases, dentition and occlusion defomities, allergies and galvanism	10	72	58	

4.1. Prosthodontic treatment in case of periodontal diseases	3	26		interview essays
4.2. Prosthodontic treatment in case of oral mucosa diseases	2	12		tests oral test
4.3. Prosthodontic treatment in case of temporomandibular joint diseases	1	10		
4.4. Prosthodontic treatment in case of dentition and occlusion deformities	2	12		
4.5. Prosthodontic treatment in case of allergies and galvanism	2	12		
5. Treatment of dentoalveolar anomalies and formed occlusion deformities. Maxillofacial prosthodontics	10	112	74	
5.1. Treatment of dentoalveolar anomalies and deformities in the formed occlusion	4	32		interview essays
5.2. Maxillofacial prosthodontics Prosthodontic treatment methods of patients with neoplasms in the dentoalveolar system. Post-resection dentures	4	64		tests oral test
5.3. Prosthodontic treatment with implants	2	16		
6. Outpatient Prosthodontics	-	140	92	
6.1. Prosthodontic treatment and rehabilitation in pathology of tooth hard tissues		20		
6.2. Prosthodontic treatment and rehabilitation in partial tooth loss		28		interview essays
6.3. Prosthodontic treatment and rehabilitation in complete tooth loss		34		standartised tests
6.4. Prosthodontic treatment and rehabilitation of patients with periodontal diseases of inflammatory and dystrophic origin		30		computer tests oral test
6.5. Tactical, diagnostic and technological mistakes in Prosthodontics		16		
6.6. Fundamentals of prosthodontic services in the Republic of Belarus		12		

LITERATURE

1. *Nallaswamy*. Textbook of Prosthodontics, Jaypee Brothers, Medical Publishers. ISBN: 818061199X; ISBN-13: 9788180611995, 12 / 2008.
2. Contemporary Fixed Prosthodontics, *Stephen F. Rosenstiel, Junhei Fujimoto, Martin F. Land*, Elsevier Health Sciences. ISBN: 0323028748, ISBN-13: 9780323028745, 06/2006.
3. Fundamentals of Fixed Prosthodontics, *Herbert T. Shillingburg et al.*, Quintessence Publishing, ISBN: 0867154756, ISBN-13: 9780867154757, 04/2012.
4. Stewart's Clinical Removable Partial Prosthodontics, *Rodney D. Phoenix, Kenneth L. Stewart, David R. Cagna, Charles F. DeFreest*, Quintessence Publishing, ISBN: 0867154853, ISBN-13: 9780867154856, 07/2008.
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6. *George A. Zarb*. Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Protheses , Elsevier Health Sciences, ISBN: 0323078443, ISBN-13: 9780323078443, 04/2012.
7. Prosthetic Treatment of the Edentulous Patient , *R. M. Basker, J. C. Davenport,, J. M. Thomason* , Wiley, John & Sons, Incorporated, ISBN: 1405192615, ISBN-13: 9781405192613, 04/2011.
8. Textbook of Complete Dentures, *Arthur O. Rahn, John R. Ivanhoe, Kevin D. Plummer*, PMPH-USA, Limited, ISBN: 1607950251, ISBN-13: 9781607950257, 01/2009.
9. *Bickley L. Bates'* Guide to Physical Examination and History Taking. 10th ed. Lippincott Williams & Wilkins; 2008
10. *Burt BA, Eklund SA*. Dentistry, dental practice, and the community. 6th ed. St. Louis: Elsevier Saunders; 2005

LIST OF RECOMMENDED DIAGNOSTIC TOOLS

For the diagnostics of competencies, the following forms are used:

1. Oral form:

- interview;
- oral credits;

2. Written form:

- tests;
- essays;
- standardized tests;

3. Oral-written form:

- credit tests;
- exams;

4. Technical form:

- computer tests;

LIST OF LECTURES

Thematic Plan of Lectures for the 5th semester, 3rd year students in Prosthodontics (11 lectures , 14 hours).

Lecture 1. Prosthodontics, subject, tasks, branches of the subject. List of nosological forms subjected to prosthodontic or complex dental treatment . Lectures 2-3. Principles of medical ethics and deontology . Preparing of the oral cavity for dental prosthetics.

Lecture 4. Pathology of hard tissues of carious and non-carious origin. Diagnostics. Grounds and indications for prosthodontic treatment of hard tissue defects of the tooth crown. Clinical and laboratory procedures of restoration of the tooth crown using inlays. Features of preparation of various classes cavities.

Lecture 5. Theoretical aspects of tooth preparation for dental crowns. Effects of the teeth and periodontal tissues on tooth preparation. Anesthesia in prosthetic dentistry. Tooth safety zones by Abolmasov - Kluev. Clinical and laboratory procedures of manufacturing metal stamped crowns.

Lecture 6-7. Clinical and laboratory procedures of manufacturing plastic, porcelain, composite (porcelain-fused-to-metal, metal-acrylic) , three-quarter crowns (3/4) , the technique of the Department.

Lecture 8. Prosthodontic treatment in case of a tooth crown absence. Post constructions and their elements. Indications for application. Requirements to the root and its surrounding tissues. Clinical and laboratory procedures for manufacturing post constructions of various designs. Stump root inlays.

Lecture 9. Partial absence of teeth (partial secondary edentia) . Etiology, clinical features, methods of patients examination. Functional disorders, diagnosis and classification of dentition defects. Dentition conditions, allowing to initiate bridge prosthetics. Basic and modern bridge constructions.

Lecture 10. Biological and clinical grounds of bridge prosthetics. Clinical and laboratory procedures of soldered bridge manufacturing.

Lecture 11. Clinical and laboratory procedures of cast manufacturing, combined (metal-acrylic and porcelain-fused-to-metal) bridges. Prevention of possible errors and complications in treatment of dental patients with bridges. Modern technologies in prosthodontics.

Thematic plan of lectures for the 6th semester, 3rd year students in Prosthodontics (11 lectures , 14 hours)

Lecture 1. Denture constructions for treating patients with partial absence of teeth. Variety of removable dentures. Indications for manufacturing removable plate dentures (relative and absolute). Borders of partial removable acrylic-based dentures.

Lecture 2. Fixing elements of removable partial dentures (clasps, attachments, telescopic crowns, Rumpel system). Indications for making artificial crowns on

abutment teeth. Types of clasps. Positive and negative features of partial removable acrylic-based prostheses.

Lecture 3. The sequence of clinical and laboratory fabrication of partial removable acrylic-based dentures: impression taking, model pouring and making wax bases with occlusal rims, fixation of centric occlusion relation.

Lecture 4. Features of clasps bending, selection and setting of artificial teeth. Verification of denture design, replacing wax with acrylic base material, finishing the denture, fitting and imposing of partial removable prostheses. Adaptation to removable partial dentures. Recommendations for care. Relining and repair of acrylic-based dentures.

Lecture 5. Clasp dentures. Characteristics. Indications for framework denture fabrication.

Lecture 6. Biological and clinical grounds for selection of framework denture design. Ney clasps system.

Lecture 7. Surveying.

Lecture 8. Methods of making partial denture frameworks. The sequence of clinical and laboratory stages of manufacturing solder- and cast framework of partial denture (casting with removal from the model; casting through the plastic model according to Prof. Velichko)

Lecture 9. The sequence of clinical and laboratory stages of partial dentures cast framework manufacturing with casting on refractory model.

Lecture 10. The sequence of clinical and laboratory stages of manufacturing cast framework removable dentures with key-keyway attachments.

Lecture 11. Errors and complications in the manufacture of partial removable acrylic-based and framework dentures.

**Thematic plan of lectures
for 7th semester, 4th year students in Prosthodontics
(9 lectures, 12 hours)**

Lecture 1. Anatomical and physiological features and the morphological and functional reorganization of the maxillofacial region due to complete loss of teeth. The structure and the interrelation of edentulous jaws, their classification. Examination of the maxillofacial area with edentulous jaws, diagnosis, choice of treatment, the prognosis of its effectiveness.

Lecture 2. Methods of fixation and stabilization of complete removable dentures. The concept of transitional border between masticatory and lining mucosa, neutral zone and suction. Pliability and mobility of oral mucosa, buffer zones. The borders of complete removable dentures.

Lecture 3. Methods of preparing functional impressions of edentulous jaws. Functional tests on Herbst. Methods of determining the central relation of jaws with complete loss of teeth. Anatomical and physiological method for determining vertical dimension of occlusion.

Lecture 4. Anthropometric reference points and anatomic regularities of face structure with orthognathic occlusion, underlying the construction of artificial dentition in complete removable dentures.

Lecture 5. The laws of articulation. Methods of arrangement of artificial teeth. The method of manufacture of dentures with metal bases.

Lecture 6. Possible complications and errors in determining and fixing central relation, their manifestation in the clinic at wax try in and methods of their correction.

Lecture 7. Adaptation of patients to dentures. The mechanism and dynamics of adaptation. Adaptation features of patients to complete removable dentures. Rebasement and repair of complete removable dentures.

Lecture 8. Pathological wear of dental hard tissues. Etiology, pathogenesis, pathological forms of tooth wear. Forms of pathological tooth wear. Diagnostic. Clinic.

Lecture 9. The principles of prosthodontic treatment of localized and generalized tooth wear. Appliances and prostheses used in the treatment of pathological wear of teeth.

**Thematic plan of lectures
for 8th semester, 4th year students in Prosthodontics
(8 lectures, 10 hours)**

Lecture 1. Periodontal diseases: alveolar pyorrhea, amphodontosis, parodontosis, periodontal pathology, periodontitis. Methods of examination. Classifications. Local and generalized periodontal lesions. Etiology. Clinical features. Diagnostics. Differential diagnostics.

Lecture 2. Theories and mechanism of development of various types of periodontal diseases. Prosthodontic prevention (occlusal correction). Purposefulness of tooth splinting. The role of prosthodontist and indications for teeth splinting. Main principles of teeth splinting. Types of dental arch stabilization.

Lecture 3. Indication for temporary and permanent splinting of teeth. Constructions of the splints, used for temporary and permanent splinting.

Lecture 4. Indications for removable and fixed splint constructions. Immediate dentures, orthodontic treatment and their roles in treatment of periodontal diseases.

Lecture 5. Functional pathology of dentoalveolar system, definition. Macro- and microstructural changes in dentoalveolar system following the tooth loss. Deformities of dentition and occlusion. Types of manifestation of functional disorders of dentoalveolar system: Popov-Godon phenomenon, traumatic occlusion (kinds), mechanism of development. Diagnostics, clinical features and methods of prosthodontics treatment of deformities of dentition and occlusion.

Lecture 6. The main features of prosthodontics treatment of patients with oral mucosa pathology.

Lecture 7. Oral pathology, associated with the action of dentures and materials from which they are made on the human body. Intolerance to resins. Galvanosis and

allergies to materials of dentures. Prophylaxis, clinical features, diagnostics and treatment.

Lecture 8. Diseases of temporo-mandibular joint. Etiology, clinical features, diagnostics, differential diagnostics and methods of prosthodontics treatment.

**Thematic plan of lectures
for 9th semester, 5th year students in Prosthodontics
(8 lectures, 10 hours)**

Lecture 1. Principles of complex treatment of gunshot and non-gunshot fractures of maxilla, classifications. Clinical features, diagnostics. Classification of splinting and forming apparatus used for prosthodontic treatment.

Lecture 2. Principles of complex treatment of of gunshot and non-gunshot fractures of mandible, classifications. Clinical features, diagnostics. Classification of splinting and forming apparatus used for prosthodontic treatment.

Lecture 3. Prosthodontic methods of treatment of false joints, bone defects of jaws, wrong concretion of jaw fractures, microstomia.

Lecture 4. The features of orthodontic treatment of anomalies and deformities of dentoalveolar system in adults (formed occlusion).

Lecture 5. Prosthodontic methods of treatment of congenital defects of the hard and soft palate. Features of constructions of most modern obturators.

Lecture 6. Prosthodontic methods of treatment of acquired defects of the hard and soft palate. Features of constructions of most modern obturators.

Lecture 7. Dental implants. Classifications, indications. Clinical and laboratory stages of removable and fixed constructions of dentures on dental implants.

Lecture 8. The fundamentals of prosthodontic services in the Republic of Belarus.

LIST OF PRACTICAL CLASSES

SEMESTER 5

1. Medical ethics and deontology in the clinic of Prosthodontics. Preparing the oral cavity for dental prosthetics. Methods of anesthesia in tooth preparation.
2. Defects of hard tooth tissues. Etiology, clinical picture, methods of patient examination with hard tooth tissue defects.
3. Inlays , indications for their application. Cavity preparation for inlays.
4. Methods of making inlays. Clinical-and-laboratory procedures of tooth crown restoration using inlays.
5. Metal stamped crowns. Clinical-and -laboratory procedures of their making.
6. Plastic crowns. Clinical-and -laboratory procedures of their making.
7. Combined metal-to-plastic crowns. Clinical-and -laboratory procedures of their making.
8. Cast metal , metal-acrylic, porcelain-fused-to-metal , ceramic crowns. Clinical-and -laboratory procedures of their making.
9. Post restoration constructions.
10. Clinical-and -laboratory procedures of making post restoration constructions.
11. Partial defects of dentition.
12. Prosthodontic treatment of partial edentia.
13. Clinical-and-laboratory procedures of stamped - soldered bridges making.
14. Tooth preparation, impression taking in making bridges (stamped- soldered, cast, combined).
15. Centric occlusion relation and methods of its fixation in making bridges.
16. Check of constructions, final making, application and fixation of bridges.
17. Cast, metal-acrylic, porcelain-fused-to-metal dentures, clinical and laboratory procedures of their making. Credit with a differentiated mark. Test control.

SEMESTER 6

1. Partial absence of teeth (partial secondary edentia). Etiology, pathogenesis, clinical picture, classification of dentition defects. Peculiarities of patient clinical examination and laboratory examination tests in partial dentition defects, diagnosis substantiation.
2. Characteristics of removable partial dentures and their elements. Indications and contraindications for removable partial denture application.
3. Methods of fixation and stabilization of removable dentures. Clasp line, types of clasps. Fixation with the help of dental implants.
4. Technique of impression taking, characteristics of impression materials. Plaster models. Detection of prosthetic bed borders. Sequence and rules of making of wax bases with occlusal rims.
5. Methods of central occlusion determination and clinical landmarks for tooth selecting and setting in case of partial dentition defects.
6. Check of a partial removable denture design. Methods, algorithm, criteria of clinical assessment.

7. Final modeling of bases of removable partial acrylic-base dentures on the upper and lower jaws. Flasking the wax composition of the denture. Stages of wax by plastic replacement. Finishing and polishing of removable acrylic dentures.
8. Fitting and application of partial removable dentures. Rules of removable dentures use. Process of adaptation to dentures.
9. Correction of partial removable laminar dentures. Clinical and laboratory mistakes of denture fabrication.
10. Clinical and laboratory stages of removable partial acrylic-base dentures making.
11. Removable clasp framework dentures. Indications for their use. Structural elements, their purpose and location in relation to tissues of the prosthetic bed. Impression taking techniques.
12. Clasp system of framework denture. Anatomical shape of teeth. Clinical tooth equator. Surveying. Topography of clinical equator line. The notion of denture application and removal. Mechanisms of selection of clasp system and construction. Elements of a clasp denture that reduce chewing load on the periodontium of the abutments.
13. Techniques of making of soldered clasp dentures and unit-cast with removal from the model and by Professor L.S. Velichko's method. Basic techniques, main and supplementary materials, instruments and equipment used in clasp denture making.
14. Techniques of making of unit-cast clasp denture frames on refractory models. Basic techniques, basic and supplementary materials, instruments and equipment.
15. Fitting and checking a clasp denture frame. Criteria of assessment of its quality. Construction of dentition. Check of centric occlusion determination and registration, denture borders and teeth setting.
16. The technique of the clasp denture imposing in partial tooth loss. Criteria of clinical assessment of dentures. Rules of denture use. Test control. Credit test with a differentiated mark.

SEMESTER 7

1. Prosthetics in complete tooth loss (complete secondary edentia). Peculiarities of patient clinical examination in complete tooth loss. Detection of morphological characteristics of hard and soft tissues of the prosthetic bed, the degree of bone tissue atrophy of the alveolar processes and the jaw body, compliance of mucosa mobility.
2. Classification of edentulous jaws by Schroeder, Keller, Kurlandski, Oksman.
3. Techniques of removable denture fixation and stabilization in complete tooth loss. Fixation with the help of dental implants.
4. Anatomical impressions, techniques of making, materials. Individual trays, characteristics, their making techniques and materials used for these purposes.
5. Herbst's fitting of individual trays. Taking and assessment of functional impressions. Substantiation of impression material choice for functional impressions. The borders of denture bases in complete tooth loss.
6. Model casting and making of wax bases with occlusion rims.
7. Detection of the centric relation of mandible to maxilla in complete tooth loss.

8. Articulation laws. Construction of dentition in complete tooth loss. Peculiarities of tooth setting in prognathic and mesial relation of the alveolar processes.
9. Check of wax reproduction of complete removable acrylic base dentures. Analysis and correction of medical and technical mistakes in detecting the centric relation of mandible to maxilla.
10. Fitting and imposing of acrylic base dentures in complete tooth loss. Rules of removable denture use and correction.
11. Clinical management of patients in long-term periods. Adaptation.
12. Prosthetic treatment of patients with complete tooth loss in one jaw. Further prosthetics in complete tooth loss.
13. Clinical-and-laboratory stages of making complete removable acrylic base dentures.
14. Pathological abrasion of hard dental tissues. Characteristic of abrasion, types, etiology, pathogenesis. Classification of pathological abrasion of hard dental tissues.
15. Pathological abrasion of hard dental tissues (localized and generalized form). Etiology. Clinical picture, diagnostics, prosthetic treatment techniques. Types of prosthodontic constructions.

SEMESTER 8

1. Periodontal diseases classification. Etiology, pathogenesis, clinical picture, diagnostic methods, differential diagnosis of periodontal disease.
2. Parodontogram as an indicator of periodontal functional state and endurance. Periodontium reserve forces and their changes depending on the degree of alveolar process atrophy. Periodontal tissue inflammation degree and tooth mobility interrelation.
3. The role of occlusal relations in periodontal disease development. Selective grinding (occlusal correction) as the first stage of prosthodontic treatment of periodontal diseases. Immediate dentures as a means of periodontium overload prevention.
4. Indications to temporary splinting in periodontal tissue diseases. Temporary splints types and characteristics. Orthodontic treatment in periodontal tissue diseases.
5. Indications to permanent splinting in periodontal tissue diseases. Permanent splints, types and characteristics. Types of stabilization. Indication to the application of removable and fixed splints, their comparative characteristics.
6. Design peculiarities and technology of making splints and splint-dentures in anatomic integral dentition and dentition defects.
7. Dentition and occlusion deformities in partial tooth loss. Etiology, pathogenesis, diagnosis, clinical picture. Treatment techniques of dentition and occlusion deformities.
8. Peculiarities of prosthodontic treatment in patients with chronic diseases of oral mucosa.
9. Pathological changes in the condition of the organism, tissues and organs of the oral cavity associated with the presence of dentures. Galvanism. Etiology, pathogenesis, clinical picture, prevention, treatment techniques.

10. Pathological changes in the condition of the organism, tissues and organs of the oral cavity associated with the presence of dentures. Allergies. Etiology, pathogenesis and clinical picture.
11. Functional anatomy of temporomandibular joint. Base issues of functional occlusion.
12. Temporomandibular joint diseases. Etiology, pathogenesis, clinical picture, differential diagnosis, orthopedic treatment techniques. Credit with a differentiated mark.

SEMESTER 9

1. Classification of tooth anomalies, dentitions and occlusion.
2. Orthodontic patient examination methods. Diagnosis, plan and tasks of orthodontic treatment.
3. Orthodontic apparatuses, their characteristics. Construction and indications for application.
4. Principles and peculiarities of pathogenetic treatment of dentoalveolar anomalies in the formed occlusion. Use of surgical, physical and physical-chemical methods in complex treatment of dentoalveolar anomalies.
5. Peculiarities of orthodontic treatment of dentoalveolar anomalies in formed occlusion in patients with periodontal tissues diseases.
6. Prosthodontic treatment in adult patients with dentoalveolar anomalies.
7. Principles of complex treatment of gunshot and non-gunshot fractures of the maxilla.
8. Principles of complex treatment of gunshot and non-gunshot fractures of the mandible.
9. Prosthodontic treatment methods in false joints, improperly healed jaw fractures, bone defects, microstomia.
10. Prosthodontic treatment in acquired and congenital defects of the palate.
11. Dental implants. Characteristics. Indications and contraindications. Main types.
12. Peculiarities of fixed and removable implant prosthodontics.
13. Post-resection prosthodontics.
14. Prosthodontics in case of face injuries and defects. Face mask.
15. Making of jaw splints and dentures- splints. Demonstration of splint making (splints by Vankevich, Tigerstedt).
16. Case history substantiation. Credit.

SEMESTER 10

1. Hard tissue defects of dental crowns. Etiology, clinics, methods of patient examination. Methods of anesthesia in tooth preparation. Inlays , indications for their application. Cavity preparation for inlays. Methods of making inlays, clinical-and-laboratory procedures of tooth crown restoration using inlays.

2. Hard tissue defects of dental crowns. Artificial crowns (stamped, acrylic, combined, metal-acrylic, porcelain-fused to metal). Indications, clinical-and-laboratory procedures.
3. Hard tissue defects of dental crowns. Prosthodontic treatment in case of total defect of tooth crown. Post restoration constructions. Clinical-and -laboratory procedures of making post restoration constructions.
4. Partial defects of dentitions. Classification, clinical picture, diagnosis.
5. Prosthodontic treatment of partial dentition defects with fixed dentures. Indications, clinical-and -laboratory procedures of making.
6. Etiology, pathogenesis, clinics, diagnostics and prosthodontic treatment of hard tissue defects of dental crowns and dentition defects with fixed dentures. (Seminar).
7. Prosthetic dental treatment of partial secondary edentia with removable acrylic-base and cast framework clasp dentures. Characteristics of removable partial dentures, indications, positive and negative properties, clinical-and -laboratory procedures of making.
8. Prosthetic dental treatment of partial secondary edentia with removable dentures. Indications for removable cast framework clasp dentures, construction elements, their purpose and location in relation to tissues of the prosthetic bed. Ney clasp system, surveying. Methods of making removable framework dentures clinical-and -laboratory procedures of making.
9. Prosthetic dental treatment of partial secondary edentia with removable acrylic-base and cast framework dentures (Seminar).
10. Prosthetics in case of complete tooth loss. Special preparation of oral cavity for prosthodontics treatment in case of complete edentia. Methods of fixation and stabilization of complete dentures.
11. Prosthetics in case of complete tooth loss. Herbst's fitting of individual trays. Taking and assessment of functional impressions. Substantiation of impression material choice for functional impressions. The borders of denture bases in complete tooth loss.
12. Prosthetics in case of complete tooth loss. Detection of the centric relation of mandible to maxilla in complete tooth loss (methods). Construction of dentition in complete tooth loss. Analysis and correction of medical and technical mistakes in detecting the centric relation of mandible to maxilla.
13. Prosthetics in case of complete tooth loss (Seminar).
14. Etiology, pathogenesis, clinical picture, diagnosis and prosthodontic treatment of periodontal diseases. Classification of periodontal diseases. Differential diagnosis of periodontal diseases.
15. Etiology, pathogenesis, clinical picture, diagnosis and prosthodontic treatment of periodontal diseases. Biological grounds for teeth splinting. Periodontium reserve forces and their changes depending on the degree of alveolar process atrophy. Periodontal tissue inflammation degree and tooth mobility interrelation. The role of occlusal relations in periodontal disease development. Selective grinding (occlusal correction) as the first stage of prosthodontic treatment of periodontal diseases.
16. Etiology, pathogenesis, clinical picture, diagnosis and prosthodontic treatment of periodontal diseases. Temporary and permanent splinting, indications, types and

characteristics of temporary and permanent splints. Orthodontic treatment in periodontal tissue diseases.

17. Etiology, pathogenesis, clinical picture, diagnosis and prosthodontic treatment of periodontal diseases (Seminar).

18. Tactical, diagnostic and technological mistakes in Prosthodontics.

19. Fundamentals of prosthodontic services in the Republic of Belarus. The structure of dental polyclinic. Analysis of clinic and laboratory work. The duties of the head of the prosthodontic department and prosthodontist. Grounds for quality in patients treatment. Prophylactic meaning of prosthodontic work. Setting the dispensary groups on dental, prosthetic diseases. Prosthodontic prophylaxis and organization of prosthodontics work in the city and district conditions. Medical profession examination. Medical errors and professional responsibility. Aspects of ethics, aseptic, antiseptic in the clinic of prosthodontics.

20. Fundamentals of prosthodontic services and medical errors. State examination on practical skills.

PROTOCOL OF CURRICULUM APPROVAL

The name of discipline, which requires approval	Chair	Proposals for changes in the content of the curriculum of higher education institutions on a subject	Decision of the Chair, which developed the educational program
1.General Dentistry	Chair of General Dentistry	No proposals, no changes	Protocol № <u>20</u> from 26.05.2015
2.Therapeutic Dentistry	Chair of Therapeutic Dentistry #2	No proposals, no changes	
3.Orthodontics	Chair of Orthodontics	No proposals, no changes	
4. Pedodontics	Chair of Pedodontics	No proposals, no changes	
5.Maxillo-facial surgery	Chair of maxillo-facial surgery	No proposals, no changes	
6. Oral surgery	Chair of oral surgery	No proposals, no changes	

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V.A. Sharanda

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

Dean of the Medical Faculty of
International Students

04.06 2015



V.V. Davydov

Methodologist of Educational
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"Belarusian State medical
University"

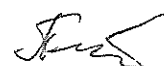
04.05 2015



S.A. Kharytonava




Head of the Foreign Languages
Department

04.05 2015



M.N. Petrova

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ВЫПСКА З ПРАТАКОЛА

Министерство здравоохранения
Республики Беларусь
Учреждение образования
«Белорусский государственный
медицинский университет»
ВЫПСКА ИЗ ПРОТОКОЛА

от 26.05.2015 № 20

г.Мінск

заседания кафедры ортопедической стоматологии

г.Минск

Председатель заседания – С.А. Наумович, зав. кафедрой ортопедической стоматологии, д.м.н., профессор.

Секретарь – доцент Дмитроченко А.П.

Присутствовали: проф. Величко Л.С., проф. Гунько И.И., проф. Ивашенко С.В. доц. Коцюра Ю.И., доц. Мойсейчик П.Н., доц. Ралло В.Н., доц. Круглик Ю.Н., доц. Бунина М.А, доц. Борунов А.С., доц. Титов П.Л., доц. Головки А.И., доц. Наумович С.С., доц. Шаранда В.А., доц. Кувшинов А.В. доц. Крушинина Т.В, доц. Ельцова-Таларико З.С., доц. Полховский Д.М., асс. Пашук Анд.П., асс. Цвирко О.И., асс. Шишов В.Г., асс. Горбачев А.Н., асс. Соломонов Е.Д., асс. Пискур В.В., асс. Пашук Алек.П., асс. Воложин Г.В., асс. Шнип Е.В., асс. Храменков С.И., асс. Остапович А.А., асс. Клишко К.А., Беляй А.М.

ПОВЕСТКА ДНЯ:

4. Рассмотрение и обсуждение учебной программы по дисциплине «Ортопедическая стоматология» для специальности 1-79 01 07 Стоматология.

СЛУШАЛИ:

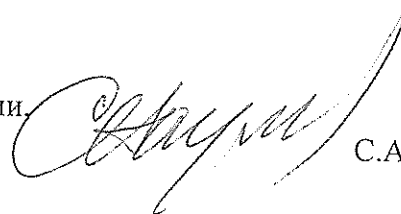
С.А.Наумовича, С.В.Ивашенко – о содержании учебной программы по дисциплине «Ортопедическая стоматология» для специальности 1-79 01 07 Стоматология.

РЕШИЛИ:

1. Рекомендовать учебную программу по дисциплине «Ортопедическая стоматология» для специальности 1-79 01 07 Стоматология к утверждению на методической комиссии стоматологических дисциплин.

Голосовали единогласно.

Председатель
Зав. кафедрой ортопедической стоматологии,
профессор



С.А. Наумович

Секретарь, к.м.н., доцент кафедры
ортопедической стоматологии



А.П.Дмитроченко

Верно
Секретарь

А.П.Дмитроченко

26.05.2015г.

Міністэрства аховы здароўя
Рэспублікі Беларусь
Установа адукацыі
«Беларускі дзяржаўны
медыцынскі ўніверсітэт»
ВЫПІСКА З ПРАТАКОЛА

Министерства здравоохранения
Республики Беларусь
Учреждение образования
«Белорусский государственный
медицинский университет»
ВЫПИСКА ИЗ ПРОТОКОЛА

г. Мінск

г. Минск

28.05.2015 г. № 7

заседания методической комиссии
стоматологических дисциплин

Председатель: доцент Л.А.Казеко
Секретарь: доцент Ю.В. Модринская

Присутствовали члены методической комиссии:

Профессора: Ластовка А.С., Терехова Т.Н., Походенько-Чудакова И.О., Ивашенко С.В.;
Наумович С.А. доценты: Пархамович С.Н., Бармуцкая А.З., Белик Л.П., Третьякович А.Г.,
Полонейчик Н.М., Гресь Н.А., Людчик Т.Б.

Повестка дня:

2. Утверждение учебной программы по дисциплине «Ортопедическая стоматология» для специальности 1-79 01 07 Стоматология на английском языке

2. СЛУШАЛИ: С.А. Наумовича, В.А. Шаранду – о содержании учебной программы по дисциплине «Ортопедическая стоматология» для специальности 1-79 01 07 Стоматология на английском языке. Имеется выписка из протокола № 20 заседания кафедры ортопедической стоматологии УО БГМУ от 26.05.15 г. Вопросов нет.

2. РЕШИЛИ: Рекомендовать к утверждению учебную программу по дисциплине «Ортопедическая стоматология» для специальности 1-79 01 07 Стоматология на английском языке.

Голосовали «за» единогласно.

Председатель:
Секретарь:



доцент Л.А. Казеко
доцент Ю.В. Модринская

Верно.
Секретарь:



доцент Ю.В. Модринская